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**Dysfunctional Market or Insufficient Creditworthiness?  
An Exploration of Financial Constraints Experienced by  
Small, Medium and Micro Enterprises in South Africa**

Thesis Presented for the Degree of

**DOCTOR OF PHILOSOPHY**

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UNIVERSITY OF CAPE TOWN

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## Declaration

I hereby declare that this thesis embodies only my original work, both in concept and execution.

All significant contributions to, and quotations used in, the thesis have been attributed to their authors and adequately cited and referenced.

I am aware of the consequences of plagiarism.

University of Cape Town

## Dedication

This thesis is dedicated:

To my father, the first small business owner that I have got to know.

To the countless South African and foreign small business owners whom I have encountered in the last years, and who have been a source of inspiration.

To the researchers who show a genuine concern for the fate of small entrepreneurs, especially those on the African continent.

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## Abstract

The existence and prevalence of financial constraints has been extensively discussed in the international economic literature, and is implicit in debates on the performance and needs of South Africa's Small, Medium and Micro Enterprises (SMMEs). However, there is little solid research measuring financial constraints among South African SMMEs. In addition, the reasons advanced for their financial constraints are often speculative and anecdotal rather than the result of sound research. The hypothesis of credit rationing, resulting from information asymmetries, is well established in theory but an additional explanatory hypothesis, the fragile financial structure of SMMEs, is often voiced by the South African finance community. With South African data being scarce and patchy, none of these hypotheses has been validated by empirical studies.

The most likely reason for these gaps in literature is not a lack of interest, but the considerable difficulty of raising reliable data from SMMEs, a joint result of confidentiality, widespread informality in the sector, and the limitations of publicly available statistics in developing countries. Surveys of banks or SMMEs raise risks of partiality and limited ability of respondents to provide quantitative data, while accounting data are characterised by limited usability and reliability.

This thesis attempts to address those challenges by exploring primary and secondary sources of data, combining the respective strengths of interview and financial data. In addition to drawing on largely unpublished data from an existing Global Entrepreneurship Monitor (GEM) survey run in 2003, the empirical work is based on a database of financial statements of SMMEs from the greater Cape Town area, which have been subjected to a thorough quality-control process. Multiple case studies add a deeper understanding of the phenomena.

Based on these data, the thesis first addresses the types and severity of financial constraints experienced by South African SMMEs, based on a typology of financial constraints and a methodology to interpret survey data. This review

suggests that a surprisingly high proportion of formal SMMEs, between 20% and 40%, are not financially constrained. Investment constraints and liquidity constraints are found to be roughly equivalent in terms of prevalence, even though liquidity constraints, which are often severe, tend to have more dire consequences on the businesses.

In the second stage, the thesis examines the role of informational asymmetries in explaining these constraints, the focus being on accounting opacity in SMMEs. To assess this aspect, a comprehensive scoring model, based on literature with input from auditing practitioners, is developed and applied to 64 sets of SMME accounts. The reasons for accounting opacity are also investigated: the findings indicate that the lack of internal controls is more widespread than the tendency to manipulate, but that the latter factor has stronger effects on accounting opacity. Next, the relationship between the measurements of accounting opacity and financial constraints is explored, yielding rather inconclusive results. Against the expectations raised by the literature, firms with more transparent accounting are not more likely to access bank finance; in fact, the quantity of accounting information produced seems to be more relevant than its quality in opening SMMEs access to credit.

In the third stage, the intrinsic financial soundness of SMMEs is assessed to verify the hypothesis that the financial constraints of South African SMMEs are caused by their poor creditworthiness. Conceptually, a distinction is made between fundamental and financial aspects of creditworthiness (the former ones being unaffected by the provision of financial services), leading to a matrix of possible diagnoses. A ratio-based scoring model is developed and linked to this matrix of diagnoses. The application of this model to the 64 sets of SMME accounts is made possible by the thorough quality control of accounting data performed in the previous stage. The findings suggest that South African SMMEs are not financially more vulnerable than their counterparts in developed countries, even though there are indications that their working capital cycle is particularly slow. Firms with a good fundamental score are found to be able, when supported, to recover from their financial weaknesses. However, the



evidence regarding the relationship between creditworthiness and use of bank finance or financial constraints is inconclusive. In fact, little evidence was found of creditworthy SMMEs being refused bank finance.

Overall, neither the accounting opacity hypothesis, nor the creditworthiness hypothesis, is strongly empirically supported. The inconclusiveness of empirical tests probably reflects the complexity of the phenomenon of granting bank debt, which involves multiple criteria and factors. In addition to creditworthiness and information quality, other aspects are relevant, such as the entrepreneur's skill, network effects, securities, amounts and transaction costs, or even the ambiguity of entrepreneurs' demand for finance.

The findings have implications for policies fostering the SMME sector (encouraging networking; easing access to accounting services; mentoring, strengthening internal controls, marketing, capital retention and working capital management) and improving the banks' practices (more differentiated offer of facilities; more discerning use of financial information; consistent monitoring especially of start-ups).

Limitations of this research are mainly linked to the nature of the data. The sampling method strived to strike a balance between data quality and bias avoidance, with both objectives being only partly fulfilled. Moreover, the conceptual constructs developed for the research were unequally covered by the various data sources, causing difficulties in empirically establishing relationships between them.

In light of the findings achieved, the main contribution of this exploratory research is to improve our understanding of the extent to which financial constraints affect SMMEs in South Africa. In this regard, it prepares the ground for future research: the use of emerging SMME databases (e.g. from credit bureaus) should enable researchers to examine more closely specific segments of the SMME sector and thereby deepen the understanding of the phenomenon and roots of financial constraints both in South Africa and in other, especially developing, countries.

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## List of acronyms

AFS	Annual Financial Statements
ANC	African National Congress
AO	Accounting Opacity
AT	Accounting Transparency
BEE	Black Economic Empowerment
BS	Balance Sheet
BSM	Business Sophistication Measure
CC	Close Corporation
CDR	Current Debt Ratio
CF	Cash Flow
CFOD	Cash Flow to Overdraft Ratio
CFS	Cash Flow Statement
CIE	Centre for Innovation and Entrepreneurship (research unit at the Graduate School of Business, UCT)
CIPRO	Companies and Intellectual Property Registration Office
COD	Cash On Delivery
CSBP	Centre for Small Business Promotion (DTI organisation responsible for monitoring the implementation of SMME strategy)
DBSA	Development Bank of Southern Africa
DTI	Department of Trade and Industry
EBIT/EBITDA	Earnings before Interest and Tax / Earnings before Interest, Tax, Depreciation and Amortisation
EU	European Union
GAAP	Generally Accepted Accounting Principles
GEM	Global Entrepreneurship Monitor
HDSE	High Differentiation Service Enterprise
IDRC	The International Development Research Centre of Canada
IQ	Intrinsic Quality (as a dimension of accounting transparency)
IS	Income Statement

ISA	Instalment Sale Agreement
LDSE	Low Differentiation Service Enterprise
LT	Long Term
MFRC	Micro Finance Regulatory Council
MLR	Mean Liquidity Ratio
NCDR	Net Current Debt Ratio
OD	Overdraft
ROCSA	Rotating Credit and Savings Association
RSC	Regional Services Council
SACOB	South African Chamber of Business
SARS	The South African Revenue Service
SEDA	Small Enterprise Development Agency, an agency of the DTI
SIC	Standard Industry Classification (as defined by the Statistics SA, 5 <sup>th</sup> edition, 2002)
SME	Small and Medium-sized Enterprises
SMME	Small, Micro and Medium-sized Enterprises
TO	Turnover
UCT	University of Cape Town
WECBOF	Western Cape Business Opportunities Forum

# **Chapter I**

## **Introduction:**

### **SMME Finance in South Africa**

University of Cape Town

## **Section 1. The controversy on SMME finance in South Africa**

Small, Medium and Micro Enterprises<sup>1</sup> (SMMEs) are widely regarded as vehicles for economic and social development in South Africa – potentially contributing to economic growth, job creation, broad-based black economic empowerment, skills building and even poverty alleviation. This thinking underlies many key political writings of the last decades (from the ANC election manifesto of 1994 to President Thabo Mbeki's latest State of the Nation address in 2008) and is generally supported by economic literature (Schumpeter 1911, Perroux 1953, Hirschman 1958, Teszler 1993, Naudé 2008), although Von Broembsen (2005) rightfully cautioned against the naïve belief that all these objectives could be achieved at the same time.

There is also a general consensus that the South African SMME sector is weak (Tucker 2000, Ntsika 2001, 2002, Falkena et al 2002, DTI 2004, 2005, SEDA 2006). Strengthening the sector would thus help to achieve the goals listed above. However, opinions differ on the reasons for the weakness observed.

The role of finance in explaining the fragility of SMMEs is controversial in the South African business arena. As in other countries, the circles close to entrepreneurs tend to argue that with more support from financial institutions, the SMME sector would flourish – while more conservative voices highlight the numerous other shortcomings of the sector and the hurdles that would first need to be removed. The local debate, in addition, includes some sets of arguments specific to the South African context.

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<sup>1</sup> International literature tends to use the acronym SME (Small and Medium Enterprises); however, since micro enterprises play a meaningful role in the finance controversy in South Africa, this work uses the South African acronym 'SMME' rather than 'SME'. See Section 3.4 for a definition.

Those on the side of SMMEs argue that funding is not only grossly insufficient in quantity, but also unfairly allocated, overly costly and subject to unattainable conditions, notably collateral requirements, which are often interpreted as racial discrimination (South Cape Investment Network 2000, Mashologu 2000).

Conversely, critics representing the business and finance sphere highlight other reasons for the narrow supply, such as the custodian duties of the financial sector, coupled with SMMEs' poor intrinsic quality. Tucker (2000) stresses the relevance of these issues in a country where the savings base is narrow and foreign investments are risk-sensitive. The South African Chamber of Business (SACOB) (1999) further emphasises weaknesses in the business concepts and management structures of many SMMEs.

## **Section 2. Literature review: The role of finance and broad explanatory models**

A similar polarisation can be found in academic literature. The controversy takes place on two levels: the descriptive level (how significant is the financial hurdle for SMMEs?), and the explanatory level (what are the reasons for the financial gap?).

### **2.1 – Role of finance**

In the last decade, several studies have attempted to identify institutional hurdles to SMME development, such as regulations or the political context (corruption, policy instability). The importance attributed by these studies to the issue of finance varied widely: occasionally this issue was absent (Ahwireng-Obeng & Piarey 1999); at other times it was regarded as a minor issue (Levy 1996, SACOB 1999, Karumbidza 2009); yet other studies considered it to be an essential factor. To name but a few, Sawaya (1996), Rwigema & Karungu (1998), Rogerson (2002), Chandra et al (2001) and Thwala & Phaladi (2009) found that access to finance had a significant negative impact on SMME development.

The focus of these studies is generally on the role of finance for the success (growth and profit) of existing firms, but the argument could be extended across the lifecycle of SMMEs to include start-up as well as survival or exit. Chapter II provides references on these aspects (p. 34).

Global Entrepreneurship Monitor (GEM) (2004:31-32) compared the opinions of experts on the relevance of the financial hurdle for South African SMMEs, to similar assessments in other countries. They found that while SMMEs do face a problem with regard to financial support, they appear to be better off, on average, than in most developing countries – possibly as a result of the dual structure of the South African economy and society.

## **2.2 – Broad explanatory models**

Most authors implicitly acknowledge that finance is a constraint for many SMMEs, but disagree on the reasons. This leads to conflicting sets of policy recommendations. Broadly, three main streams of opinions are found.

### **2.2.1 – Insufficient or unfairly allocated supply**

Several authors have stated that funding - rather than being generally insufficient – is only minimally available to some types of SMMEs, such as informal businesses (Moore & Schoombee 1995), rural enterprises (Ardington 1999, Karumbidza 2009) and micro-enterprises (Schoombee 2004). Nott (2000) further provides evidence of inappropriate lending practices by informal lenders.

This observation is sometimes explained by cost issues: it is widely acknowledged that the cost of originating and monitoring small loans tends to make them unsustainable (Schoombee & Moore 1995, Tucker 2000). An alternative explanation focuses on bank behaviour, including collusion, discriminatory practices, red tape and administrative burden (Naudé & Havenga 2004).

If funding is insufficient or discriminatory, supply-side policy interventions are called for, such as:

- Coercion, by means of obliging lenders to increase their supply to specific target groups, with the loss of banking license as a possible sanction (Ardington 1999);
- Regulation, through the creation of incentives to increase the supply, such as disclosure obligations, improved refinancing for microlenders, or more favourable schemes for small banks (Schoombee 2004:13);
- Investment of funds into target groups of SMMEs, either through institutionally supported equity funds (Buys 2009:16), or as a catalyst to private sector investment by means of a joint resource pool (Tshabangu 2009:59);
- Subsidising the provision of financial services (Ardington 1999, who focussed on rural finance).

### **2.2.2 – A dysfunctional market**

A second line of argument is that frictions or, more radically, market failure is preventing a full match between supply and demand. Market failure, especially the phenomenon referred to as credit rationing, is a consequence of informational asymmetry and deficient enforcement mechanisms (see Chapter III). A contributing factor is the lack of transparency on the financial status of SMMEs (Falkena et al 2004:117).

This calls for interventions to smooth market functions, remove interest rate ceilings and improve information mechanisms (Ebony Consulting International 2000:74-76, Falkena et al 2002).

### **2.2.3 – Unqualified demand**

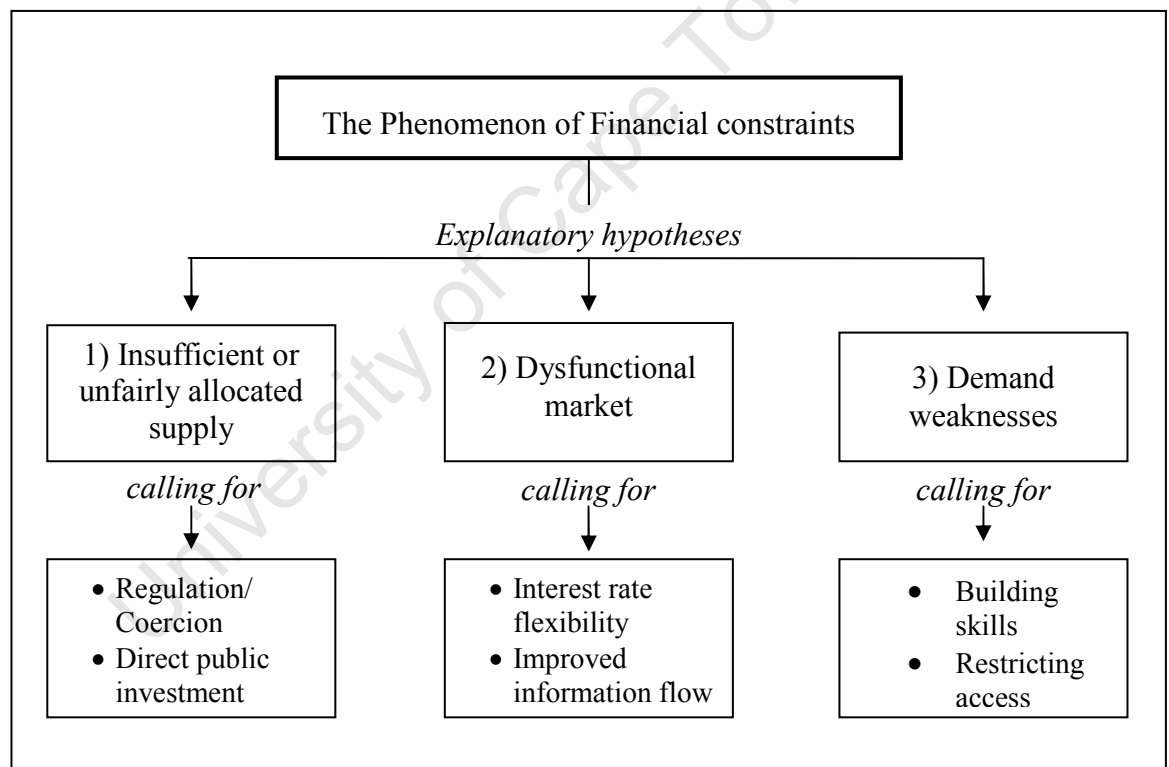
A third line of argument, sometimes implicit, is that South African SMMEs do not qualify to receive finance, for example because the owners' managing skills are insufficient or their expectations unreasonable. GEM (2002:42-43, 2003:47, 2004:31) have repeatedly argued that some entrepreneurs' difficulties in accessing finance were often caused by weaknesses within the firm and its managing team. These may also explain why schemes put in place by the banks to enable micro enterprise funding have been largely unsuccessful (Schoombee 2004:11).



For many authors, the solution lies in skills building, gradually improving entrepreneurial capacity and thus creating a generation of SMMEs that will fulfil sound lending requirements (GEM 2002, 2003, 2004, 2005). In the interim, some authors recommend restricting access to finance, either to specific segments, such as over-indebted borrowers (Ebony Consulting International 2000) or as a general strategy (Cressy 1996).

The three broad explanatory models are summarised in the figure below:

*Figure 1 – The three main explanations for financial constraints and corresponding policy recommendations*



### 2.3 – Demand quality: a gap in the literature

The literature frequently uses the argument that many SMMEs do not qualify for finance. However, there is not much systematic in-depth evidence on enterprise quality to back this argument. For example, with the exception of the 2003 extensive review of financial management practices, GEM assessed the creditworthiness of SMMEs based on

superficial proxies such as: blacklisting, unavailability of adequate financial records, lack of collateral, or seeking working capital<sup>2</sup> (GEM 2002). Schoombee also quoted the problem of poor credit records (2004:11), as well as a lack of commitment by the owners and non-viable business ideas – but these criteria were based on interview evidence of mentors rather than on a systematic analysis of SMME data.

The choice of criteria to determine creditworthiness fuels the controversy. Past credit records (including blacklisting), the existence of collateral or the quality of financial records are popular indicators but are contested by SMME advocates, especially those of black entrepreneurs, on the following grounds:

- (a) past credit records, being related to an unfair historical context (apartheid and its legacy that continued after 1994), are regarded as inappropriate predictors of future payment behaviour;
- (b) collateral requirements are more difficult to fulfil for Africans, who were historically unable to acquire property and still tend to be structurally confined to low-value areas;
- (c) adequate financial records are unattainable for small entrepreneurs who cannot afford the fees of qualified professionals.

In part, the reason for this dilemma on criteria is that they are second-best indicators, used in a context of imperfect markets, as substitutes for a more in-depth assessment of the SMMEs' quality. Therefore a serious investigation needs to distinguish between criteria referring to the *intrinsic quality* of SMMEs as economic actors (such as the viability of the business idea or the owner's commitment), and those related to the *functioning of markets* in a context of imperfect information and enforcement problems (such as the credit record,

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<sup>2</sup> "Seeking working capital" may seem a surprising cause of exclusion. The argument of the GEM authors (2002) was that asking for working capital without providing collateral (i.e. combination of two factors) would be a sufficient ground for rejection. However, in their empirical work they consider each criterion separately.

collateral, etc)<sup>3</sup>. In this way, credit rejections can be attributed more precisely either to weaknesses in the foundation of the SMMEs, or their inability to meet market requirements. The distinction also has great policy relevance: no amount of support can provide durable relief to an SMME whose foundation is not sound; nonetheless, targeted policies and infrastructure would be able to help SMMEs that have a well thought-out business idea but poor collateral or financial records, to access the required finance.

## **Section 3. Purpose, scope and philosophy of the research**

### **3.1 – The gradual emergence of the focus areas**

When this study began in 2001, the financing problems faced by SMMEs were taken as a given, while the unknown was the intrinsic quality of businesses. The initial purpose of the study was therefore to gain a closer understanding of the financial profile of SMMEs and to assess its impact on their access to finance, in order to estimate to what extent SMMEs are victims of unfair credit rationing<sup>4</sup>.

The difficulty of gathering and cleansing financial data from SMMEs raised the issue of information, especially accounting opacity. Being originally perceived as a practical limitation of the empirical methodology, this problem area gradually emerged as a conceptually relevant factor. In particular, it appeared that issues of financial communication had to be separated from the intrinsic quality of an SMME as a potential debtor. This led to the addition of a chapter on the role of information problems.

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<sup>3</sup> The relationship between informational asymmetry, enforcement problems, and collateral is discussed in Annexures 26-29.

<sup>4</sup> This paragraph and the next one allude to concepts and processes, which will be defined and explained in detail later in the thesis, specifically in Chapter III, Section 2.4 (credit rationing), Chapter III Section 3 (accounting opacity) and Chapter IV Section 4.2 (data cleansing).

The research purpose was then reformulated to include both the phenomenon of financial constraints, and the two sets of explanatory hypotheses, as detailed below.

### **3.2 – Objectives and research questions**

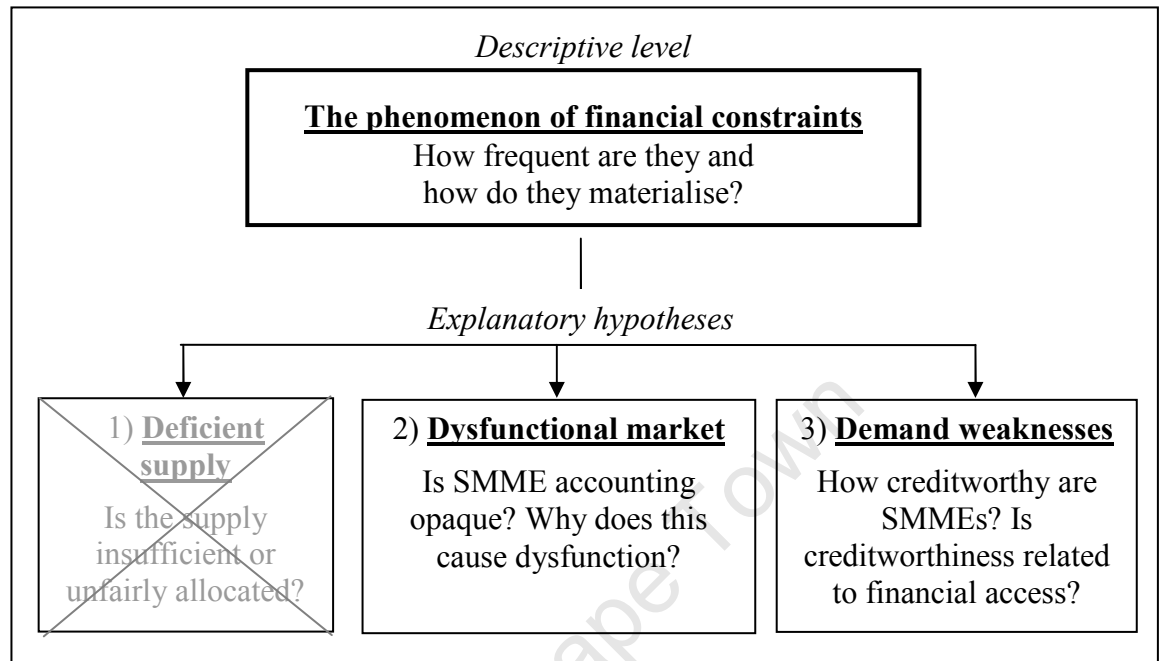
This research uses business data to review the SMME finance controversy. As illustrated in Figure 2, a distinction is made between the phenomenon of financial constraint – which is observable – and the explanatory hypotheses, such as market or creditworthiness problems.

This is an important point, as the literature too often tends to make judgments based on an amalgamation of concepts, such as interpreting the frequency of financially related complaints as a proof of market failure, or regarding the high number of loan rejections as a proof of poor SMME creditworthiness. Instead, this thesis investigates the extent and type of financial constraints separately from their reasons. From the three main hypotheses, the one linked to the supply will not be addressed in this thesis, as it would require a different approach and a different set of data. The study therefore concentrates on the hypotheses of dysfunctional market and uncreditworthy demand.

The research agenda for theoretical and empirical analysis is then as follows:

- (1) How do financial constraints materialise among South African urban SMMEs? How frequent and acute are they?
- (2) Are the financial markets for SMMEs prone to dysfunction? In particular, are SMMEs informationally opaque and if so, does this affect their access to finance?
- (3) Does the financial profile of SMMEs constitute evidence of poor creditworthiness? Does this affect their access to finance?

Figure 2 – The research questions



The study will explore these three areas separately, and will formulate more precise research questions on each issue after a review of the specific literature.

### 3.3 – Introducing the research constructs

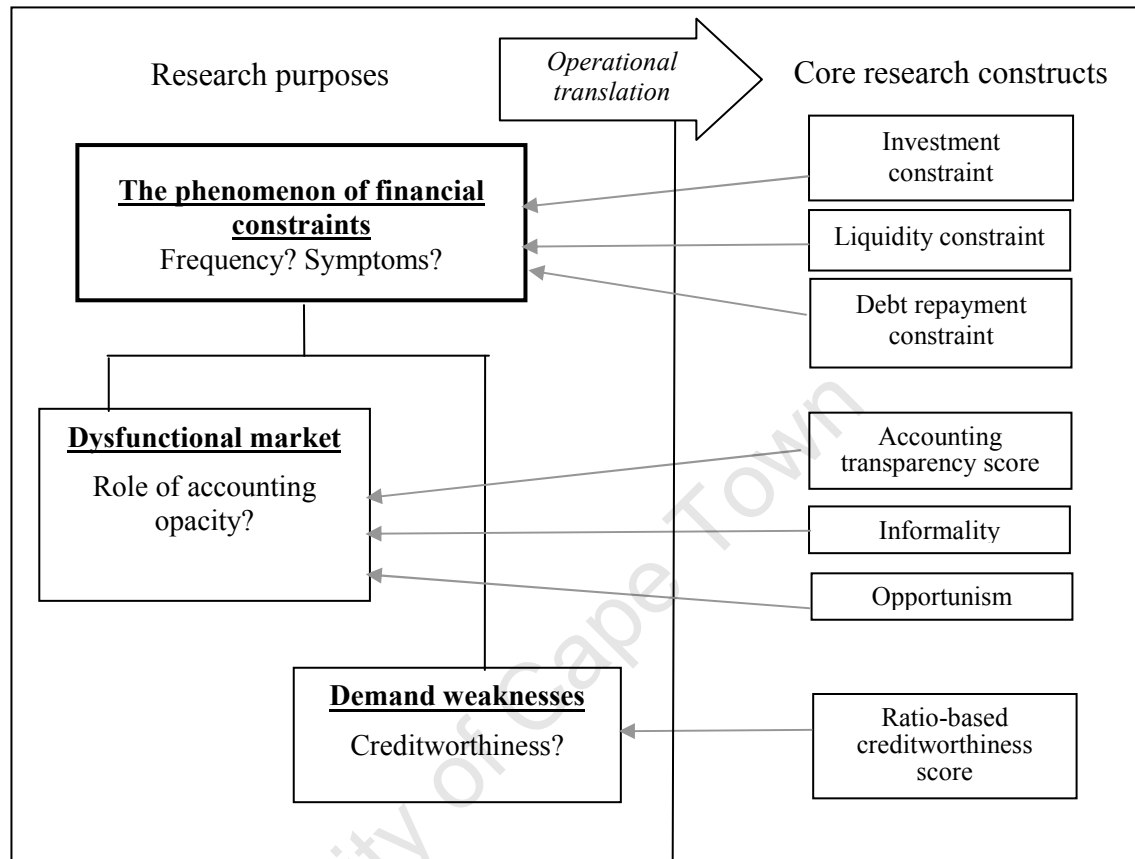
To address the research questions and link them with empirical data, research constructs were devised, following the coding procedures recommended in grounded theory (Strauss & Corbin 1998:57ff).

Initially, the phenomena and concepts that appeared relevant to the study questions were labelled and explored through open coding (Strauss & Corbin 1998:57ff). This process led to a number of constructs, which were then linked and ordered together into a coherent framework. The axial and selective coding (Strauss & Corbin 1998:57ff) led to seven core categories, which were filled as necessary by a number of lower-level constructs, which will be commented on in greater detail in the following chapters. The seven core categories are briefly introduced below.

- An ***investment constraint*** is a situation in which a firm is unable to realise its ambitions for lack of term funding (i.e. finance that is required for a period exceeding one year) (see Chapter II Section 3);
- A ***liquidity constraint*** is a situation in which a business suffers from tight liquidity (see Chapter II Section 3);
- A ***debt repayment constraint*** means that a firm has insufficient internal funds to repay existing debt (see Chapter II Section 3);
- The ***accounting transparency score*** expresses the ability of a firm's financial statements to convey a transparent view of the firm's business and financial situation (see Chapter III Sections 4 and 5); the lower the score, the more opaque is the firm's accounting;
- ***Informality*** in this thesis refers to the low level of sophistication of a firm's financial management. It involves the failure to implement certain practices (such as record-keeping) as well as organisational aspects (such as the absence of qualified administrative staff) (see Chapter III Section 6.3);
- ***Opportunism*** in this thesis refers to the tendency of small business owners to tailor their financial statements to a specific objective, such as tax-saving or image-boosting (see Chapter III Section 6.4);
- The ***ratio-based creditworthiness score*** expresses the intrinsic quality of the firm, based on a series of ratios calculated from the financial statements (see Chapter IV Section 4).

These constructs were connected to the research agenda as represented in Figure 3.

Figure 3 – Research questions and research constructs



### 3.4 – Scope and limitations

As indicated, this study uses the acronym SMME, as officially defined by the National Small Business Act of 1996, and revised by the National Small Business Amendment Bill of March 2003. “Small business” or “small firm” are also occasionally used with the same meaning.

The official definition of South African SMMEs is based on a matrix of three quantitative criteria (staff, turnover and gross assets) for eight sectors of the economy (see Annexure 1). Compared to international standards, the South African definition has lower thresholds, probably reflecting the different structure of the economy, so that an official ‘small’ enterprise in South Africa is substantially smaller than in developed countries (see Annexure 2).

The present research looks primarily at small independent firms that are engaged in manufacturing, construction, trade and repairs, transport or other services, with a particular focus on black businesses<sup>5</sup>.

As the study was designed in such a way that each firm had to have accounting records, two additional exclusions were necessary:

- Informal businesses:

In the absence of a clear distinction between formal and informal businesses, this research regards the following as formal: companies and close corporations (registered with CIPRO), as well as sole proprietorships or partnerships that produce financial statements at least once a year.

- Start-ups:

Firms that are too young to have published their first set of financial statements, i.e. on average firms younger than eighteen months, are not included in this review.

Furthermore, the following firms were not, or only peripherally, covered by this research: enterprises from the informal sector and from rural areas (excluded for practical reasons); not-for-profit businesses; property management and financial services, and businesses which are, directly or indirectly, owned by a large company (because these are not usually concerned by the SMME finance controversy); however, small groups of SMMEs are included, as well as SMMEs that are part of a franchise.

### **3.5 – Research approach**

This research can be characterised as follows:

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<sup>5</sup> This thesis uses the official terminology for population groups. In particular, black businesses refer to firms owned in their majority by South Africans from African, Indian or Coloured background; African refers specifically to owners from a Black African group (and their businesses), Coloured applies to owners from mixed descent or from Khoi-San origin and



- It is ***policy research***: The definition of agenda and methods has to strike a balance between the researchers' conceptual and analytical rigour and policymakers' need for relevance, realism and ease of interpretation (IDRC 2001).
- It is ***exploratory***. Indeed, although SMME research has flourished in the last decade, in South Africa this fast-moving and widely diverse sector remains poorly known and data are often flawed (Berry et al 2002 estimate the error margin on official SMME statistics at +/- 150%!). Even on the conceptual side, in spite of a plethora of literature on credit rationing, the issues of demand for finance, creditworthiness and financial transparency have not been strongly formalised. The present research therefore often covers new ground. This combination of conceptual complexity and soft data implied a need for unusually long explanations of the analytical processes undertaken. To preserve the flow of the thesis, such detailed explanations have been provided in Annexures, which are therefore extensive.
- It is ***multi-disciplinary***. To ensure optimal coverage of the relevant issues, this research draws on economic concepts as well as accounting and financial analysis techniques and is underpinned by methods of social science research.
- This study was inspired by the principles of ***grounded theory*** (Strauss & Corbin 1998). Although a preliminary conceptual basis is developed upfront, the findings that emerged from the data were allowed to enrich and occasionally restructure the initial theoretic framework.

## Section 4. Empirical methodology: An overview

### 4.1 – Combining three research designs

The general ambition of the empirical work was to collect and assess data on SMMEs' difficulties in raising finance, their situation with regard to informational transparency as well as their financial status, and to investigate possible relationships between these variables.

Scoring models were necessary to address the multiple dimensions of the constructs of accounting transparency and intrinsic creditworthiness. However, owing to the exploratory nature of the research, the research was designed with a stronger emphasis on construct and internal validity than on statistical generalisability. Comparability between businesses was more important than numerical precision, since the scores were essentially used to sort businesses into broad categories.

Since the research questions combine descriptive and explanatory elements, design strategies were used in a pluralistic manner, as recommended by Yin (1994:15).

- The core of the empirical work was based on an **analysis of SMME financial data**. The primary approach here was to use archival analysis, based on a **sample of 64 SMMEs**; this had the advantage of combining a relatively precise and independent source of data with a relatively high number of firms, hence enabling the study of relationships and providing a basis for the classification of SMMEs into categories.
- This quantitative analysis was complemented by **case studies**, which (a) enabled a critical look at the reliability of the archival data, (b) established the qualitative background for understanding the relationships revealed in the quantitative data, and (c) triangulated the findings from the archival data (Eisenhardt 1989:538). The case study

method also revealed the interdependences between the phenomena and their complex environment (Yin 1994).

- In addition, **survey data** were analysed, with two purposes: (a) providing additional data on financial constraints and informality, and (b) testing and triangulating the findings from the financial statements analysis on a larger sample. This empirical exercise was made possible by the agreement of GEM and Khula to grant access to their survey data (this will be referred to as the GEM survey).
- In addition to these three main sources, short interviews were conducted with finance professionals to help localise financial data and understand their limitations. Furthermore, bank files were reviewed where possible, occasionally providing interesting insights.

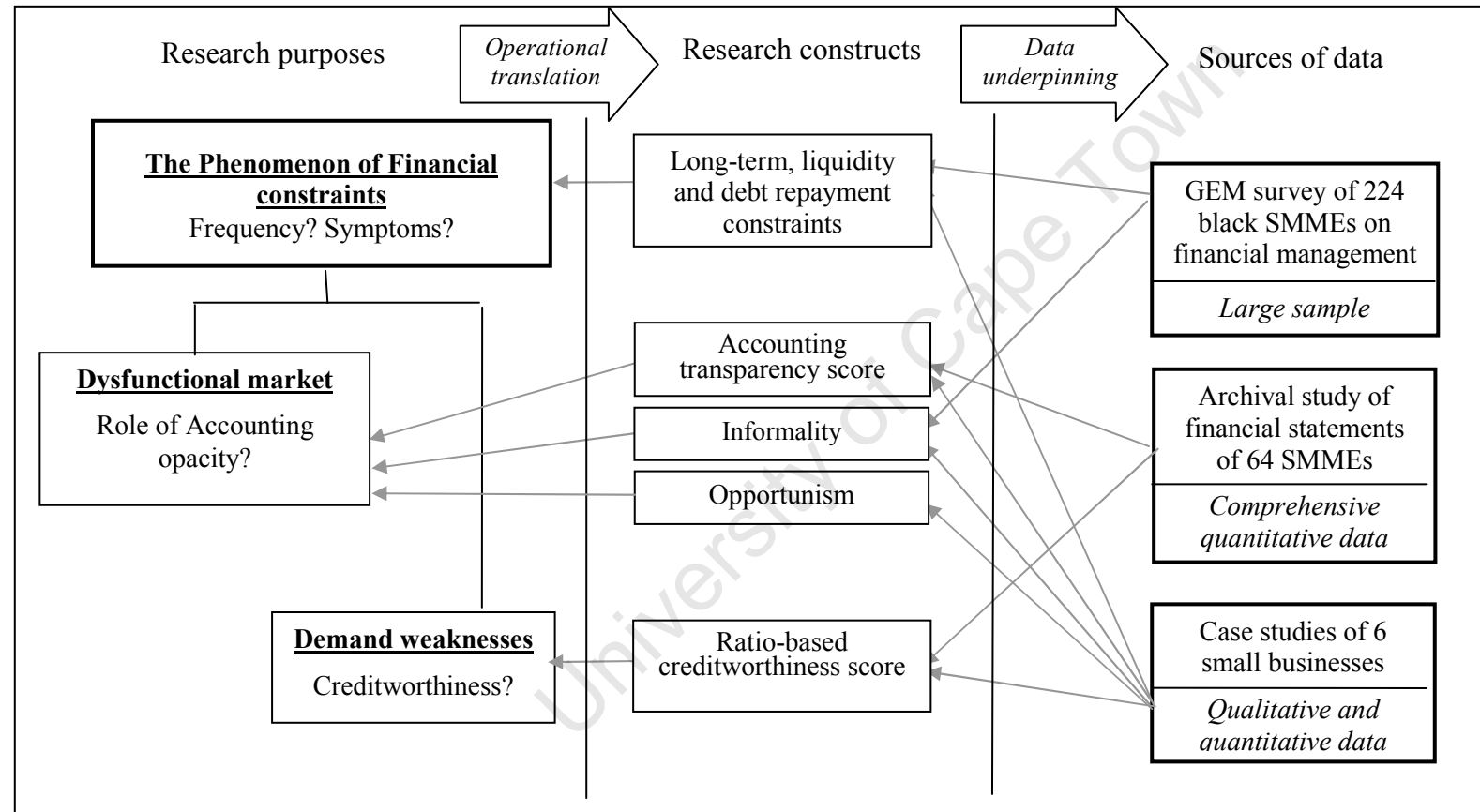
These various sources of evidence were related to each conceptual construct, following an axial coding (Strauss & Corbin 1998:57ff). This procedure enhanced the theoretical density and created connections between the constructs.

Figure 4 illustrates how the research constructs (which will be presented in greater detail in the following chapters) helped to link the main three empirical exercises to the study questions.

The boundaries of the data varied from one source to the next. While the archival and case study firms are Cape Town businesses from all races, the GEM survey targeted only black businesses in South Africa's four largest metropolises (GEM 2003:40). All three sources matched the population of interest, namely smaller urban SMMEs. The data were collected between 2002 and 2004, but, since it included historical data, it went back to the late 1990s.

The next paragraphs present the individual sources of data.

Figure 4 – Research questions, constructs and empirical design strategies



Note: The research constructs will be elaborated in the following chapters.

## 4.2 – GEM survey data

The Global Entrepreneurship Monitor (GEM) is an annual international survey aimed at quantifying entrepreneurship; since 2001, the Centre for Innovation and Entrepreneurship (CIE) at the University of Cape Town (UCT) has coordinated the South African component of this survey, often seizing the opportunity to carry out additional research on entrepreneurship-related issues.

In 2003, the GEM team, in partnership with Khula Enterprise Finance Ltd (a DTI agency specialising in small enterprise finance, which has since been dismantled), surveyed 224 formal black businesses and enquired about their financial administration and the impact of basic practices (cash book, debtors book, inventory control, proactive debtor management) on the firm's financial health (GEM 2003:38ff). This work intended to illustrate the effect of the skills gap on the success of such ventures. The survey was carried out through face-to-face interviews with business owners, based on comprehensive structured questionnaires (93 questions). Unfortunately, the GEM documentation does not indicate how many enterprises were approached for the survey, hence the response rate is not known.

The 224 businesses represented in the GEM sample represent the medium to upper end of formal black SMMEs, with relatively well-qualified entrepreneurs. The median values for staff, turnover and firm age were 8 employees, R1 million and five years respectively. Manufacturing was overrepresented at 40% of the sample, but all sectors were included. Also, a majority of firms considered themselves to be profitable and to have enough cash (see Annexure 3 for more detailed statistics on the sample profile).

The GEM survey provided data that were relevant to several areas of this study:

- Cash problems: prevalence, causes and strategies

The survey includes several questions to probe entrepreneurs' cash situation (notably the existence and use of overdraft facilities, and the ability to pay bills in the last six months).

- Finance applications

The survey records firms' sources of finance. Owners who have applied for short- or long-term finance were asked to indicate the outcome of such applications.

- Informality and accounting transparency

The survey tackles several practices that contribute to transparency (separation of business and personal account; crediting cash inflows to the bank account; sound record-keeping).

### **4.3 – Database of financial statements**

The core of the empirical work was based on a database of financial statements for 64 SMMEs from the greater Cape Town area; in the rest of the thesis this database will be referred to as the *balance sheet sample*.

Accounting information is a type of archival data, which is regarded as comparatively stable, unobtrusive, exact, precise and quantitative (Yin 1994:78ff). Although applying these attributes to small firms' accounts is subject to caution, a financial statements' database does provide a more objective and quantitative picture of creditworthiness and financing schemes than a survey would.

In the absence of an existing database of small business financials in South Africa, the collection of accounting data proved challenging. Since most business owners were reluctant to provide this type of information, even for research purposes, it was feared that relying exclusively on voluntary participation of SMMEs would lead to a strong self-selection bias. To remedy this problem, the study adopted a two-pronged approach: some financial statements were collected on an anonymous basis from financial institutions, while others were obtained through direct contact with firm owners.

For the first part, agreements were entered into with financial institutions such as banks and accounting firms about access to their clients' files. This happened on

an anonymous basis: the firm names were erased on the documents provided, but profile information was given (sector, number of employees, ownership, year of creation). The providers of data were: NedEnterprise, Gobodo Inc., Betty & Dickson SA and PriceWaterhouseCoopers Inc.<sup>6</sup> This approach provided data on firms which might otherwise have declined to participate. Furthermore, in the case of the bank clients, the bank file provided additional information, especially with regard to the facilities granted and the securities pledged. However, the data collected under this method could only be analysed by means of desk research, since the business owners were not available for feedback. Another disadvantage was that the pool of bank clients was biased towards indebted firms, while the pool of clients of the good accounting firms was biased towards better accounting quality and transparency.

To complement this sample, additional data were collected from businesses themselves, either directly or through the mediation of WECBOF (the Western Cape Business Opportunities Forum), which supported this research. The response rate was low: nine of the 75 WECBOF members approached agreed to participate, while six of the 35 firms contacted individually joined the sample. Surprisingly, the expected self-selection bias did not lead to the exclusion of the unhealthiest firms; in fact, the motivations of owners for participating in the survey were variable – while some were happy to share their successful experiences, others were hoping that participation in the study might help them out of a desperate situation. This data also had the advantage of enabling follow-up interviews if required (e.g. through site visits and short contacts with business owners and accountants), as well as specifically targeting firms that were under-represented in the other samples, in particular manufacturing and black-owned businesses.

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<sup>6</sup> At the time when data were collected, NedEnterprise was a division of Nedcor Bank Ltd; it was later transferred to Peoples Bank Ltd before being reintegrated into Nedbank Ltd; Gobodo Inc. was an independent auditing firm, whose Western Cape branch later merged into Ernst & Young Inc.; Betty & Dickson Chartered Accountants SA was an independent auditing firm, which similarly merged with RSM to form RSM Betty & Dickson.

Lastly, a co-operation with Business Beat provided complementary data in the form of reports written by groups of BCom Hons students, describing small enterprises of their choice. From 35 reports, ten included usable, albeit scant, financial information. This data were used to support and generalise findings from other firms.

The financial statements and profile information collected through this process were compiled into an anonymous database, where each SMME had a code name indicating the source of data. From the 72 businesses for which financial statements were collected, eight were excluded because they did not meet the eligibility criteria (being too large, part of a group, operating in a sector outside the scope of the study, or having insufficient financial data quality). The final composition of the balance sheet sample is represented in Table 1.

*Table 1 – Origins of the balance sheet sample data*

Source of data	Number of firms	Code names
NedEnterprise	17 SMMEs, labelled	Ned1-Ned20
Gobodo	17 SMMEs, labelled	Gob1-Gob19
Betty & Dickson	4 SMMEs, labelled	BD2-BD9
Price Waterhouse Coopers	1 SMME, labelled	PWC1
WECBOF	9 SMMEs, labelled	Wec1-Wec9
Business Beat	10 SMMEs, labelled	BB1-BB10
Direct contact	6 SMMEs, labelled	Dir1-Dir6
<b>Total</b>	<b>64 SMMEs</b>	

*Note: The code names for NedEnterprise, Gobodo and Betty & Dickson do not match the number of firms from those sources, because some firms, which had been attributed a code name after their accounts were collected, were later excluded.*

The data collection followed a theoretical sampling method (Glaser & Strauss 1967; see also Strauss & Corbin 1998:176). In particular, the direct contacts with targeted groups of firms sought to include diverse situations which may affect SMMEs' access to finance (in terms of age, size, sector, ownership, financial health). Therefore, the sample was not statistically representative of the SMME population but rather intended to fill conceptual categories (Eisenhardt 1989:533). In practice, however, it proved very difficult to collect sufficient data from African-owned businesses, which were rare in the files of our sources; from



all those who responded to our requests, only one (Wec1) was able to deliver financial statements.

Like the GEM data, the 64 businesses of the balance sheet sample tended to represent the medium to upper range of the SMME population:

- Sizewise, 86% of the sample were either very small or small. The median size was 7 employees and a turnover of R1,7 million. 69% of the sample were close corporations, the rest being companies (Pty Ltd), sole proprietorships and partnerships.
- The age of the firms was slightly lower than in the GEM sample, with a median of 4 years<sup>7</sup>. Apart from the methodologically induced under-representation of start-ups, the age distribution of the sample appeared to be roughly representative of the whole SMME population;
- Unlike the GEM sample, the balance sheet sample had no manufacturing bias; the trade and catering sector represented half of the businesses, followed by manufacturing (22%), services (19%) construction and transport enterprises (5% each);
- Firms operating in a franchise scheme may have been overrepresented at 19% of the sample, but this seems consistent with the fact that new entrepreneurs, particularly black entrepreneurs, are increasingly attracted to franchises (*Sunday Times* 2003:12).

The most significant difference from the GEM sample was its racial composition. While the intention was to include all race categories, African SMMEs remained marginal at 4% of the sample. Unfortunately, although almost

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<sup>7</sup> Data was collected between 2002 and 2004, but the accounts collected usually referred to financial years that had been closed 1,5 to two years earlier. As a consequence, a 4-year old firm could often only provide two balance sheets and income statements. Younger firms (2-3 years) often had the same number of financial statements, as these had been produced more swiftly e.g. to apply for finance.

all the African entrepreneurs contacted were willing to respond to interviews, they were unable to provide financial statements.

More detailed statistics on the balance sheet sample can be found in Annexure 4.

#### **4.4 – Case studies**

To reflect the variability of situations, a multiple case study design was chosen, with individual businesses, selected from the balance sheet sample, representing single units of analysis (see detailed case study design in Annexure 30). The firms were studied within their context, including in particular (a) the partners associated in financial management, such as external bookkeeper or accountant, and (b) the potential or actual providers of funds, such as family and friends, banks, suppliers, micro-lenders.

The study design also adopted multiple sources of evidence, seeking a synergy between quantitative and qualitative data (Eisenhardt 1989:538) and combining the advantages of various types of data (Yin 1994:78):

- interviews, especially of the business owners, which have the advantage of being targeted and insightful (Yin 1994:80),
- direct observations, in the form of on-site visits, which are real and contextual, and
- archival records, namely the historic financial statements, which partly compensate the weaknesses of the other sources of evidence by being comparatively stable, unobtrusive, precise and quantitative.
- Occasionally, business brochures, cash flow forecasts or excerpts from the bank file were used as additional sources of evidence.

Potential problems resulting from the volume of data were controlled by axial coding (Strauss & Corbin 1998:57ff).

As in the archival analysis, the case study objects were selected to cover a variety of situations while concentrating on firms with a superior accounting quality. In the process of selecting enterprises, however, two problems surfaced:

- (1) unfortunately, no African business was found that fulfilled the conditions regarding accounting quality;
- (2) firms that were able and willing to provide both strong accounting data and time for interviews all appeared to be reasonably successful (self-selection bias).

As a result, the design was revised based on the following compromise:

- Four regular case studies were carried out, based on a combination of strong accounting data and interview data; a particular effort was made to include constrained businesses – but low-skilled, African or distressed businesses were not covered;
- To cover low-skilled African businesses, a purely interview-based methodology was used for an additional case study, and
- To illustrate the financial distress phenomenon, a failed business was examined, based on archival data only (i.e. including accounting and bank files, but no interviews).

This compromise enabled a combination of two strategies for theory-building, namely *replication* of emerging theoretical concepts (Eisenhardt 1989:535) through the similarities in the four regular case studies, and *extension* of the theory (Eisenhardt 1989:537, Eisenhardt 1991:620) through the addition of two polarised cases (Pettigrew 1988).

The six case studies undertaken are briefly presented below:

- CS1 is a failed business that was initially encountered in a bank file review. It was started by a white male in 1996 as the first franchisee of a Pretoria-based furniture manufacturer, and the initial investment was largely financed by a long-term bank loan of R380 000. Unfortunately,

the turnover, at approximately R2,5 million, remained below expectations, and new debt-financed investments only made matters worse. In 2000 the business was liquidated.

- CS2 is a franchise restaurant sourced through direct contact. The firm was started in 2001 by a white-owned serial entrepreneur. With a turnover of over R3 million and 47 employees, it is the largest of the case studies. The business's balance sheet shows hardly any debt apart from the member's loan, but the latter is backed by a long-term personal bank loan granted to the owner. In the absence of profits in the last two years, the business owner might be considering to resell the operation.
- CS3 was also originally taken from the bank file; it is a manufacturer and retailer of safety wear, started informally in 1998 by a coloured man, who later registered a formal CC in partnership with a neighbour. Although the partnership did not last, the business has undergone a sustained growth to reach an annual turnover of nearly R3 million – while carrying hardly any debt. The owner is planning to expand its manufacturing operation.
- CS4a+b agreed to participate in the study after direct contact (through black business listings). The two close corporations are owned by a township-based African couple, and operate as multiple-activity businesses specialising in tenders (including cleaning, catering, building, and gardening). The first CC (CS4b) was started by the husband in 1998 and ran a significant cleaning contract for eighteen months (turnover of R350 000 p.a.), but poor profitability and extremely tight working capital caused him to stop trading. His wife then started a new CC (CS4a) in 2003, and won a cleaning contract, for which she contracted unsustainable debt (buying machinery on a three-month credit in spite of her acute need for working capital). Both businesses have been unable to secure stable external finance.

- CS5 is a tourism business specialising in township tours and cultural tours. It was started as a partnership in 1997 and registered as a CC in 1998. Through regular investments in vehicles (financed by instalment sale), the turnover grew to approximately R1 million. When the firm became profitable, the main member (a coloured man) bought out his dormant partner. The firm is profitable but suffers from seasonal cash shortages in winter.
- CS6 is a thirteen-year old family business involved in industrial packaging, specifically the manufacturing of wooden crates. After the death of the founding member, his wife and one son took over the business, but there has been little growth. The second son then came in and used a more aggressive strategy, while the first son started a new business – drawing funds out of the older sister company. This led to a split and to major cash shortages in the crating business.

Table 2 summarises the six case studies undertaken.

*Table 2 – Synopsis of case studies undertaken*

<b>Business code name</b>	<b>Size category</b>	<b>Age (yrs)</b>	<b>Type of business</b>	<b>Sector / activity</b>	<b>Race</b>	<b>Sources of evidence</b>
CS2	small	3	franchise	restaurant	white	multiple
CS3	small	6	manufacturing (and retail)	safety wear	coloured	multiple
CS5	small	6	high-skilled services	tourism	coloured	multiple
CS6	small	13	high-skilled services	packaging	white	multiple
CS1	very small	4	failed; franchise; manufacturing	furniture manufacturing and retail	white	bank file only
CS4 a+b	micro	8 & 0.5	low-skilled services	cleaning	African	interviews only

## **4.5 – Enhancing the design validity**

Following the recommendations of the literature, a few measures were implemented to enhance the validity of the study design (Kidder et al 1986:26-29).

- To ensure good construct validity, the choice of constructs was guided by rigorous conceptualisation, and the multiple constructs used, which were organised as a chain of evidence (Yin 1994:34), decreased the risk of choosing inappropriate constructs. The correctness of operational measures was enhanced by using multiple sources of evidence. In the specific case of accounting transparency, where the scarcity of literature made the development of a scoring tool difficult, external professionals were asked to validate the model.
- Internal validity can be threatened if exogenous factors are ignored. This is controlled by the broad focus of the present study, which reviews two rival explanations for a phenomenon.
- External validity deals with the generalisability of findings. The basis of generalisation in this study is analytical (Yin 1994:36) rather than statistical. This is made possible through theoretical sampling (Strauss & Corbin 1998:176), and the choice of multiple case studies with a focus on replication and extension (Eisenhardt 1989:535-37).
- Reliability can be a cause of concern in a study based on SMME accounting data, which may contain errors and biases. To minimise the risk of error caused by data adjustments, clearly defined and documented operational procedures were followed.

## **Section 5. Progression of the thesis**

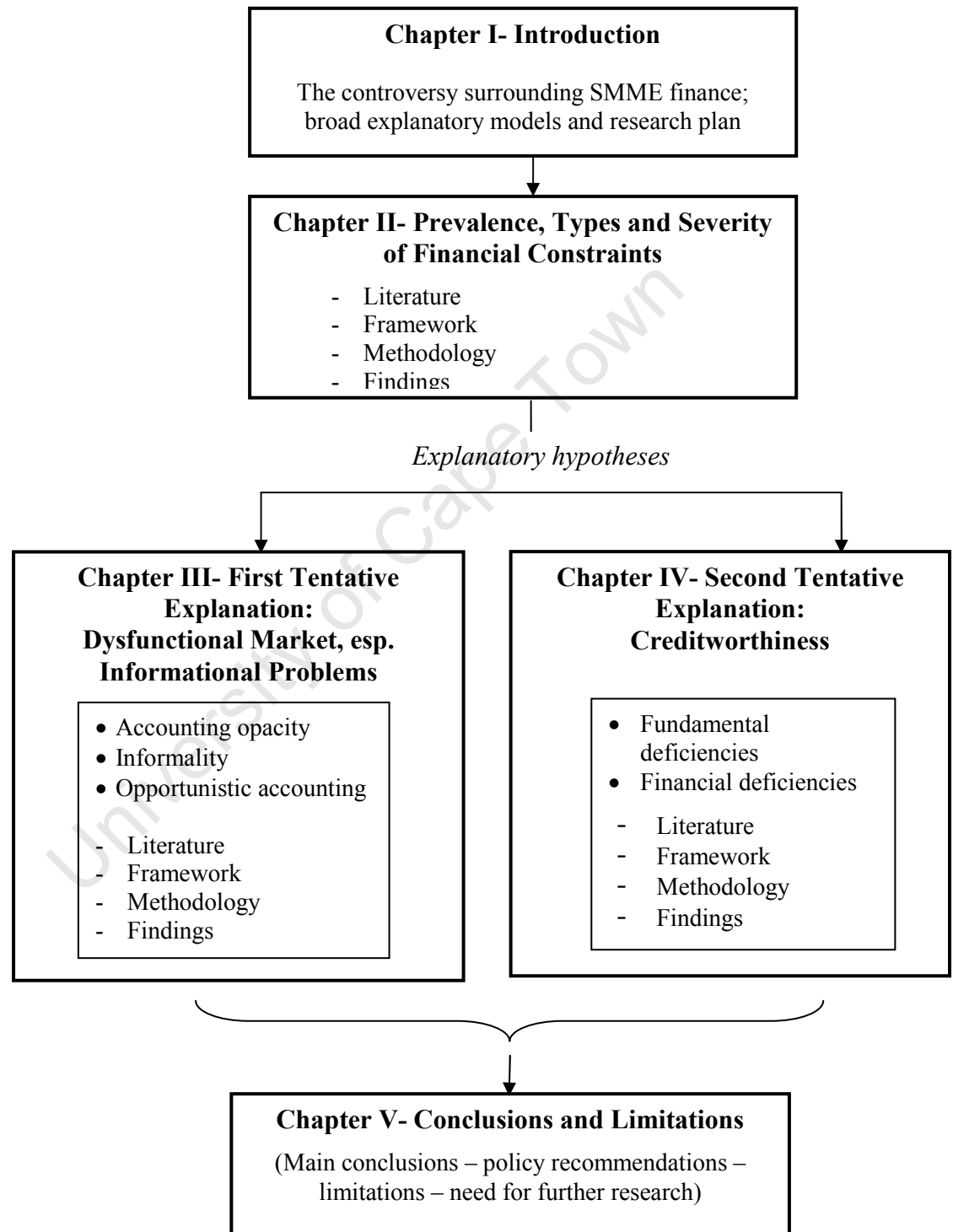
Because of the broadness of focus, it was decided to follow a thematic line rather than the conventional operational line. This means that each of the constructs (or groups of constructs) identified earlier is investigated in an individual chapter or section following the same model: literature review, conceptual framework, methodology, findings, discussion. This approach enables a better logical flow, while avoiding confusion between the multiple constructs.

Accordingly, the thesis is structured as follows:

- Chapter II investigates the phenomenon of financial constraints, its nature, severity and frequency.
- Chapter III reviews issues related to informational asymmetry, in particular accounting transparency.
- Chapter IV turns to the role of creditworthiness in explaining financial constraints.
- Chapter V assesses the results and concludes by discussing the limitations of this research and identifying the need for further research.

The overall scheme of the thesis is depicted in Figure 5. For the sake of clarity, this figure is repeated at the start of each chapter to demonstrate its position in the overall framework of the thesis.

Figure 5 – The structure of the thesis

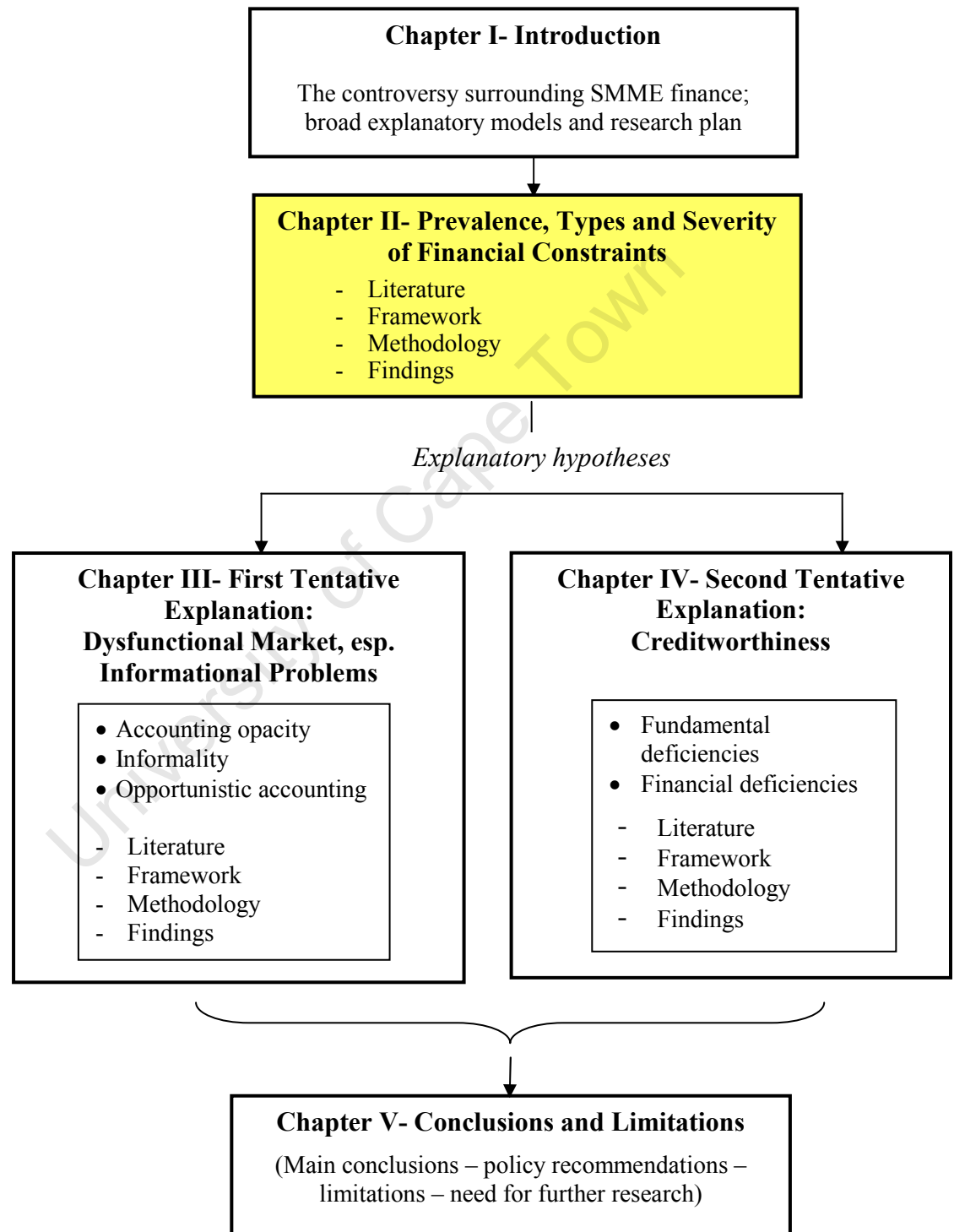




## **Chapter II**

# **The prevalence, types and severity of financial constraints among South African SMMEs**

University of Cape Town



## Section 1. Formulating the problem

This chapter focuses on the financial constraints faced by SMMEs and their complexities. More specifically, this chapter addresses the following issues:

- (1) What constitutes a financial constraint? What types of financial constraints can be identified, and how do they materialise?
- (2) How can financial constraints be recognised and measured in practice?
- (3) How frequent and severe are financial constraints in South African SMMEs?

The literature study (Section 2) starts by reviewing methodological approaches to the identification and measurement of financial constraints, whereafter it presents evidence available from South Africa and from other countries. The impact of financial constraints is also discussed. From there emerges a general framework on financial constraints (Section 3), which forms the basis for the development of a methodology (Section 4). The findings of the empirical analysis are presented in Section 5. Section 6 concludes.

## Section 2. Literature study

### 2.1 – Definition and methodological aspects

Kaplan & Zingales (1997:172) define *financing constraints* as the wedge between the internal and external cost of funds (sic)<sup>8</sup>, with the understanding that the cost of external funds may preclude a firm from making an investment. This definition may not fully apply to SMMEs, for which availability of funding may be as constraining as the costs thereof. In addition, since it applies only to investment finance, it may be understood as a sub-category of financial

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<sup>8</sup> It would be more accurate to apply the adjectives 'internal' and 'external' to the funds rather than the cost.

constraints, which we have labelled *investment constraint*. Similarly, the concepts of *liquidity constraints* and *credit constraints* are restricted to particular types of finance (see Chapter I, Section 3.2). This thesis further uses the term *financial constraint* to include all three.

The international literature has used a wide array of approaches to identify and measure financial constraints, depending on the understanding of the underlying concept. The main approaches are briefly reviewed below:

- (i) The most straightforward method is the survey, in which researchers ask entrepreneurs whether finance constitutes an obstacle for them (see, for example, Levy 1996). This approach is simple and suitable for SMMEs;
- (ii) Another option is to use statistics on credit rejections. Firms whose applications for finance are declined (or approved but with a smaller amount) are presumed to be financially constrained (Atanasova & Wilson 2004:598). This is also a simple approach, but it only considers credit constraints;
- (iii) More sophisticated indicators can be used, based on the extensive reporting of listed corporations. Kaplan & Zingales (1997:181-182) estimate constraints based on companies' financial behaviour: postponing the issuance of shares or bonds, cutting dividends, renegotiating debt or reducing investments for financial reasons are all seen as symptoms of constraints; unfortunately such information is rarely available for SMMEs, making this approach impractical unless it is done through a survey;
- (iv) Financial constraints can also be measured based on ratios, such as the liquidity ratio, the interest coverage or the debt ratio (Kaplan & Zingales 1997:183), or a multivariate index (Cleary 1999). Again, this method is more difficult to apply to SMMEs where less financial data are available;

- (v) A further approach harnesses the existence of a correlation between availability and use of finance. Firms that have more resources are often found to invest more. Some authors interpret this evidence as an indication that poorer firms would invest more if they had sufficient funding, which implies that financial constraints exist. This has been discussed on a micro-economic scale (Fazzari et al 1988; Lizal & Svejnar 2001; Bratkowski et al 2000:106) and on a macro-economic scale (Lederman et al 2003:145)<sup>9</sup>. Similarly, Dietsch (2003:111) argues that a positive relationship between the availability of credit (measured by the credit rating) and the use of credit implies the existence of credit constraints. However, Kaplan & Zingales (1997) have found that investment-cash flow sensitivities are not good measures of financing constraints, since more constrained companies display lower sensitivities. In addition, this approach is limited to credit/investment constraints.

Overall, there is no consensus on how to determine financial constraints. Some approaches are too narrow, while others are not easily applicable to SMMEs due to their limited financial reporting. Dietsch's method, which uses a creditworthiness indicator as a proxy for the availability of credit, is not suitable for our purposes, since it implies a perfect correlation between creditworthiness and access to finance, which is precisely what we are questioning in this thesis. Similarly, drawing on the *use* of credit as an indicator of the *need* for credit ignores the possibility of credit rationing, which will be discussed in Chapter III.

## 2.2 – Impact of financial constraints

There is ample literature on the impact of financial constraints on firms, which touches on three main aspects:

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<sup>9</sup> For a comprehensive literature review on this approach, see also Wagenvoort (2003b:35-36).

- ***Suboptimal capital structure and financing costs:*** Petersen & Rajan (1995) and Houston & James (1996) showed that by making more intensive use of trade credit, credit constrained firms suffer higher costs for their working capital. Hommel & Schneider (2003:70-71) further argued that alternative financing like trade credit is not always available.
- ***Reduced investment activity:*** Hubbard (1998) showed empirically that financing constraints have a greater impact on the investment behaviour of small firms.
- ***Firm survival:*** There is no consensus in the literature about the relevance of finance for the survival of SMMEs. Evans & Jovanovic (1989) and Holtz-Eakin et al (1994), as well as Ma & Smith (1996) for developing countries, argued that the availability of capital is a strong determinant of the survival of a venture. However, Cressy (1996:1253) suggested that “human capital is the ‘true’ determinant of survival”.

### 2.3 – South African evidence of financial constraints

There is converging evidence that *micro* enterprises have specific financial patterns: unlike *Small and Medium Enterprises* (SMEs), they hardly use formal finance, especially long-term finance. In different samples, the proportion of micro enterprises using formal credit was found to be 4% (Rogerson 2002), 8% (Rwigema & Karungu 1998:120) or 15% (Chandra et al 2001:78-80).

This low use of formal finance does not necessarily reflect a problem of access: It could be attributed to low demand. In Rogerson's sample, only 22% of businesses had applied for loans. Alternative sources, especially informal micro-lending and hire purchase, are deemed easier to obtain than credit amounts between R10 000 and R200 000 (DTI & Unops, 2000:9). Quantitative indications on the use of microloans and hire purchase for micro enterprise finance in South Africa can be found in Davel (2001) and Ardington (1999) respectively. Nevertheless, availability of credit remains a constraint for micro

entrepreneurs: the complaint was made by 88% of the respondents to Rwigema & Karungu's survey (1998:120).

Among SMMEs more generally, the literature has revealed that constraints depend on the size, age and racial background of the business. Levy (1996) found that younger and smaller firms, as well as African and Coloured entrepreneurs, are the most likely to experience finance as a severe obstacle.

Racial differences are also visible in four recent reviews of term finance for SMMEs. Studies by Chandra et al (2001:78-80) and GAB Consulting (2002), converge to show that use of long-term bank loans is significantly correlated with race, with African and, to a lesser extent, coloured businesses being less likely to use bank funds to finance their investments. The comparison of sampling between the two consecutive GEM surveys (2002, 2003) supports this finding.

As far as short-term finance is concerned, though, evidence is less conclusive. The proportion of SMMEs using short-term bank finance ranges from 4.5% (Chandra et al 2001) to 63% in GEM (2003:46). However, the GAB and Chandra studies converge to suggest that, unlike for long-term finance, race is not a strong determinant of access to short-term loans.

Table 3 summarises the level of use of bank finance in various categories of firms, according to the studies quoted above.

*Table 3 – Proportion of SMMEs using bank finance in various studies*

<b>Reference Population</b>	<b>Proportion using bank finance</b>	<b>Reference</b>
Micro enterprises in Johannesburg	4%	Rogerson 2002
Micro enterprises in Soweto and Johannesburg	8%	Rwigema & Karungu 1998
African Cape Town SMMEs, mainly retail / services	for initial capital 8% for working capital: 40%	GAB 2002
African Gauteng SMMEs, mainly manufacturing	for investment: 18%	Chandra 2000
Black very small businesses, mainly African	term loan: 18% overdraft: 9%	GEM 2002
Black small and medium businesses	term loan: 30% overdraft: 63%	GEM 2003
White Gauteng SMMEs, mainly manufacturing	for investment: 27%	Chandra 2000
White Cape Town SMMEs, mainly retail / services	initial capital: 35% working capital: 44%	GAB 2002

*Source: As indicated – the utilisation statistics in GAB and GEM are extrapolated from the demand and success rate statistics, assuming that all facilities applied for and granted are used.*

While the low use of bank finance may be motivated by other reasons, the following indications constitute evidence of financial constraints:

- In spite of distortion risks caused by sample differences, international statistics on loan rejections are revealing. As Table 4 suggests, South African white businesses experience similar rejection rates as in industrialized countries (10% or less), whereas the rejection rates of South African black firms, especially Africans, are of similar magnitude to Ghana (35 to 75%). This strongly indicates a high level of constraints for those firms.
- Chandra et al (2001:34) confirm this by stressing that the reason for a low use of bank finance among Africans is not primarily the absence of need.



Only 34% of African entrepreneurs indicated that they did not need bank loans, as opposed to 67% of the entire sample.

- In their investigation of cash shortages among black businesses, GEM (2003:41) find that 45% of the sampled businesses that have an overdraft have exhausted their limit at least once in the last six months. They also find that this indicator is correlated positively with the firms' inability to pay wages and salaries. This again constitutes strong evidence of cash constraints among black businesses.
- Conversely, GEM 2002 showed that 15% of the sampled firms granted finance have rejected the conditions. The ability to decline an existing supply suggests a lower degree of constraint, even among black SMMEs.

*Table 4 – Rejection rates for SME loan applications, for various South African and international studies*

<b>Sample</b>	<b>Rejection rates on bank loan applications</b>	<b>Source</b>
<b><u>South African studies</u></b>		
African Cape Town SMMEs, mainly retail / services	69%	GAB 2002
Black very small businesses, mainly African	bank loan: 75% bank overdraft: 38%	GEM 2002
Black small and medium businesses	term loan: 39%	GEM 2003
White Cape Town SMMEs, mainly retail / services	10%	GAB 2002
<b><u>Foreign studies</u></b>		
SMEs in Australia	10%	Wallis 1997
SMEs in the UK	5%	Cruickshank 2000
SMEs in the United States	4%	Levenson & Willard 2000
SMMEs in Ghana (sample consisting of particularly successful enterprises)	56%	Aryeetey et al 1994

Altogether, South African evidence shows that SMMEs do not face uniform experiences with regard to financial constraints. While some firms are

unconstrained enough to reject loan offers whose conditions were not suitable, others experience rejections of their applications. There is convergent evidence that the smallest firms and black, especially African businesses, experience stronger investment constraints; the evidence with regard to short-term finance is less conclusive.

### **Section 3. Conceptual framework**

This section aims to provide a definition as well as a typology for financial constraints, in order to encapsulate multiple situations while distinguishing between degrees of severity.

#### **3.1 – Defining a financial constraint**

As suggested in the literature study, **a financial constraint is understood as the existence of a financial need, which – for whatever reason – remains unsatisfied, thus negatively affecting the business.** The following paragraphs will comment in detail on the three elements of the definition.

The first element of the definition is the *financial need*, which, in its broadest sense, is at the sole discretion of the business owner. It may include any type of present or future need, and may relate to any type of finance: investment finance, liquidity, equity or debt.

In such broad interpretation, the concept of financial constraint is almost a tautology: virtually every business experiences finance as a scarce resource, and virtually every SMME owner has ideas which he would wish to implement if he had additional resources. But the severity of the constraint varies according to the type of need and the extent to which plans are elaborated; these nuances build a continuum discussed below.

The second aspect is that the need must be *unsatisfied*, and there are many ways in which this can happen. The most straightforward is the rejection of a firm's

application for finance; however, this case may represent only a minority of financial constraints.

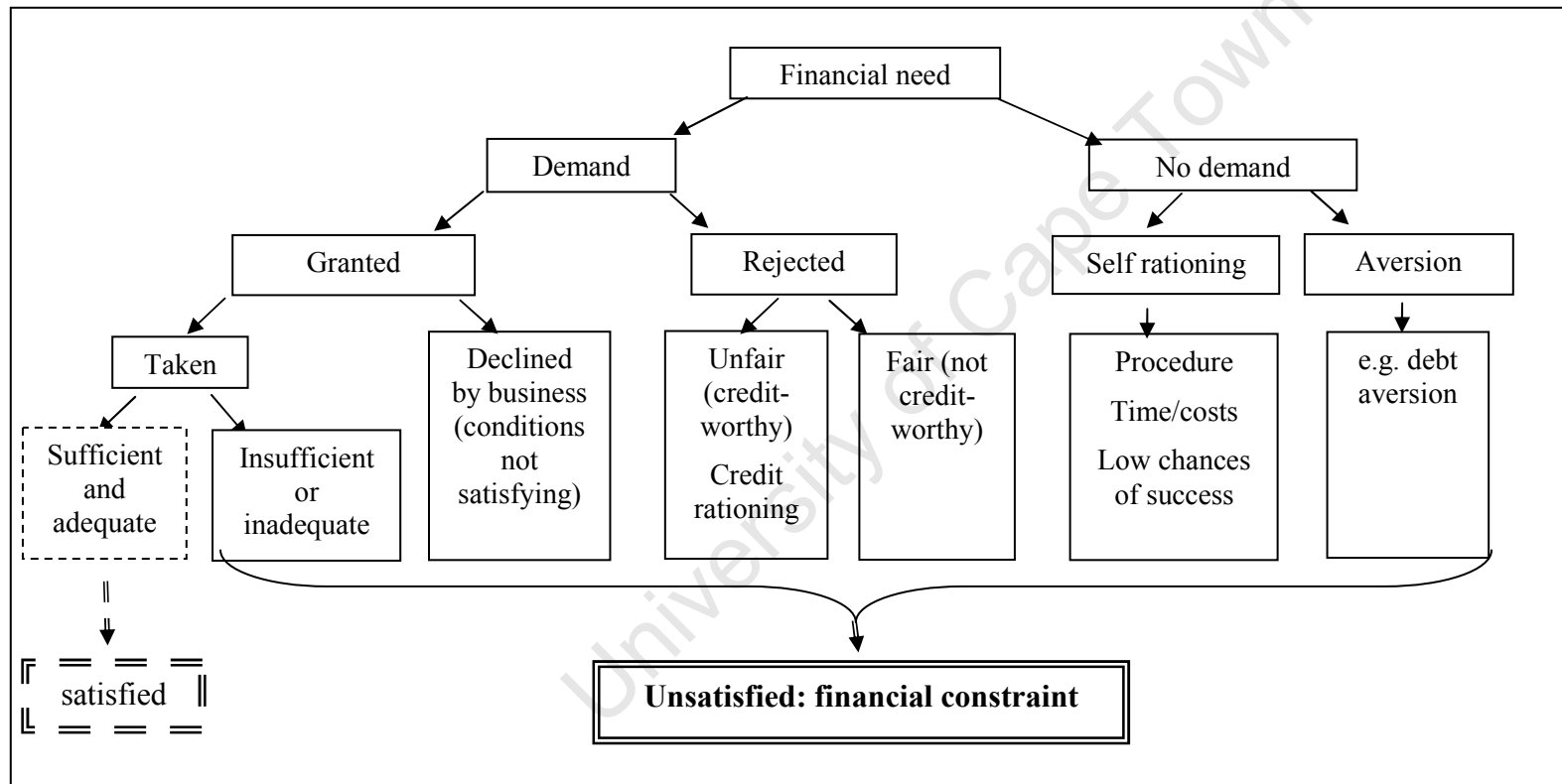
From all business owners who feel a need for finance, only some lodge an application for finance with an institution. Many entrepreneurs omit to do so, either because of procedural difficulties or a lack of confidence in their chances of success (self-rationing), or because of an aversion to debt. The financial need hence remains unsatisfied, and the business financially constrained.

Conversely, if an application for finance is lodged, there can be various reasons why the needs remain unsatisfied, such as a rejection of the application (which may or may not be caused by insufficient creditworthiness), unacceptable conditions, or an insufficient amount. It becomes clear, then, that financial constraints are not limited to businesses which have no access to institutional finance. Firms carrying financial debt may even be more constrained than those with no debt. The multiple configurations leading to financial constraints are represented in Figure 6.

The third requirement in the definition is that financial constraints have a *negative impact on business*. They may force a business to limit growth (e.g. by waiving or postponing investments), to use unauthorised resources (such as a breach of overdraft or a default on loan), or to use excessively expensive financing options (e.g. trade credit, as shown by Petersen & Rajan 1994). More severe constraints can preclude businesses from paying bills or repaying loans on schedule, and may ultimately cause business failure.

However, these symptoms can exist with many nuances: a breach of overdraft may be seasonal, and the inability to invest may be temporary. Similarly, a constraint may be comprehensive (if a type of finance is not available at all), or partial (if finance is present but insufficient).

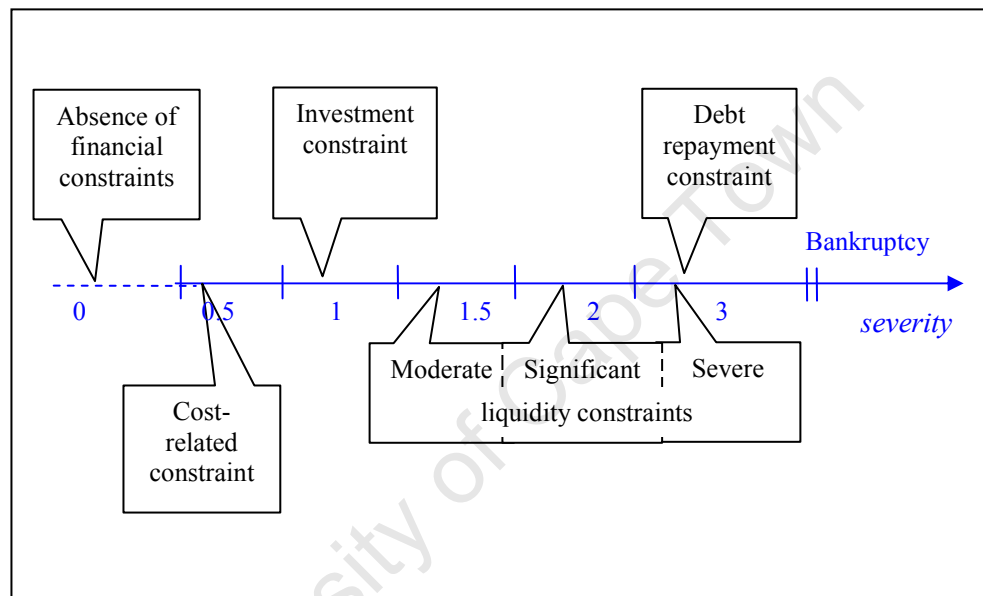
Figure 6 – Possible configurations causing a financial need to be unsatisfied



### 3.2 – The continuum of financial constraints

To understand constraint scenarios along a continuum, we developed a scale, numerically rating the severity of constraints from 0 (no constraint) to 3 (bankruptcy risk), as illustrated in Figure 7.

Figure 7 – The continuum of financial constraints



The constraint levels are the following:

- Cost-related constraints are usually the least constraining, since the required funds are available, only at a sub-optimal cost;
- Investment constraints preclude entrepreneurs from realising their ambitions, but they do not hinder the businesses in their current format. The latent entrepreneurial potential embedded in investment constraints may be released when finance becomes more accessible (although there is no guarantee that investment plans are sustainable).
- However, when the lack of long-term finance causes businesses to use short-term resources to invest in long-term assets, cash shortages and vulnerability can result. When liquidity shortages are severe (e.g. causing

an inability to pay salaries), then the business is at great risk of bankruptcy.

- Similarly, when an SMME is trapped in debt which it cannot repay, it runs a high risk of becoming insolvent.

Section 4 (methodology) will explain in greater detail how financial constraints were empirically classified along this continuum, including the assessment of severity with regard to liquidity constraints.

### 3.3 – Synthesis and hypotheses

Figure 8 illustrates the wide variety of situations that can constitute a financial constraint: internally or externally conditioned constraints (depending on the type of resource that is missing most); comprehensive or partial credit constraints (depending on whether credit is absent or only insufficient); investment, liquidity or debt-related constraints (depending on the type of need); mild or severe constraint (depending on the symptoms); and seasonal or temporary constraints.

Based on the literature and the opinions expressed by sector experts, three preliminary hypotheses can be proposed:

*H1. A vast majority of SMMEs, at least two thirds, experience some kind of financial constraint.*

*H2. The most prevalent type of financial constraint among SMMEs is the liquidity shortage.*

*H3. Liquidity shortages in SMMEs are often severe: at least a third of SMMEs experiencing cash shortages are severely constrained.*

Since this is exploratory research, the rather unprecise quantitative indications contained in these hypotheses are in essence arbitrary; however, they enable empirical testing. The remainder of this chapter is concerned with defining a practical approach and testing these hypotheses with empirical data.

## **Section 4. Methodology**

### **4.1 – Data sources**

The measurement of financial constraints, in terms of prevalence and severity, was based mainly on two types of data: open-ended interviews and the GEM closed survey data.

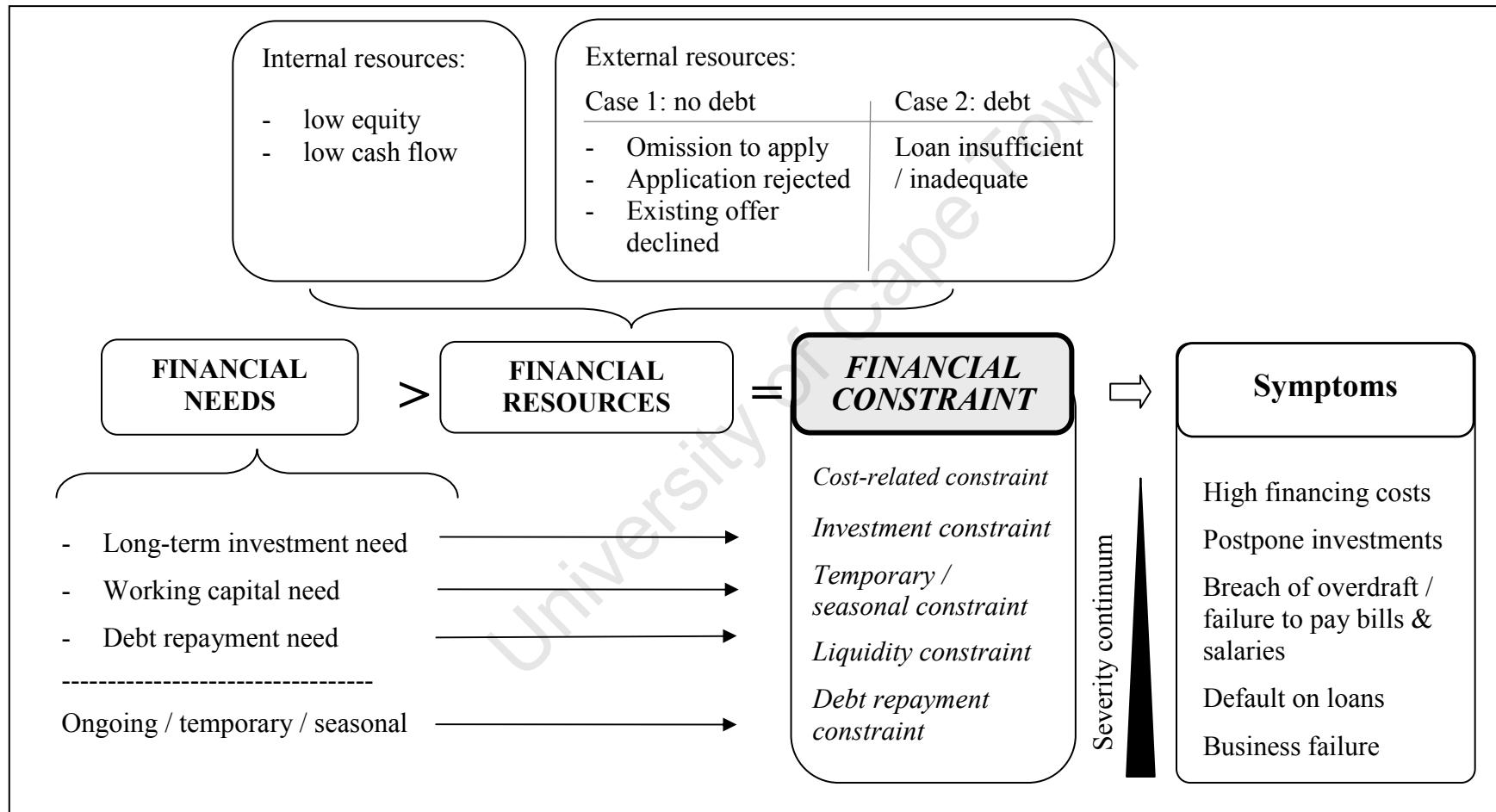
#### **4.1.1 – Open-ended questioning**

Open-ended questioning of a few business owners took place during data collection: Whenever data collection (either for case studies or the balance sheet sample) involved a direct contact with business owners, they were asked whether they were satisfied with their financial arrangements – a question which was expected to be answered negatively by most interviewees, and to trigger more detailed comments. Follow-up questions were used to qualify the constraints as past or present, temporary, seasonal or permanent, quantitative or qualitative, light or serious, etc. Although restricted to a small number, this approach was chosen for a rich narrative, exempt of preconceptions.

#### **4.1.2 – GEM survey data**

In addition, the GEM survey, with its questions on liquidity shortages and longer term plans, enabled assessing SMMEs' financial constraints on a larger sample.

Figure 8 – The concept of financial constraint





The GEM database captures a number of symptoms of liquidity constraints (exhaustion or breach of overdraft limit, default on a loan, inability to settle bills as they fall due, inability to pay salaries). Of these, the exhaustion of the overdraft limit<sup>10</sup> or the default on a loan did not suit our purpose, as these indicators exclude firms which have not been granted such facilities. Our preferred indicators for liquidity constraints were therefore the inability to pay costs and the inability to pay salaries and wages<sup>11</sup>. The latter was regarded as a severe liquidity constraint, since salaries are a cost item which can be anticipated, and whose payment terms are not normally negotiable.

Other constraints were captured through GEM survey question #65: "If you were offered (your preferred form of) finance, how would your business change over the next twelve months?" If the answer to this question was "to settle existing debt", firms would be categorised as debt-trapped; if it was for expansion (such as investing in or upgrading equipment, expanding product lines or regions, investing in new business, purchasing or refurbishing premises), firms would be considered investment constrained. Firms which would "invest in working capital" were classified as moderately liquidity constrained. Firms which did not have clear ideas of what they would do with more finance were deemed *not* financially constrained – unless the answers to the other questions indicated that their lack of ideas resulted from helplessness in front of severe liquidity constraints. The firms that presented evidence of cash shortages but were unsure what to do with additional finance were categorised as liquidity constrained. More generally, contradictions in data were resolved through the following hierarchy: debt-trapped was the strongest evidence, i.e. all

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<sup>10</sup> Exhausting the overdraft limit at least once in a period of six months was the preferred indicator in the GEM (2003) report, although it can arguably happen temporarily even in a business which operates with cash surpluses for most of the year.

<sup>11</sup> It could be argued that the inability to pay salaries and wages applies only to businesses that employ at least one person – however business owners may have interpreted this question as including their member's salary, in which case it would apply even to one-person businesses.

firms to which this criterion applied were classified into that category, regardless of other criteria that also applied; next was the inability to pay wages (severe liquidity constraint), followed by the other degrees of constraint as per the continuum.

## 4.2 – Data assessment

Table 5 summarises the operational translation of the levels of constraint, as proposed in Figure 7, with a numerical score of 0 to 3.

*Table 5 – Empirical methodology to assess levels of constraint*

	<b>Interview data</b>	<b>GEM data</b>
No constraint (level 0)	the owner is satisfied with financial arrangements	#65: not sure what they would do with more finance and # 53: always had enough cash to settle costs in last six months and #76: has always been able to pay wages in last twelve months
Mixed opinion, but not presently constrained	either: there have been difficulties but these were eventually settled or: no problems at present but are expecting difficulties in near future	< not captured by data >
Cost related constraint	indications that financial arrangements are not optimal cost-wise	< not captured by data >
Investment Constraint (level 1)	indications that the entrepreneurs' ambitions have not been realised due to a lack of finance	#65: with more finance, would do any of the following: invest in capital equipment, expand product/ service lines, expand geographically, invest in new business, purchase premises, refurbish premises, upgrade IT systems and # 53: always had enough cash to settle costs in last six months and #76: has always been able to pay wages in last twelve months

	<b>Interview data</b>	<b>GEM data</b>
Moderate liquidity constraint (level 1.5)	indications that the business occasionally lacks cash (e.g. seasonally)	#65: with more finance, would invest in working capital and # 53: always had enough cash to settle costs in last six months and #76: has always been able to pay wages in last twelve months
Significant liquidity constraint (level 2)	indications that the lack of liquidity significantly hinders business	# 53: has NOT always had enough cash to settle costs in last six months and #76: has always been able to pay wages in last twelve months
Severe liquidity constraint (level 3)	indications that the lack of liquidity threatens business sustainability	#76: has NOT always been able to pay wages in last twelve months
Debt constraint (level 3)	indications of difficulties repaying contracted debt	#65: with more finance, would repay existing debt

Relating the constraint levels obtained to the population studied, for each data source, should make it possible to address the three hypotheses (see Section 3.3), i.e. to verify whether a vast majority of SMMEs experiences some kind of financial constraint, whether the most prevalent type of financial constraint among SMMEs is the liquidity shortage, and whether this constraint is often severe.

## Section 5. Findings

### 5.1 – The existence of financial constraints

For ease of reference, we reproduce here the hypothesis proposed earlier:

*H1. At least two thirds of SMMEs experience some kind of financial constraint.*

Surprisingly, the empirical work suggested that a noteworthy minority of SMMEs (in the region of 20% to 40%) was non-constrained.

In the *open-ended questionnaires*, despite conscious efforts to circumvent the inherent sample bias towards better-off businesses by targeting constrained enterprises, almost 40% of firms indicated that they faced either no constraints at all, or no constraints at the present time (they may have encountered difficulties in the past, or they anticipate constraints in the future).

The *GEM study* focussed on black-owned businesses, which the literature depicts as more constrained. It can therefore be expected that the proportion of unconstrained firms will be lower than in the interviews. Given this expectation, it is remarkable that, of the 224 entrepreneurs surveyed, 42 firms (19%) were classified as non-constrained.

Table 6 summarises the findings from both data sources.

*Table 6 – Analysis of entrepreneurs' statements about financial constraints*

	<b>Constrained</b>	<b>Difficulties at some stage, but presently not constrained</b>	<b>Non-constrained</b>	<b>Total</b>
Own data (mixed sample)	11 61%	3 17%	4 22%	18 100%
GEM data (black SMMEs)	182 81%	n/a	42 19%	224 100%

*Source: Own data: short interviews or written statements (see Annexure 5); GEM data*

While statistical generalisation of interview results would be inappropriate given the small sample size and the convenience sampling, the data sources do converge in suggesting that a non-negligible proportion of formal SMMEs, including black-owned businesses, is *not* financially constrained. This proportion could be in the region of 40% overall and 20% among black SMMEs.

Most SMMEs however *do* experience some constraints. In the next section, a review of the symptoms experienced will shed light on how pressing these constraints are.

## 5.2 – Types and severity of financial constraints

*H2. The most prevalent type of financial constraint among SMMEs is the liquidity shortage.*

*H3. Liquidity shortages in SMMEs are often severe: at least a third of SMMEs experiencing cash shortages are severely constrained*

Again, contrary to expectations, the evidence shows that lack of investment finance is as prevalent as cash constraints, even though liquidity-related symptoms tend to be more pressing.

### 5.2.1 – Investment constraints

The GEM sample suggests that investment constraints are highly prevalent: of the 169 businesses that knew what they would do if they were granted additional finance in the next year, 103 (61%) intended to realise investments or expand their operations.

The interview data showed that these investment constraints could be either mild, if the lack of term finance hindered expansion, or serious, if investments were carried out on the basis of short-term resources, causing cash shortages.

A mild level of constraint was experienced by several businesses, which in different ways were operating below their owners' ambitions, due to a lack of term finance. Table 7 provides details on the cases. It illustrates the extent to which a lack of term finance can inhibit the growth of SMMEs and create a barrier to entry into the manufacturing sector.

Investment constraints are more severe when they result in allocation of short-term funds to fixed assets, as in crating business CS6. The lack of term funds caused the firm to work with sub-standard equipment and drive barely roadworthy vehicles, while the rejection of their property finance application resulted in high rent costs. More seriously, this lack of long-term

finance was remedied at the cost of liquidity. As the majority owner reported, the firm's habit was to buy a new piece of equipment (saws, small machines) each time the business completed a larger contract. This put a strain on the liquidity of the business, which was severely constrained at the time of the case study.

*Table 7 – Firms with mild investment constraints*

	<b>sector / type of business</b>	<b>type of finance lacking</b>	<b>consequences</b>	<b>evolution</b>
Wec6	supplier of heating and air con systems	finance for a manufacturing unit (premises and machinery)	traded for 13 years as a specialised retailer only	succeeded, after 13 years
BB9	supplier of narrow textile (cam buckle)	finance for a manufacturing unit	trades as a specialised retailer only	little hope to convert to manufacturer
ACSe	security business	finance for acquisition of other business	limited growth	keeps trying to obtain finance
CS3	supplier of protective clothing	finance to buy premises in industrial area	limited manufacturing operations due to lack of space	trying to acquire residential property

*Source: Interviews with business owners*

Overall, the findings on investment constraints can partly be seen as positive. Indeed, mild investment constraints constitute evidence of latent entrepreneurial potential waiting for finance to materialise. However, when they result in cash shortages, long-term finance deficiencies are a source for concern.

### **5.2.2 – Liquidity constraints**

The GEM data indicate that cash shortages are significant. Among 224 black SMMEs, 99 (44%) expressed at least one sort of liquidity constraint, as follows:

- 34 (15%) would like to invest more funds into working capital (moderately liquidity constrained);
- 77 (34%) have not had enough cash to pay costs at least once in the last six months (significantly liquidity constrained);
- 39 (17%) have been unable to pay salaries and wages at least once in the last twelve months, with at least ten cases where it happened more than twice (severely liquidity constrained);
- 67 have exhausted their overdraft at least once in the last six months; this represents 45% of the SMMEs that have an overdraft.

Among the case studies, cash shortages were experienced by four out of six enterprises, with various degrees of severity as exposed in Table 8. The kind of operating consequences encountered, such as the inability to acquire new supplies until previous bills have been settled (CS6), shows the extreme vulnerability of cash-constrained businesses. All owners confirmed that the use of unauthorised overdrafts (or breaches of limit) was stressful.

*Table 8 – Case study firms with liquidity constraints*

	<b>sector / type of business</b>	<b>level of constraint</b>	<b>strategy</b>	<b>consequences</b>
CS1	manufacturer and retailer of furniture	severe	breach of overdraft	bankruptcy
CS4	township-based cleaning and construction firm	severe	micro-loan	breach of contract, e.g. cleans less often than required, uses cheaper chemical
CS5	tourism business (township tours)	seasonal (winter)	unauthorised OD in winter	tight cash in winter
CS6	packaging (crating)	severe	breach of overdraft delay in paying suppliers	defer payment of saleslady's salary unable to order new supplies

*Source: Interviews with business owners*

### **5.2.3 – Default on loan repayments and failure**

Debt repayment constraints were only identified in a minority of the GEM survey companies: nine owners (4%) mentioned that, if they were to receive additional finance, they would settle existing debt. This figure is likely to underestimate the reality, as surveyed business owners may be tempted to mention more attractive changes to their business even though sound business practice would require them to settle outstanding debt first.

The case studies provided two examples of businesses which had difficulties settling debt. CS1, a franchise furniture business, had been granted a comprehensive start-up package, but it soon became unable to repay its loans according to schedule. The firm then entered a vicious circle of contracting new loans and increasing its overdraft to face its initial loan commitments, until it was eventually liquidated. CS4b, a young township-based cleaning business, acquired equipment on credit before starting, and similarly found itself trapped in a debt circle. The owner gave up repaying the outstanding portion of the loan, and the chances of survival of the business appeared slim.

### **5.2.4 – Summary: Levels of constraint**

To summarise, Table 9 and Figure 9 show how GEM respondents and case studies are distributed among the six constraint level categories defined in the framework. It appears that, against the expectations formulated by Hypothesis H2, investment constraints and liquidity constraints are roughly equivalent in terms of prevalence.

This result is subject to a possible methodology-based bias, as the hierarchy adopted in classifying the firms exclusively into one category created an impression that there was a greater number of liquidity constrained firms than investment constrained firms. This is because 29 firms, that were both



investment and liquidity constrained, were classified as liquidity constrained. Furthermore, as indicated, the proportion of debt-trapped GEM firms may be under-estimated, as surveyed business owners may be more inclined to think of further investments than of their need to settle debt.

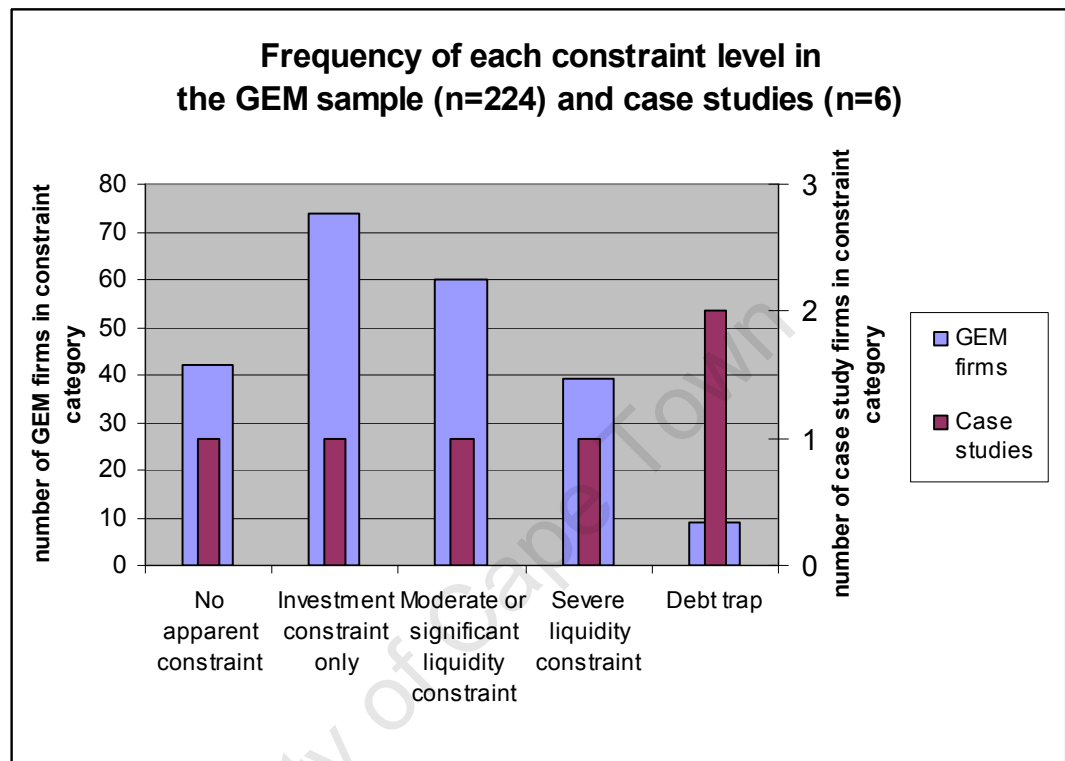
The result may also be influenced by the choice of definition of constraint, which gives the business owners discretion to determine their needs. Ambitious entrepreneurs may be dreaming of expansion even though experts would objectively recommend improving the liquidity buffers first.

Qualitative data have made it clear, though, that liquidity constraints tend to have more dire consequences on the businesses. The findings also validate Hypothesis H3 on the significance of severe liquidity shortages, which represent almost 40% of cases of liquidity constraints.

*Table 9 – Level of constraints of GEM and case study businesses*

	'Level'	Number of GEM firms	Proportion	Case studies
Total number of				
• investment constrained firms		103	46%	(CS1,3,4,6)
• liquidity constrained firms		99	44%	(CS1,4,5,6)
Apparently not constrained	0	42	18.8%	CS2
Only investment constrained	1	74	33.0%	CS3
Liquidity constrained:				
• only moderately	1.5	10	4.5%	CS5
• significantly	2	50	22.3%	
• severely	3	39	17.4%	CS6
Debt trapped	3	9	4.0%	CS1, CS4
<b>Total</b>	<b>1.49</b>	<b>224</b>		

Figure 9 – Frequency of each constraint level



## Section 6. Conclusion on financial constraints

To summarise the findings briefly, the empirical results show that financial constraints do exist, but do not affect every small business. The data suggest that the proportion of formal SMMEs which are not actually constrained may reach 20% to 40% – including among black businesses. In this sense, Hypothesis H1 is not fully supported by data.

Hypothesis H2 is not fully supported either, as investment constraints appear to be as prevalent as liquidity constraints. The data did confirm, though, that investment constraints tended to be less disruptive: when they come in isolation, they indicate latent entrepreneurial potential. However, they are more worrying when accompanied by liquidity problems.

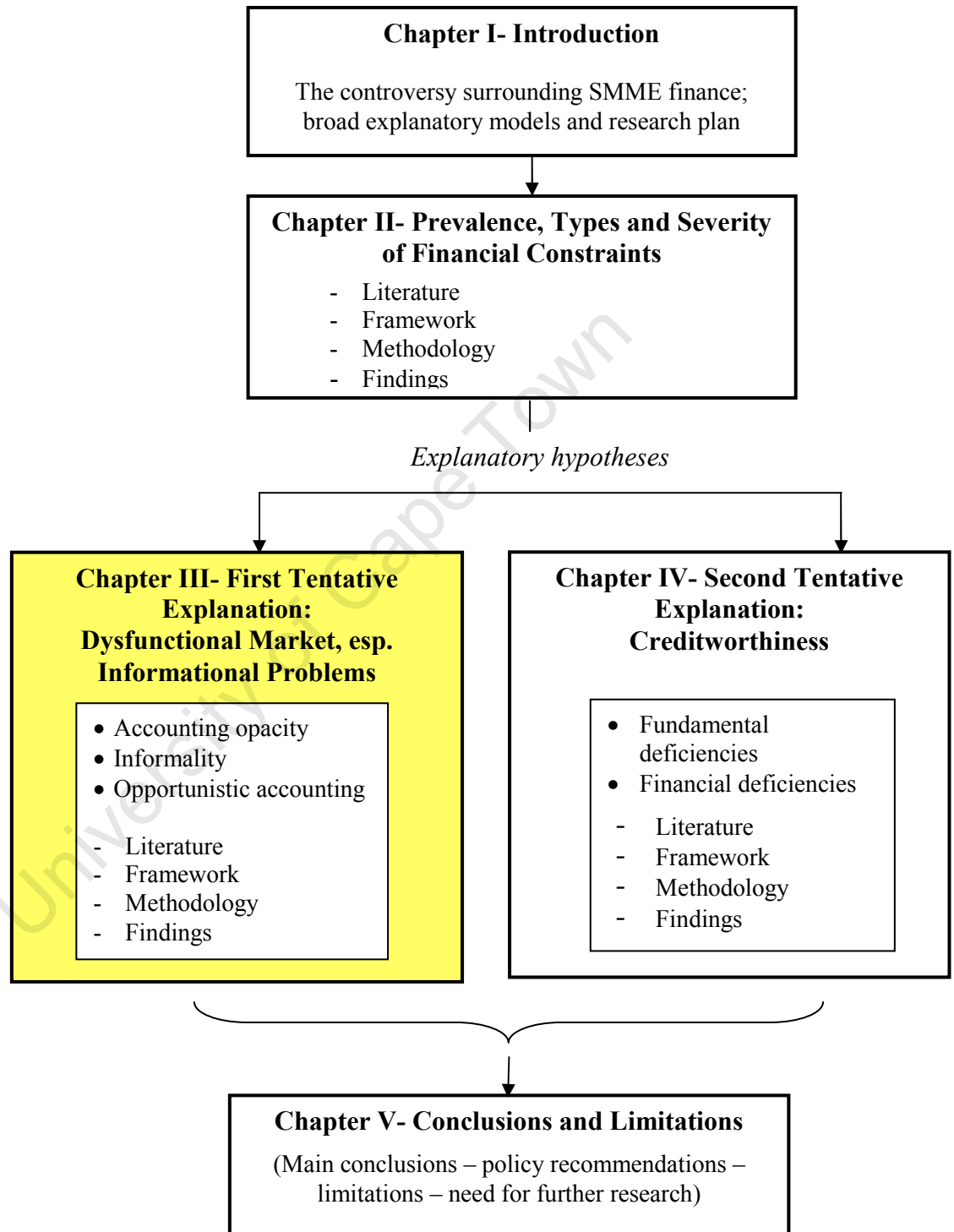
Regarding the severity of liquidity constraints, the data validate Hypothesis H3 in showing that approximately 40% of cases of cash constraints are severe (implying an inability to pay wages). Cash constraints and the situation of debt trap make businesses more vulnerable.

The following two chapters discuss tentative explanations of these financial constraints.

## **Chapter III**

# **The hypothesis of market dysfunction, in particular accounting opacity**

University of Cape Town



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## Section 1. Introduction

This chapter deals with the first tentative explanation for SMMEs' financial constraints: market dysfunction. In a situation of market failure, either a substantial part of the supply is unallocated<sup>12</sup>, or a substantial part of the demand is unmet, or both. The inability of supply to meet demand is then caused by obstacles that hinder market forces, including the imperfect circulation of information.

This chapter particularly focuses on the *accounting opacity* of South African SMMEs, a concept coined for the purpose of this thesis to narrow the literature's '*informational opacity*' concept to accounting records (see pp. 66ff for a more accurate definition of this concept). There are two reasons why accounting opacity is explored in more depth: firstly, it is a difficult issue which has not been well researched up to now, so meticulous scrutiny is needed to obtain significant results; secondly, since the use of accounting data forms an essential part of this thesis' empirical work, the review helps to deal with data reliability problems.

It is worth noting here that the discussion on market dysfunction is broader than the informational issue. Traditional market imperfection models are based on transaction costs, which can easily explain part of SMMEs' financial constraints. Other issues related to the way in which markets function could be summarised under the heading of information substitutes, including collateral, credit history and networking. These areas are briefly presented in this chapter (with more detailed findings in Annexures 24-29). However, the chapter concentrates on the area that is conceptually most challenging, and empirically the newest, i.e. the assessment of SMMEs' informational opacity.

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<sup>12</sup> There is indeed some evidence that this is the case in South Africa. See Hartzenberg (1998) on the surpluses of bank funds earmarked for SME finance; DTI/UNOPS (1999) on the inability of DTI/Khula to allocate SMME incentives; Karungu et al (2000: 60) on venture capital institutions unable to identify deserving entrepreneurs.

Informational problems are often mentioned to explain financial market imperfections. The ‘accounting opacity hypothesis’ postulates that *informational asymmetry* on financial markets causes *market failure*, resulting in firms’ inability to secure the funding that they would deserve. It is argued that SMMEs are particularly affected by this issue because of their *opacity*, which results *inter alia* from their *informality*. This topic goes beyond market frictions, as it implies not only transaction costs to search for and process information, but also *enforcement problems* and credit rationing.

In order to test the accounting opacity hypothesis, this chapter addresses four questions: (i) How does one assess SMMEs’ accounting opacity? (ii) Are South African SMMEs informationally opaque, in particular with regard to their accounting? (iii) What are the roots of accounting opacity, and how can policy address it? And: (iv) Is accounting opacity related to financial constraints? Two more questions are briefly touched upon, namely (v) What (second-best) strategies do banks use to circumvent the use of accounting information? And (vi) What dysfunction results from transaction costs on the SMME financial market?

To answer these questions, Section 2 will seek pointers in the literature. These will be assembled into a coherent framework (Section 3). Sections 4 and 5 will develop and apply a tool to measure SMMEs’ accounting opacity<sup>13</sup>. Among the possible reasons for accounting opacity, resources, informality and opportunism are explored in Section 6. Section 7 investigates the connections between resources, informality, opportunism, accounting opacity and financial constraints. Section 8 briefly reviews the peripheral aspects of information substitutes as well as the role of

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<sup>13</sup> This thesis uses the positive term of ‘transparency’ when applied to the scoring model, as a ‘score’ normally measures a positive feature. When talking about the problem, though, the thesis prefers the negative term of ‘opacity’. The two terms designate different perspectives of the same phenomenon, which can be represented on a continuum from the most opaque to the most transparent.

transaction costs, and Section 9 concludes on the hypothesis of accounting opacity and more generally market dysfunction.

## **Section 2. Literature review**

This section starts by reviewing the literature on informational opacity as well as on SMME accounting, before examining specific evidence relating to South African SMMEs. The literature review then looks at factors that contribute to opacity, as well as the alleged effects of opacity on access to finance.

### **2.1 – Opacity in SMMEs**

In a central text on SMME finance, Berger & Udell (1998:3) argue that **informational opacity** is the most important characteristic defining small business finance. They define this concept as the inability of SMMEs to convey their quality in a credible way, as a result of issues such as the privacy of their contracts with employees, suppliers, or customers; the proprietary character of their capital; and the lack of audited financial statements (1998:3). They link opacity to firms' lifecycles, arguing that informational opacity is inversely correlated with size and age of such firms. Since firms in the middle range of the age/size/opacity continuum have the highest need for bank finance (with large enterprises having direct access to capital markets and micro enterprises relying on informal finance), their opacity has the strongest effect on their access to finance.

In **SMME accounting** specifically, a number of weaknesses have been identified, such as incompleteness, lack of detail, lack of compliance with applicable standards, irregularity and missing external validation (Mc Mahon 1998:6). Although the literature on SMME accounting has seldom discussed detailed shortcomings found in the accounts, it can be assumed that issues found in larger firms apply similarly to SMMEs. They include the classification and recognition of expenses or revenues, the



valuation, depreciation and amortisation of assets, as well as the manipulation of accruals, such as estimates of bad debt expense or inventory obsolescence (Sharma & Stevenson 1997:131-149). These practices can have income-enhancing or income-decreasing effects. An issue of particular relevance in SMMEs are members' or directors' loans, whose amounts tend to be affected by the retention of bonuses or salaries (Howorth 2001:81).

## **2.2 – South African evidence**

The South African literature on SMME finance generally accepts the premise that poor financial reporting hinders SMMEs' access to finance. Falkena et al (2004:117) quote poor financial reporting as one of four reasons for SMMEs' financing difficulties, along with scale, risk and the seasonal nature of business. The GEM survey shows that the financial records' inadequacy contributed to the rejection of 11,7% of finance applications by black entrepreneurs (GEM 2002:42).

The informality of SMMEs and the deficiency of their bookkeeping practices have already been reviewed in three studies. Rwigema & Karungu (1998), who focused on micro enterprises, found a frequent failure to distinguish between business and personal expenditure (37%), or to keep a sales record (46%) or other records (kept by less than 20% of respondents). Similar shortcomings are reported in the construction sector by Thwala & Phaladi (2009:72). Such deficient internal controls, which are typical of the informal sector, are likely to exist in at least a portion of formal entrepreneurs too.

Even among formal SMMEs with an overdraft facility, GEM 2003 found low record-keeping habits. The failure to maintain records ranged from 40% for cash books to 30% for accounts receivable (GEM 2003:43-45).

The recent FinScope Small Business Survey of small businesses in Gauteng (Kubheka 2006:19-22) shows that, in less sophisticated businesses, the absence of a business bank account is motivated by high banking costs,

insufficient business size as well as procedural complexities. Even among more sophisticated businesses, many firms do not keep financial records, and only the most sophisticated businesses use professional help with record-keeping (Kubheka 2006:24, Chetty 2009:45). Under these circumstances, it is not surprising that SMMEs' financial statements are regarded as poor or unreliable.

### **2.3 – The reasons for accounting opacity**

The accounting literature suggests several factors that could explain SMMEs' accounting opacity, ranging from a lack of interest to informality and opportunism.

Against the usual understanding that accounting information is vital for business management, in the 1980's a school of thought known as Austrian economics started contesting the decision-usefulness of accounting information for owner-managers of small businesses. The main sets of arguments were (a) the lack of interest of small business owners for financial statements (Levin & Travis 1987:30, Carsberg et al 1985:31), especially because accounts fail to reflect the value of their personal assets (Hommel & Schneider 2003), (b) their lack of skills in interpreting the figures (Thomas & Evanson 1987:570), and (c) the high cost of accounting (Friedlob & Plewa 1992:91). The literature also emphasised (d) SMME owners' preference for secrecy and independence (Dietsch 2003:94) and (e) the lenders' failure to pay attention to technical compliance of SMME accounts (Friedlob & Plewa 1992:90).

Informality is another factor of opacity. Its multiple facets, ranging from type of activity or business facilities, to documentation, compliance and use of financial services, have been interestingly synthesised in Galpin's model of Business Sophistication Measure (BSM) (2006), which the FinScope survey (Kubheka 2006) used to segment the South African SMME

population<sup>14</sup>. SMMEs' failure to adhere to standard management procedures such as internal accounting or cash management has also been documented in several studies, such as Hommel & Schneider (2003:79).

A third broad factor for accounting opacity found in the literature is opportunism (e.g. Watts & Zimmerman 1978). Although not specifically related to SMMEs, this school of thought suggests that managers tend to make judicious use of creative accounting techniques (usually within the framework of generally accepted accounting principles (GAAP) in order to maximise their utility. Bhattacharya et al (2001) use the concept of *earnings opacity* to reflect the possible discrepancy between a firm's earning number and its true economic performance. They observe three tendencies: earnings aggressiveness (increasing reported earnings); loss avoidance and earnings smoothing. Firms approaching financial distress are often suspected of masking performance problems through creative accounting practices (Sharma & Stevenson 1997:130). However, the empirical testing of this theory reveals contradictions. For example, Lilien et al (1988) found income-enhancing behaviour, while De Angelo et al (1994) observed frequent income-decreasing accounting choices. The vigilance of auditors may reduce such opportunistic practices (Stice 1991).

## 2.4 – Imperfect information and credit rationing

This section provides an overview on the vast literature on credit rationing; exhaustive literature reviews can be found in Waller & Lewarne (1994), Fafchamps et al (1995) or Valentini (1999).

The credit rationing theory is inextricably linked to information economics, especially the pioneering works of Stiglitz & Weiss (1981). Informational asymmetry occurs when a lender does not know the true quality of the

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<sup>14</sup> Unfortunately, since bank loans are included as a criterion of sophistication, the model does not allow one to test whether sophisticated businesses are more likely to obtain finance.

borrower before granting a loan, nor is he able to ascertain the true state of the business during the period of the loan. This results in enforcement problems related to moral hazard (Hellwig 1977) and adverse selection (Stiglitz & Weiss 1981). All strategies available to lenders to deal with their ignorance of risk lead to dilemmas. Increasing interest rates would exacerbate the default risk (Keeton 1979) and worsen adverse selection and moral hazard (Stiglitz & Weiss 1981), so banks may prefer to reject a credit application for lack of ability to price it correctly (Jaffee & Russell 1976, Gale & Hellwig 1985). At a macro-economic level, in this situation, interest rates are deemed sticky. Alternatively, second-best contracts may incite borrowers to act in the bank's interest, either through loan size rationing (Grossman & Hart 1983), or through embedded penalties, but excessive penalties would suppress demand for credit (Zeldes 1989, Zame 1993).

This complex interaction of risk, enforcement problems and interest rate stickiness causes credit rationing, which was defined by Jaffee & Stiglitz (1990:849) as "*instances in which some individuals obtain loans, while apparently identical individuals, who are willing to borrow at precisely the same terms, do not*". Credit rationing implies that firms are denied funding for reasons other than creditworthiness (Levenson & Willard, 2000).

The prevalence and significance of credit rationing has been studied in diverse settings and with different results (Valentini 1999). While Fielding (2000) found empirical support for the existence of credit rationing among South Africa's smaller public companies (which are unlikely to match the definition of SMMs), an extensive literature study did not reveal any systematic study of credit rationing among South African SMMs.

Unlike neoclassic market disequilibrium triggered by market frictions (see Annexure 24), credit rationing corresponds to a stable equilibrium where a part of the demand is not satisfied: as such, it represents a challenge for policymakers.

## **2.5 – Synthesis and gaps of the literature**

This overview of the literature has revealed useful insights, but remains incomplete. On the positive side, the literature has established that informational problems can preclude SMMEs from accessing intermediated forms of finance, that the accounting information produced by SMMEs tends to be poor in quantity and reliability, and that these problems may be caused by a lack of interest and skills on the part of the small business owners, as well as opportunism.

However, gaps remain: There is little empirical work on SMME-specific accounting problems, especially in the South African context. The extant literature has focused on reviewing owners' motivations and bookkeeping processes, rather than on pinpointing actual weaknesses in the final product (that is, small business accounts). The literature also lacks an overarching theory, linking motivations, accounting processes, and specific outcomes visible on the financial statements.

## **Section 3. Framework for market failure under accounting opacity**

This section purports to fill the gap in the literature by proposing an overarching framework that develops the accounting opacity concept in its dimensions (3.1), identifies its causes (3.2) and discusses its effects on access to finance, hence on financial constraints (3.3).

### **3.1 – Dimensions of accounting opacity**

The concepts of **accounting opacity** and **accounting transparency** are meant to narrow Berger & Udell's (1998) concept of informational opacity to accounting records. Accounting opacity is defined from the perspective of

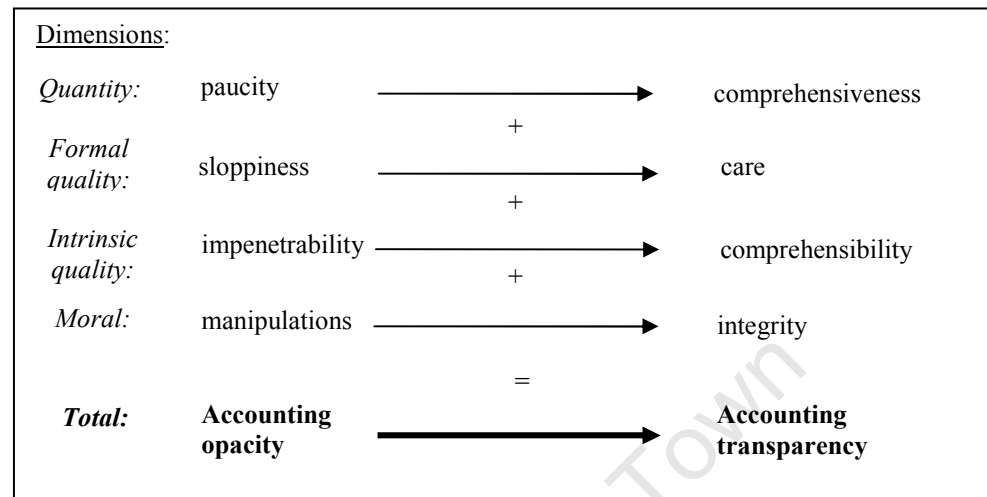
an external user trying to use accounting information to understand a firm's financial situation: it refers to *the incapacity of financial statements to inspire external readers' confidence and to convey a view that reasonably reflects the performance and the financial status of the enterprise.*

Financial statements, being the concise summary of multiple transactions, are always opaque to some extent. But opacity is aggravated when reporting presents weaknesses, as tends to be the case in SMMEs. To summarise the various elements found in the literature, accounting opacity can be organised in four dimensions, which are illustrated in Figure 10:

- (1) a quantitative dimension, referring to the paucity of data, in particular the extent of missing indications (e.g. historical figures, cash flow statements or notes are often missing or not sufficiently detailed);
- (2) a formal-qualitative dimension, related to the sloppiness of accounts (poor presentation, deficient technical correctness, lack of validation through owner's signature and/or auditor's report);
- (3) an intrinsic-qualitative dimension, i.e. the inability of the statements to speak for themselves: existence of unexplained/unusual items (related party transactions, intangible assets, provisions for future expenses), inconsistencies;
- (4) a moral dimension, i.e. the suspicion that misrepresentations by the owners convey a distorted view of the performance and financial status of the enterprise.

While the three qualitative dimensions are conceptually distinct, it is not possible in practice to keep them entirely separate when examining financial statements. This difficulty is raised again in Section 4.

Figure 10 – From opacity to transparency, a continuum with four dimensions



These four dimensions were the basis for the development of an accounting transparency scoring tool, which will be presented in Section 4.

### 3.2 – Reasons for accounting opacity

Accounting opacity is the complex result of many factors. The elements found in the literature can be organised in three main areas: (a) the balance between accounting needs and accounting resources; (b) the interdependencies, informality and instability typical of small business operations; and (c) the existence of motives and opportunities for manipulation. These elements are discussed briefly below.

(a) Following Austrian economics, the effort that a small business puts into accounting can be regarded as a function of its needs and resources. The need for detailed and carefully prepared information can arise from legal obligations, from internal management constraints or from third party requirements, such as creditors or clients. In particular, firms applying for finance or for tenders may be under pressure by their banks or prospective clients to provide accurate accounts. Resources refer to the allocation of time and staff to the accounting function, the level of accounting skills,

especially the qualification of staff, and the affordability of external support, as well as material resources.

(b) Regardless of the effort put into accounting, transparency can be affected by the context in which SMMEs operate, with three aspects standing out: interdependencies, informality and instability. *Interdependencies* occur when entrepreneurs share staff, equipment or cash between the home and the enterprise(s) – especially when they own more than one venture; when owners do not separate personal and business accounts, and when their remuneration patterns are erratic and poorly documented. *Informality* refers to the lack of documentation, the vagueness of conditions of some transactions, such as loans granted by friends or family, and the sometimes large amounts of unbanked cash. *Instability* may be related to rapid growth, seasonality or erratic fluctuations, especially if the small enterprise is dependent on few clients or mobilises most of its capacity for each job. The owner's personal constraints such as sickness or absence can also destabilise the business.

(c) Window-dressing results from the balance between the owner's integrity, possible motives, and opportunities for manipulation. Integrity will not be further considered here as an empirical assessment of this dimension would require different data and skills. Opportunities can be conceptualised as a function of the rigour of the legal framework, the internal controls in place, and the vigilance of auditors. Motives for manipulation depend on the firm's circumstances and include: saving on income and other taxes; boosting its appearance, especially when tendering or seeking external finance; and concealing fraud, such as non-recording of sales, disproportionate payments to agents from the owner's family, or recording of personal costs as business expenses.

To assess the relative relevance of these three categories of reasons in explaining accounting opacity, the empirical work will explore the role of resources, informality and motives for manipulation (Section 6).



### **3.3 – Accounting opacity and credit rationing**

In line with information economics and the theory of credit rationing (see Section 2.4), the framework assumes that accounting opacity results in rationing, and hence in financial constraints. Adopting a differentiating approach, the accounting opacity hypothesis is formulated as follows: SMMEs with more opaque accounting are more likely to be credit rationed, hence financially constrained.

Any evidence that more opaque firms are more constrained supports the hypothesis, subject to two spurious effects:

- Firms carrying debt tend to have a stronger need for financial transparency, both for internal reasons, as their leverage represents a higher risk, and because of their creditors, who may pressure them to provide financials. The direction of causality between transparency and access to debt becomes unclear.
- It is probable that accounting opacity is correlated with the quality of financial management. In that case, a positive relation between opacity and rationing may mask a simpler relationship, in which banks reject applications by poorly managed firms. The financial constraints would then be caused not by a dysfunctional market but by the lacking intrinsic quality of the business. The quality of financial information here would only fulfil the role of signalling (Bester 1985).

The empirical methodology will address these limitations.

### **3.4 – Synthesis, hypotheses and research design**

Figure 11 illustrates the overarching framework covering the factors, dimensions and assumed effects of accounting opacity. Based on this synthesis, three groups of hypotheses can be proposed, which are related to the phenomenon of accounting opacity itself, its roots, and its effects on

financial constraints. From the myriad of those hypotheses, six appear both relevant for this study and possible to test, of which five involve causal relationships. The testing of these was based on seeking evidence of positive or negative relationships between the constructs at stake. Given the data limitations noted in Chapter I, which did not allow for detailed statistical evaluations, links between variables were sought by observing the values of one variable for various categories of the other variable.

The boxes below list the six hypotheses and their preliminary operational translation.

***Hypothesis related to the phenomenon of accounting opacity:***

*H4. SMME's accounting is generally opaque.*

Test: See Section 4.4.6.

***Hypotheses related to the roots of accounting opacity:***

*H5. Accounting opacity is aggravated by a lack of resources.*

Test: There should be a positive relationship between the sophistication of the financial function and the firm's accounting transparency score.

*H6. Accounting opacity is aggravated by informality.*

Test: There should be a positive relationship between the implementation of internal controls and the firm's accounting transparency score.

*H7. Accounting opacity is aggravated by opportunism.*

Test: Firms applying for finance should have poorer accounting transparency scores.

***Hypotheses related to the effects of accounting opacity:***

*H8. Accounting opacity hinders **access to bank debt**.*

Test: There should be a positive relationship between the accounting transparency score and the use of bank debt.

*H9. Accounting opacity causes **financial constraints**.*

Test: There should be a negative relationship between the accounting transparency score and the level of constraint.

These hypotheses and tests are represented in Figure 12, which transfers the framework from Figure 11 into an operational research design. The remainder of this chapter will test these hypotheses, as follows.

Based on the four dimensions of accounting opacity identified above, a scoring model is developed (Section 4) and applied to SMMEs' financial statements (Section 5), in order to test Hypothesis H4.

Section 6 assesses the three selected factors for accounting opacity: resources, informality and opportunism. Section 7 studies the relationships between accounting opacity, its factors, and financial constraints – hence assessing hypotheses H5-H9.

Section 8 briefly addresses other aspects related to market dysfunction, including transaction costs and the role of information substitutes. Section 9 concludes this examination of the dysfunctional character of SMME financial markets, especially the accounting opacity hypothesis.

Figure 11 – Overarching accounting opacity framework

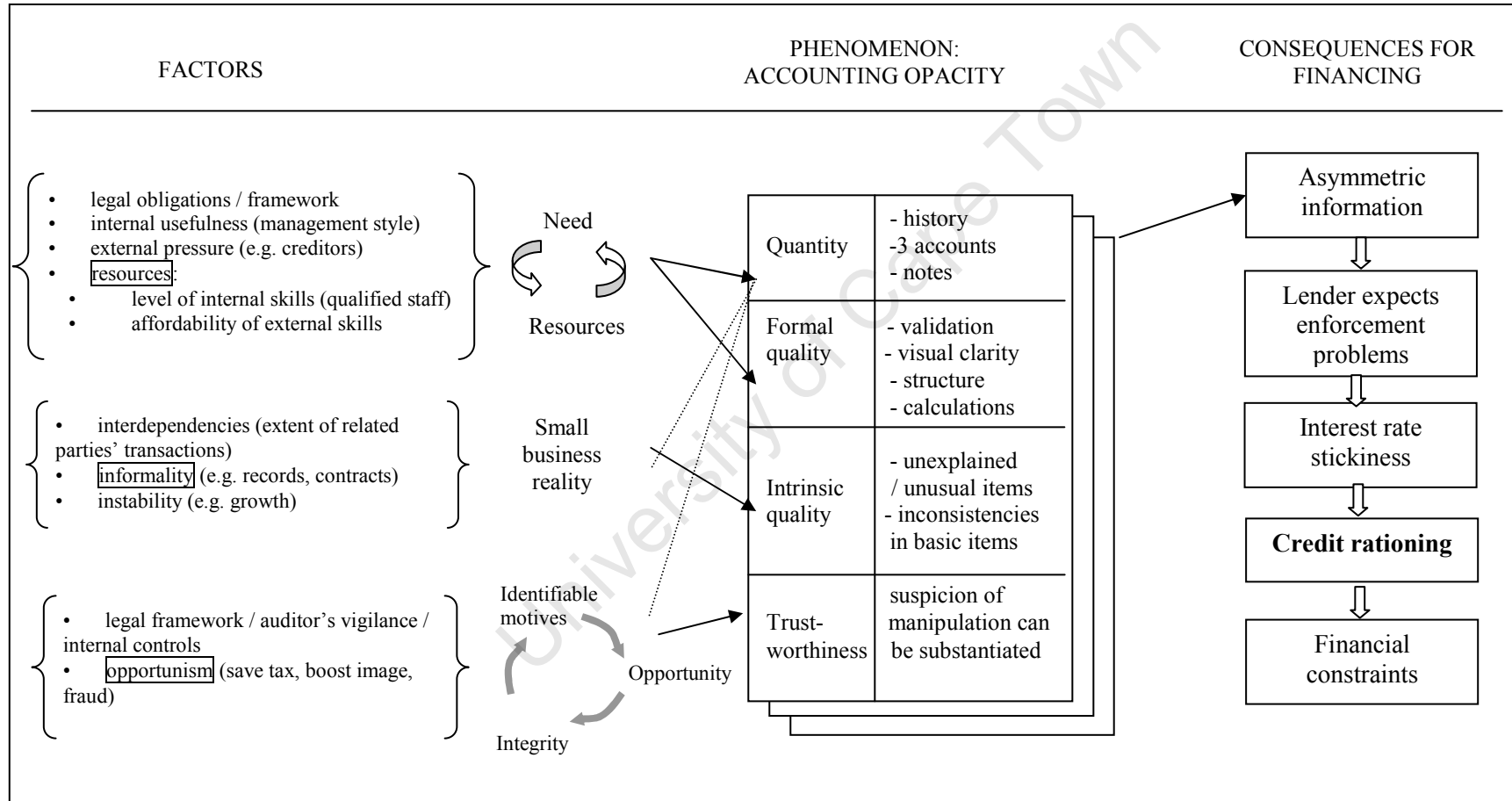
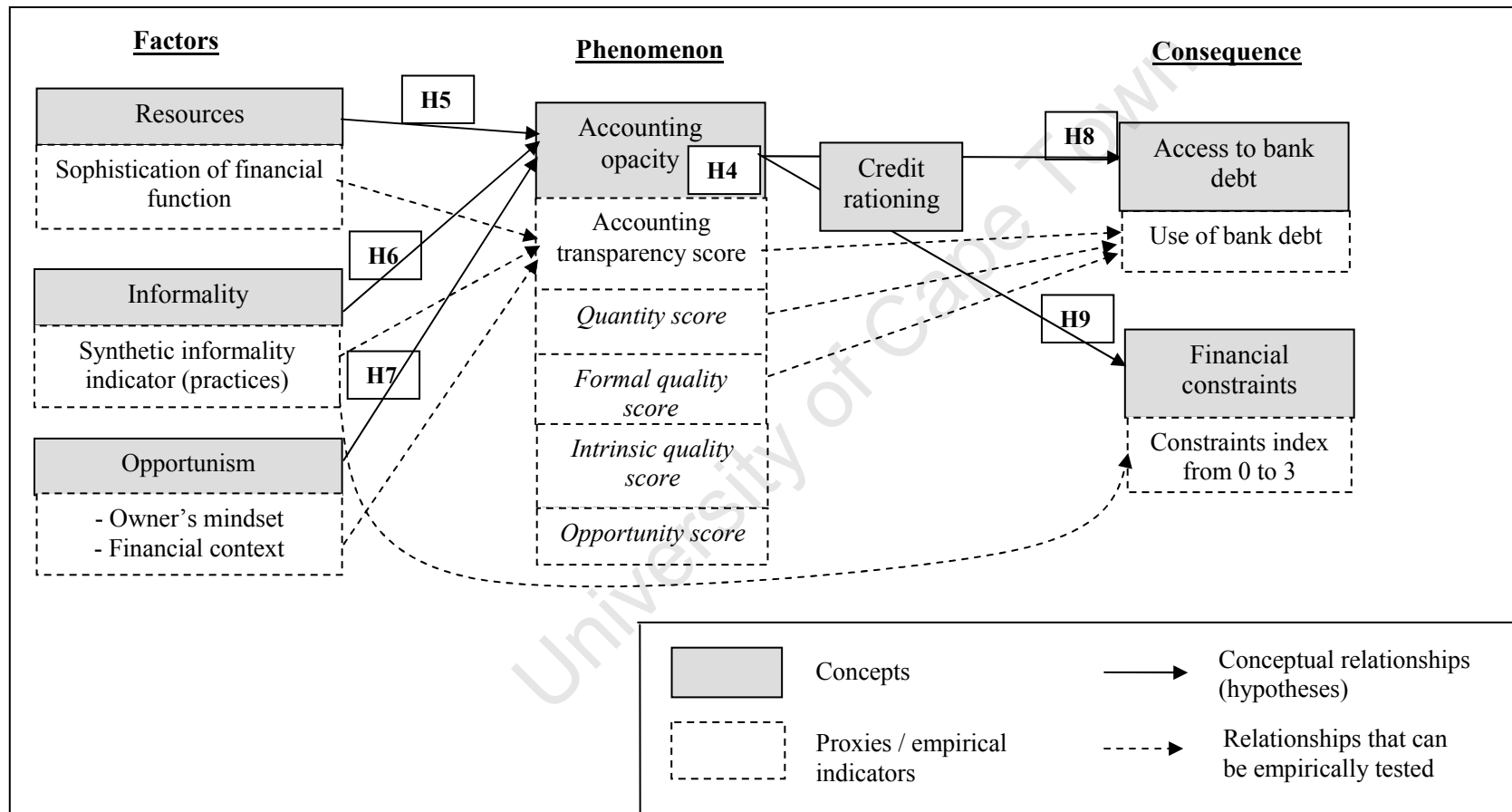


Figure 12 – The relations to be tested under the accounting opacity hypothesis



## **Section 4. How to assess SMMEs' accounting transparency: Scoring methodology**

### **4.1 – Designing an accounting transparency scoring model**

The transparency of financial statements, especially the realism and credibility of reported figures, is not easily assessed empirically. To minimise the risk of some issues remaining unnoticed or some suspicions of improper accounting being unfounded, a thorough procedure is required.

Unfortunately, neither the literature nor practitioners provide a useful research tool: the literature was usually too superficial, whereas practitioners (bankers and auditors) relied on more data than was available to an outside researcher. A specific evaluation instrument was thus developed. The scoring model, as presented in the following pages, was drafted, tested, discussed with practitioners, and adjusted to fit the data and the requirements of the assessment.

To reflect the four dimensions of accounting transparency, an analytical and dimensional evaluation tool (Scriven 1994:54) was developed. The first three dimensions (quantity, formal quality and intrinsic quality) were assessed numerically. Owing to the difficulties of validating manipulation, the fourth dimension was only expressed via a symbol (\* or #) indicating slight or strong suspicions of window-dressing.

For the numerically assessed dimensions, a mixed plus and minus approach was preferred to a mere problem-oriented approach, in which good practices would remain unnoticed. A list of requirements was defined upfront and the proportion of them that were fulfilled led to a preliminary mark. In a second stage, unacceptably bad practices or problematic items would lead to penalties.

It was also decided to adopt a comprehensive scoring system by taking note of minor as well as material errors or problems. This would identify businesses that

manipulate their accounts by a large number of small-scale interventions rather than via a single large manipulation. However, two materiality thresholds were defined, at 5% and 25% of the relevant figure, being the latest value for, as the case may be, equity, net profit or cash. Potential errors or manipulations exceeding these thresholds would trigger additional penalties.

The dimensional scores were then summarised into one mixed score through a numerical weight and sum approach (Scriven 1994:344-355). Intrinsic quality received the largest weight (55%), owing to its greater impact on the usability of financial information. Quantity was weighted the least (20%) to avoid overly penalising younger or smaller enterprises. The resulting scoring structure is represented in Table 10.

*Table 10 – Structure of the accounting transparency score*

<b>Dimension</b>	<b>Main Criteria</b>	<b>Format of score</b>
Quantity	- depth of history - three accounts - notes	Numerical score from +5 to +20
Formal quality	- validation (e.g. auditor) - clarity - structure - calculations	Numerical score from -12 to +25
Intrinsic quality	- unexplained / unusual items - inconsistencies in basic items	Numerical score from -20 to +55
Trustworthiness	Suspicion of manipulation can be substantiated	blank (no suspicion), * (slight suspicion) or # (strong suspicion)
<b>Total</b>		<b>Numerical score<sup>15</sup> from -27 to +100 + symbol</b>

<sup>15</sup> The maximum scores in each dimension correspond to the weightings. The minimum scores for formal quality and transparency result from possible penalties. For quantity, any firm with a score below 5/20 was excluded upfront. In theory, the model allowed any total score between -27 and 100. However, negative total scores were rare since the dimensional scores tended to balance each other out (multiple inconsistencies were more likely to be detected in firms which had provided extensive information).

The list of scoring criteria is provided in Table 11.

*Table 11 – List of criteria for accounting transparency scores*

Dimension	Detailed Criteria
Quantity	<ul style="list-style-type: none"> <li>• Number of balance sheets (BS) (full or summarised or interim?)</li> <li>• Number of income statements (IS) (full or summarised or interim?)</li> <li>• Are the dates of BS and IS congruent?</li> <li>• Number of cash flow statements (CFS)</li> <li>• Number of sets of notes</li> <li>• Are any elements missing from notes: depreciation rates, cost of assets, intangibles, nature and characteristics of long-term liabilities? inventory? related party transactions? cost of sales? tax calculation?</li> </ul>
Formal quality	<p><u>Serious issues</u></p> <ul style="list-style-type: none"> <li>• Internal validation</li> <li>• External validation (report from auditor or accounting officer)</li> <li>• Details</li> <li>• Period of reference</li> </ul> <p><u>Minor issues relating to presentation</u></p> <ul style="list-style-type: none"> <li>• Comparative column</li> <li>• Legibility (e.g. handwriting, “plus minus confusion”, alignment, “laundry-list syndrome”)</li> <li>• Classification: short-term / long-term, cost of sales</li> <li>• Sums in the balance sheet or income statement</li> <li>• Correct classification of lease debt (if applicable)</li> </ul> <p><u>Critical issues of structural correctness (=&gt; penalties)</u></p> <ul style="list-style-type: none"> <li>• Asset-liability distinction</li> <li>• Asset-expense distinction</li> <li>• Asset-liability sums</li> <li>• Consistency between BS, IS, CFS, notes (e.g. re. depreciation rates, inventory, retained earnings)</li> </ul> <p>General judgement: Do the accounts seem to be clean and prepared with care?</p>
Intrinsic quality	<p><u>Testing of obligatory items</u></p> <ul style="list-style-type: none"> <li>• BS carrying value of fixed assets, in relation to notes, CFS, depreciation, previous years</li> <li>• Depreciation, in relation to notes, cost, practice note</li> <li>• Member’s equity</li> <li>• Member’s salary</li> <li>• Accounts receivable, in relation to turnover and previous years</li> <li>• Accounts payable, in relation to turnover and previous years</li> <li>• Cash balance compared to reconstituted CFS and to interest earned/paid</li> <li>• Interest earned or paid compared to cash balance</li> <li>• Turnover to cost of sales and compared to previous years</li> <li>• Operating expenses (compared to previous years)</li> </ul>



Dimension	Detailed Criteria
Intrinsic quality (continued)	<p><u>Testing of frequent items</u></p> <ul style="list-style-type: none"> <li>• Inventory, in relation to turnover, previous years and peers</li> <li>• LT liabilities, in relation to investments, CFS and previous years</li> <li>• Member's loan</li> <li>• Financial expenses (in relation to LT liabilities and previous years)</li> <li>• Tax calculation</li> <li>• Tax liability</li> </ul> <p><u>Less usual, non-testable items (=&gt; penalties)</u></p> <ul style="list-style-type: none"> <li>• Property and intangible assets</li> <li>• BS value of property</li> <li>• BS value of intangibles</li> <li>• Amortisation</li> <li>• Loan granted to or by related parties, other than members loan</li> <li>• Other interest-free or preferential long-term loans</li> <li>• Interest or other payment to/from related parties</li> <li>• Fees, commissions, discounts granted</li> <li>• Deferred charges</li> <li>• Unexplained extraordinary items</li> <li>• Provisions for future expenses</li> </ul> <p>General judgement: Do the accounts seem to make sense considering the business' stated activity?</p>
Trustworthiness	<p>Suspicion of manipulation?</p> <p>If slight suspicion, mark *; if strong suspicion, mark #. Justify!</p>

*Abbreviations used: BS: Balance sheet, IS: Income Statement, CFS: Cash flow statement, LT: long term*

Before giving more details on the assessment criteria, weightings and materiality thresholds, it is worth dwelling briefly on the scoring process.

## 4.2 – The scoring process

Detecting and judging issues of accounting opacity required a comprehensive and thorough process. For this, though time-consuming<sup>16</sup>, a sensible evaluation acknowledging the individual characteristics of every enterprise was preferred to a mechanical computer-based scoring method.

<sup>16</sup> For an enterprise that provided extensive data with intrinsic inconsistencies, the testing and assessing process could take 15 to 20 hours.

The process is represented in Figure 13. The first two steps, an inventory of available data including a date consistency check, and a review of formal features of the statements (signature, auditor or accounting officer's report; structure and presentation), were simple and led to preliminary scores for the quantitative and formal dimensions respectively.

The assessment of intrinsic quality followed more complex procedures suggested by professional SMME accountants, and used spreadsheet-based cross-verifications, simulations and ratio calculations. For example, the process involved (re-)compiling the schedule of fixed assets, the tax calculations, the schedule of the members' investment and an approximate cash flow statement. In those tables, a mass of information was organised (such as investments/divestments, depreciation practices, financing schemes, evolution of the cash position), which was then connected to the qualitative information available to draw a tentative profile of the enterprise, its status and its characteristics. This profile ensured an appreciation of firm-specific issues impacting on the accounts.

In a second step, tests were done to verify the consistency of figures with the profile drawn. Tests included the analysis of spreadsheet-generated ratios and simulations, year-to-year comparisons and comparison with peer businesses. Questions or inconsistencies generated by these tests led to an iterative process whereby primary data was constantly reconsidered to refine the firm's profile. If uncertainties or inconsistencies remained, the corresponding accounting item was marked with 0 (clear inconsistency) or a medium score (if it was difficult to attribute the lack of clarity to accounting or to reality).

Furthermore, each inconsistency potentially triggered penalties, affecting the quantitative score (if a clarifying note was missing), the formal quality score (if there were errors in calculation or structure), the intrinsic quality score (if the potential effect of the presumed error or misrepresentation was material), or the manipulation add-on (if it was suspected that the inconsistencies came from

misrepresentations). Suboptimal scores or penalties were noted and explained separately.

From this process emerged the four dimensional scores, whose sum was the total score. A plausibility check compared the total score to the list of major issues found in the statements, to check for scoring mistakes.

### **4.3 – Evaluating and applying the tool**

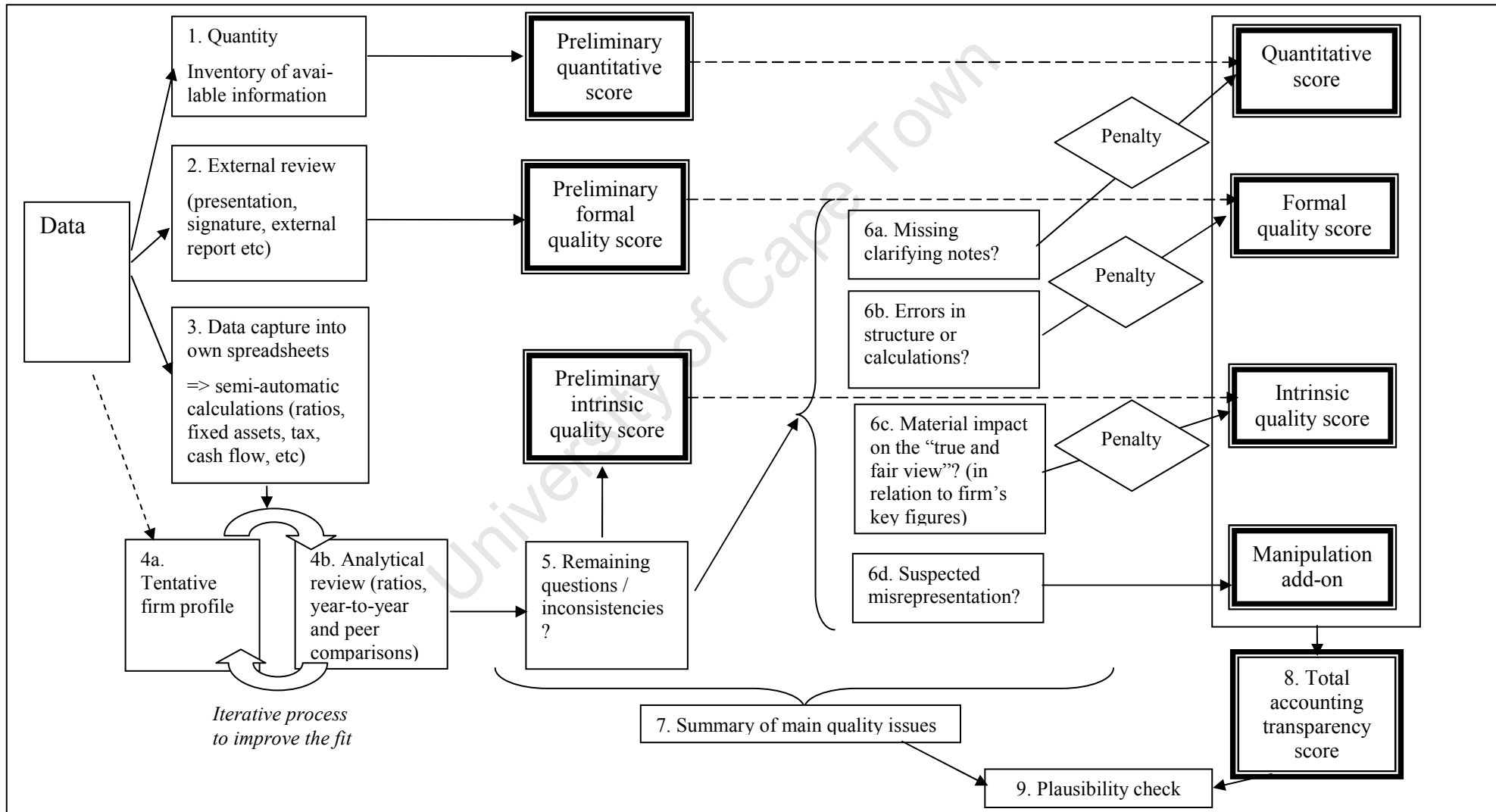
The three chartered accountants from auditing practices who contributed to this study (see Chapter I Section 4.3) were asked to give their opinion on the scoring tool, and all agreed that it would fulfil its functions. Specifically in adopting Scriven's meta-evaluation criteria (1994:230), the model appeared satisfactory with regard to conceptual clarity, comprehensibility, comprehensiveness, credibility, explicitness about the standards used, feasibility, relevance to the needs of external users of financial statements, and technical soundness. In addition, the thoroughness of the evaluation process was found to provide a reasonable assurance that most problems would be detected. Therefore, the tool seemed fit to be applied to empirical data.

In the balance sheet sample, the scoring model was applied to the 33 firms for which a copy of the financials was available<sup>17</sup> (half of the total database). In the case studies (except CS4), the scoring process was enriched by interview data to triangulate accounting data. For all other sample firms, only the intrinsic quality of figures was assessed.

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<sup>17</sup> That is, accounts provided by NedEnterprise and PWC, or by the SMMEs themselves through WECBOF or direct contact. Accounts which had been made available by other accountants or by Business Beat were only consulted at the premises of the data provider, so that no copy was kept – hindering a full scoring procedure.

Figure 13 – Accounting opacity assessment process



## **4.4 – Interpretation of scores and examples**

For a better interpretation of scores, and to establish quantitative expectations for the testing of Hypothesis H4, this section discusses possible thresholds and presents examples. After a theoretical discussion (4.4.1), a few issues emerging from the data are isolated for three businesses, and their impact on the scores is discussed (4.4.2 to 4.4.5), with more detailed comments being provided in Annexure 12. This leads to a discussion on the quantitative translation of Hypothesis H4 (4.4.6).

### **4.4.1 – ‘Rule-of-thumb’ thresholds**

As Table 11 has shown, the majority of criteria in the quantity and formal quality dimensions (which jointly account for 45% of the score), such as the presence of notes and cash flow statements or the owner’s signature, represent legal requirements for close corporations and companies. Criteria in the intrinsic quality dimension (55% of the score) are not related to compliance, but to the consistency of the economic content.

Instead of scientifically establishing thresholds – which would prove overly complex – it appeared preferable to work with rules of thumb. In light of the criteria, scores under 75% in quantity and formal quality were assumed to reveal incomplete compliance for close corporations (CCs) and companies, while total scores under 50% were assumed to indicate limited usability of financial information.

To verify these assumed thresholds, three cases were reviewed in greater detail: Ned2, a printing firm with a total score of 13,9\*; Wec07, a publishing business with a total score of 77, and PWC01, a business selling DIY and sports products, with a total score of 52,6. As the next paragraphs (and Annexure 12) show, the scores of these SMMEs are consistent with the thresholds proposed.

#### **4.4.2 – Depreciation of fixed assets in Ned2**

Ned2 did not provide a schedule of assets, so the carrying value of fixed assets could not be ascertained. The depreciation of fixed assets was omitted in its October 2001 balance sheet. The impact of this omission, estimated at R85 000, exceeded 25% of the profit figure and was therefore deemed highly material. This was reflected as follows in the intrinsic quality scoring: the carrying value of fixed assets was scored at 1,5/3 (insufficiency of data), while the amount of depreciation was scored at 1/3 (depreciation correct in February but missing in October). The intrinsic quality score was further affected by a 2 points penalty to reflect the highly material impact of this omitted depreciation on the last period's profit.

#### **4.4.3 – Treatment of liabilities in Ned2**

In Ned2's October 2001 balance sheet, most liabilities appeared as negative amounts, while the equity was positive. The member's loan and long-term liabilities were hence subtracted from, instead of added to, the member's capital. Similarly, the current tax liability was added to rather than subtracted from the current assets.

If these liabilities were in fact assets (i.e. the member and other agents had borrowed funds from, rather than lent funds to, the business), it is not clear why they should have been labelled as liabilities. It seems more plausible that the person who prepared the balance sheet had a serious accounting skills shortage and assumed that liabilities had to be preceded by a minus. To balance the capital employed with the employment of capital, substantial amounts had been added, labelled as 'long-term charges', which are suspected to have no substance.

This critical mistake substantially affected the formal quality score, with the strongest possible penalty (-6) for the asset-liability distinction and a poor general appreciation of formal quality (0,5). As to intrinsic quality, the credibility of the three types of liabilities (accounts payable, long-term liabilities and

members' loan) was valued at 0. The material amounts of the long-term liability (R24 000) and the member's loan (R227 000) triggered additional penalties. The general assessment of intrinsic quality was set at 0/4. Overall, then, this grave mistake in the compilation of the accounts, which critically impinges on the usability of the October 2001 balance sheet, affected Ned2's total score by 23.5 points, in line with the weight of the October 2001 balance sheet, which represented a quarter of total data.

Overall, this and other anomalies led to a total score of 13.9/100, consistent with the judgment that these financial statements were only partly usable.

#### **4.4.4 – Values of accounts payable and receivable in Wec07**

Compared to peers, the values of current assets and liabilities in Wec7's accounts were not self-explanatory. Accounts receivable were unusually high (with average payment terms exceeding three months) and accounts payable had experienced a steep decrease from 36 to 19 days between February and September 2001. A study of Wec7's profile did not reveal any particular explanation for these surprising values, other than possible short-term fluctuations. Therefore, this anomaly did not trigger substantial penalties: the credibility of both figures was scored at 2.5 out of 3.

Apart from this and similar anomalies, Wec7's financial statements did not reveal more substantial inconsistencies. Its total score of 77/100 (see Annexure 12) is consistent with the threshold of 75% for compliance and usability.

#### **4.4.5 – Cost of sales and inventory in PWC01**

PWC01 is a medium-sized sports and DIY supplier, registered as a (Pty) Ltd. The comparability of its accounting figures across the reporting period is rendered difficult by the fact that the Pty changed auditors in 2000, triggering a significant reshuffling of accounts. Among other issues, the date of closure of the financial year was moved from 31 December to 30 June, leading to an 18-month-

long reporting period in 1999-2000, as well as probable seasonal effects on current assets and liabilities.

One of the perturbing aspects is the change in the definition of cost of sales, which the notes do not comment on. Analysing comparative values reveals that for December 1998, the change of method had the effect of reducing the cost of sales by 27%. Similarly, other cost items present diverging values: there are three different figures for the salaries paid in 1998, ranging from R497 000 (in the 2000 income statement's comparative column) to R958 000 (in the 1998 income statement). The same applies to debt and finance charges. While this issue is fundamentally a matter of classification and presentation, it creates opacity as it becomes almost impossible to follow trends in costs, debt or financial charges across the period, or to track the source of the difference. Due to these difficulties, both the operating and financial expenses were rated with a half-score (1,5/3) to reflect the lack of clarity. No further penalty was given in the intrinsic quality dimension, since the bottom line was not affected, but a penalty was triggered in the quantity score, to reflect the insufficiency of notes which should have commented on the change of method.

Another perturbing item was the inventory, whose value in June 2000 was proportionately 75% higher than in December 1998. This was likely to be related to seasonal effects, with the winter possibly being used to build-up stock ahead of the higher sales of sports articles in summer. However, such reasoning creates an opacity problem, as it makes it difficult to detect actual selling difficulties or stock management problems. Therefore, again, the inventory was marked with a medium score (1,5/3); the very material difference amount (which was almost as high as the firm's equity) triggered an additional two-point penalty.

These and other similar issues lead to a total score of 52,6; the score reflects the overall assessment of the firm's accounting: although a number of items were difficult to interpret and compare from year to year, impeding any detailed financial analysis, the overall picture appeared as a faithful account of the firm's



situation: hence, the financial statements remained usable, although not for any type of analysis.

#### **4.4.6 – Thresholds and test for hypothesis H4**

These examples have given more tangible insights on the scoring model and generally supported the thresholds proposed in Section 4.4.1. It is now possible to propose a quantitative translation of Hypothesis H4, which stated that SMME accounts are *generally opaque*. Consideration must be taken of the fact that the hypothesis relates to the overall SMME population, whereas the test is restricted to a biased sample. Given the thresholds proposed, the hypothesis will be deemed supported if at least 25% of the sample firms score below 50% and at least 66% of them score below 75%. In this case, considering the bias, it is likely that more than half of all SMMEs score below 50% and more than 80% are below the legal CC requirement level of 75%.

The next section presents the scoring results.

### **Section 5. Accounting transparency scoring results**

*H4: SMMEs' accounting is generally opaque.*

Test: In a sample with a positively biased accounting quality, at least 25% of firms score below 50% and at least 66% score below 75%.

This section comments on the total and dimensional scores obtained from assessing the financial statements of the sample. The score review is followed by a brief discussion of the most problematic items; Annexures 13-15 provide more details.

The total scores for the 33 firms vary between 6,5#<sup>18</sup> and 86,6 with a mean of 54 and a median of 56 – reflecting the variety of situations represented in the sample. However, the sample is biased towards better accounting, since firms that could not provide any

*Table 12 – Synopsis of accounting transparency scores of case study firms*

	CS1	CS2	CS3	CS5	CS6	
Quantitative Score	10,5	12,0	13,5	14,0	13,0	/ 20
Formal Quality Score	-0,5	17,5	16,0	21,5	20,5	/ 25
Intrinsic Quality Score	-3,5	36,0	17,0	38,9	37,4	/ 55
Trustworthiness	#	*	*		#	
<b>Total Score</b>	<b>6,5#</b>	<b>66,0*</b>	<b>46,5*</b>	<b>74,4</b>	<b>70,9#</b>	<b>/ 100</b>

\*: small suspicion of manipulation; #: strong suspicion of manipulation

*Table 13 – Dimensional scores in the balance sheet sample*

	Quantity	Formal Quality	Intrinsic Quality	Total Score
Highest score	20.0 / 20	25.0 / 25	49.6 / 55	86.6 / 100
Lowest score	5.0 / 20	-0.5 / 25	-3.5 / 55	6.5 / 100
Median	11.7 / 20	15.8 / 25	29.1 / 55	55.9 / 100
<i>in percent</i> <sup>19</sup>	59%	63%	53%	56%
<i>Proportion of firms with the following score (in percent</i> <sup>27</sup> <i>)</i>				
Negative	0%	3%	3%	0%
0 to 25%	6%	12%	12%	12%
25.1% to 50%	27%	15%	21%	21%
50.1% to 75%	45%	36%	48%	52%
over 75%	21%	33%	15%	15%
Cumulative proportion				
under 50%	33%	30%	36%	33%
under 75%	79%	67%	85%	85%
Manipulation scores:		* Slight suspicion		50%
		# Strong suspicion		13.3%

*Source: Based on 33 firms from the balance sheet sample.*

<sup>18</sup> As indicated in Tables 9 and 10 of the previous section, a \* indicates a small suspicion of manipulation; a # indicates a strong suspicion of manipulation. The numerical scores are out of 100.

<sup>19</sup> For easier interdimensional comparisons, the numerical scores have been expressed as a percentage of the maximum score in the dimension, e.g. a 25% score in the dimension “quantity” corresponds to 5 (25% of 20).

accounts or whose financial statements were unreadable, were excluded upfront. Case studies, especially, were generally selected for their good transparency score.

Table 12 summarises the scores obtained by the five case study businesses which provided accounts, while Table 13 presents the results of the balance sheet sample (more detailed score results for the balance sheet sample can be found in Annexure 13).

The cumulative proportions found in Table 13 support Hypothesis H4. The following remarks further help to interpret the scores.

- The quantity scores were mostly affected by the lack of cash flow statements and notes. In spite of it being a legal requirement for CCs and Companies, 73% of the financial statements assessed had no or very rudimentary cash flow statements, and no or insufficient notes.
- The lack of validation affected formal quality scores. The members' failure to sign the accounts, as well as the absence of reports by the accounting officer or auditor, or qualified audit opinions, applied to 57% of cases.
- 43% of accounts had inconsistencies between balance sheets, income statements and notes, generally related to depreciation figures, variations of stock or retention of profit, while seven sets of accounts (23% of the sample) contained gross structural mistakes which severely restricted the usability of financial statements, such as negative recording of liabilities (see the example of Ned2 discussed in Section 4.3).

- The intrinsic quality scoring involved a high number of issues, which were often highly relevant to the total score. The most relevant issues are presented in Table 14, and include fixed and intangible assets, non-operating costs and long-term financing schemes. Problems more closely related to operations (turnover, operating costs, current assets and liabilities) were more difficult to verify and represent a limitation of the methodology.
- While not mentioned separately in the table, related party transactions were often a source of opacity, through uncertainties on members' loans, members' remuneration, as well as dealings with related businesses. (Further details can be found in Annexure 14 and in case study narratives, Annexures 31-36).
- Suspicions of manipulation existed in more than half of the scored balance sheet sample firms (sixteen out of 33), with four cases of strong suspicions. The effect of manipulations on the firm's key figures was material in nine cases, and highly material in four cases. Most suspicions were cases of earnings aggressiveness or exaggerations of the amount of equity and long-term funds available to the firm. Annexure 15 provides a detailed overview of the cases, the context, and materiality of suspected misrepresentations.

To summarise and conclude on Hypothesis H4, the review has confirmed the existence of accounting opacity in a number of SMMEs, affecting all four dimensions of the model: paucity of information, sloppiness of presentation, lack of reliability of the figures and, in many cases, suspected manipulations. In all dimensions, at least two-thirds of the sample fell below the level of 75%, which is believed to correspond roughly to a minimum legal requirement for CCs and companies. This is still an optimistic figure, since the accounting quality in the overall SMME population is likely to be far worse than in our sample. Given the sample's inherent bias, though, two-thirds of the sample and the majority of case

studies had acceptable or transparent financial statements (total score above 50%).

*Table 14 – Most problematic items in the balance sheet sample*

<b>Item</b>	<b>Proportion of accounts materially affected</b>	<b>most frequent problems</b>	<b>detectable? adjustable?</b>
Fixed and intangible assets	53%	- depreciation - franchise fee	generally detectable and adjustable
Equity and term debt	39%	- retained income - members' loans - non-bank loans, incl. related party loans - financial charges	detectable but adjustment often speculative
Current assets and liabilities	37.5%	- accounts payable - accounts receivable - inventory	difficult to detect and to adjust
Operating costs	17%	- e.g. manipulating turnover or cost of sales	difficult to detect and to adjust
Non-operating costs	45%	- underestimation of depreciation and financial charges - members' salaries	generally detectable and adjustable

The next section examines the reasons for accounting opacity.

## **Section 6. The reasons for accounting opacity**

### **6.1 – Introduction: Practical approaches**

The conceptual framework has identified three main groups of factors for accounting opacity, which we have reduced to hypotheses on the role of

resources (H5), informality (H6), and opportunism (H7)<sup>20</sup>. Before testing these hypotheses, available data must be used to assess these factors individually.

The assessment of resources which SMMEs devote to accounting is presented in Section 6.2. It focuses on internal organisation as well as on the quality of co-operation with accountants, and is based on case study data.

The aim of Section 6.3 is to assess informality. The review of case study and GEM data enables determining firms' degree of informality in their bookkeeping and other practices.

Opportunism is assessed in Section 6.4 by relating accounting opacity scores to specific events that are likely to constitute a motive for manipulation, such as existing applications for finance or impending failure. This review is based on data from the balance sheet sample and the case studies.

## 6.2 – The lack of resources

*H5: Accounting opacity is aggravated by the lack of resources devoted to the financial function.*

Test: There should be a positive relationship between the sophistication of the financial function and the firm's accounting transparency score.

Before testing this hypothesis, it is necessary to devise a list of criteria to assess resources. Reviewing the organisation of the financial function in case study firms throughout their lifecycle, and mapping the progress (or decline) experienced by these firms through the years, proved useful in this regard. From this process emerged a number of factors (see Table 15), which were organised in sophistication levels, as illustrated in Table 16.

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<sup>20</sup> See Section 3.4 for an elaboration of the hypotheses. Another area is the need for accounting information, which depends among other things on external pressure, arising from the legal framework, the enforcement of regulations, and banks' possible requirements. While this thesis could not accommodate an in-depth review of these issues, the study found some indications of weaknesses in the enforcement of legal requirements, as well as in the incentive effects expected from banks; corresponding data is presented in Annexure 8.

*Table 15 – Criteria for the assessment of ‘accounting resources’*

<b>Area</b>	<b>List of criteria</b>
Internal human resources	<ul style="list-style-type: none"> <li>* number of administrative/financial employees</li> <li>* existence of administrative/financial supervision</li> <li>* level of training of administrative/financial employee(s)</li> <li>* purpose of admin/financial function: paperwork or strategic information</li> <li>* level of owner’s knowledge of the firms’ figures and modalities of financial management (intuitive vs. computerised)</li> </ul>
Internal material resources	<ul style="list-style-type: none"> <li>* existence of computerised systems, e.g. income and cost tracking or accounting software</li> </ul>
External resources	<ul style="list-style-type: none"> <li>* involvement of external bookkeeper (frequency and purpose; quality of the co-operation)</li> <li>* involvement of accounting officer (frequency and purpose; quality of the co-operation)</li> </ul>

It seems natural to expect the financial function to become more sophisticated as the business grows and matures, as predicted by Berger & Udell (1998) (see Section 2.1 in this chapter). However, case studies display variable evolutions between start-up and mature age. As Appendix 9b shows, the pattern of increased transparency described by Berger & Udell (1998) applies only to some of the businesses.

To investigate the connection between accounting resources and accounting transparency, the accounting sophistication level of each case study (expressed numerically according to the levels defined above), was put in relation to the accounting transparency score. The values can be read in Table 17.

While the sample is too small for generalisations, the figures displayed in this table are compatible with a positive relationship between the level of accounting resources and accounting transparency.

Table 16 – Levels of sophistication of the accounting/financial function

Sophistication levels	Examples
1. No financial function	- no records - no external support
2. rudimentary administration	- no employees: owner or family members devotes some of their time - vulnerable relationship with external bookkeeper or accounting officer
3. non-specialised administrative function	- secretary-type employees - focus on paperwork - accounting outsourced to external bookkeeper
4. specialised financial organisation	- staff trained on financial issues - specialised computer systems - accounting officer provides financial advice
5. sophisticated financial controls	- trained financial staff supervised by qualified manager - owner gaining strategic information from financial systems - required controls by accounting officer (or auditor)

Table 17 – Accounting resources and transparency of case study firms

	Resources devoted to accounting			Accounting transparency score
	<i>Internal (financial staff)</i>	<i>External (accountant's support)</i>	Total: Accounting sophistication level	
CS2	<i>professional</i>	<i>strategic support by chartered accountant</i>	4	65.5*
CS3	<i>secretary and admin person</i>	<i>small independent accountant</i>	3	46.5*
CS4	<i>none</i>	<i>none</i>	1	0
CS5	<i>admin undergoing training</i>	<i>strategic support by chartered accountant</i>	3 => 4	74.5
CS6	<i>family and salesperson</i>	<i>limited professional support</i>	3	70.5#

Note: \*: small suspicion of manipulation; #: strong suspicion of manipulation; Accounting sophistication level as defined in Table 16



### **6.3 – Informality: The study of financial practices**

Conceptually, the informality factor is close to the resources factor as discussed above. A firm with a rudimentary administrative function will naturally be informal, whereas one with sophisticated financial controls is most likely to be formal. The main reason for its separate treatment is not conceptual, but rather practical. The existence of comprehensive data on financial practices in the GEM database makes a larger-scale assessment possible. Unfortunately, no accounting transparency score is available for the firms in the GEM database, so that it was not possible to study the relationship between informality and opacity. Nevertheless, an informality indicator is useful to test its possible relationship with financial constraints (H9), as a means to triangulate the accounting opacity hypothesis (H8).

The aim of this section, therefore, is not only to address H6 on the basis of case studies (whose results are expected to echo those of H5) but also to build a set of values that will be useful when testing for H9.

*H6: Accounting opacity is aggravated by informality.*

Test: There should be a positive relationship between the implementation of internal controls and the firm's accounting transparency score.

After presenting the methodology adopted, the findings on each relevant dimension are discussed.

#### **6.3.1 – Methodology**

The informality indicator is based on GEM data, which provide invaluable information on entrepreneurs' financial practices, such as the records they keep, the person responsible for setting up the documents, the frequency with which accounting documents are consulted, the accounting fees paid, as well as specific practices like the separation of personal and business accounts, the owner remuneration patterns, and the proportion of unbanked cash.

To reduce complexity and focus on the questions replied to by most respondents, this thesis concentrates on four types of practices characteristic of SMMEs and consistent with the framework developed in the previous section:

- Lack of separation of personal and business accounts (question 44). Indeed, separating business from private bank accounts is a fundamental prerequisite for transparency;
- Absence of records for: sales, purchases, cash movements, accounts payable and receivable, and inventory when applicable (questions 20, 21, 22, 37, 40, 41, and 42). Without proper records, the correctness of financial statements cannot be soundly established;
- Impractical format for the same records – which can affect their usability; and
- Failure to channel all or most of the cash through the bank account (question 25). If most cash remains unbanked, physical cash movements are more difficult to control, raising the risk of fraud or theft.

The failure to remunerate the owner-manager on a regular basis was a fifth dimension whose inclusion in the framework was considered but eventually rejected<sup>21</sup>.

To derive a single indicator from those practices, the four criteria (account separation, existence of records, format of records, and banking of cash) were combined into a single composite indicator of formality. For this, each of the criteria was rated on a scale from 0 (most informal) to 2,5 (most formal), and the four scores were added.

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<sup>21</sup> Remuneration data poses two problems. Firstly, data is ambiguous due to the owner's reluctance to answer (confidentiality) or the risk of over- or understating salaries (if business owners try to prove their success or their sense of sacrifice). Secondly, the direction of causality in a correlation between regular salary patterns and financial constraints is difficult to interpret: in fact, the affordability hypothesis (whereby non-constrained firms pay their owners a regular salary because they can afford it) seems more likely than the accounting opacity hypothesis.

### 6.3.2 – Description: Failure to implement basic practices

As Table 18 shows, only 86% of formal black businesses separate their business bank accounts from their personal bank accounts. While **account amalgamation** is not surprising for sole proprietors, it is questionable whether the 8% of close corporations which amalgamate accounts are able to comply with the rules of a formal corporation. The township case studies CS4a+b, whose incorporation as CCs seems mainly aimed at improving their chances in tenders, illustrate this situation (see narrative in Annexure 34). Other case studies show that owner-business confusion may even exist with separate bank accounts, with businesses *de facto* paying a variable portion of the owner's private expenses.

With regard to **record-keeping**, the GEM data confirmed the relatively weak practices of black SMMEs, except for trading records. The frequent lack of records for cash flow and overdue accounts may exacerbate SMMEs' vulnerability to liquidity problems. Furthermore, in approximately half of the cases, records are kept physically rather than electronically, potentially causing a higher risk of displacement or loss, and making monitoring more difficult.

As to **banking cash**, 14% of respondents held more than a quarter of cash inflows away from the bank – representing a favourable terrain for the development of accounting opacity. Nine businesses did not respond to this question.

Table 18 – Proportion of GEM firms implementing basic practices

Proportion of GEM firms implementing following practices	in %	Sample size
<i>a) separating accounts</i>		
Sole proprietors	44%	27
Close Corporations	92%	160
Companies (Pty ltd)	<u>100%</u>	<u>33</u>
Full sample	86%	224
<i>b) keeping the following records</i>		
• Sales	96%	224
• Purchases	94%	224
• Cash in and out	58%	224
• Cash flow	42%	224
• Overdue accounts	51%	224
• Accounts payable } (where	76%	218
• Inventory } applicable)	65%	162
<i>c) keeping sales records in the following format</i>		224
• Computerised	48%	
• Cash register	3%	
• Physical filing, e.g. invoice book	40%	
• Loose, e.g. slips, boxes	4%	
• Did not answer / not applicable	5%	
<i>d) retaining the following part of cash out of the bank</i>		215
• 0%	58%	
• 0.5-25%	28%	
• >25%	14%	

Source: GEM data, 2003

### 6.3.3 – Synthetic informality indicator

Summarising all four factors into a synthetic indicator as described in the methodology, the GEM respondents could be classified into five categories, as represented in Table 19. The table suggests that approximately half of black SMMEs apply a fair degree of formality, whereas a third can be regarded as semi-formal, and the remaining sixth are either informal or highly informal.

*Table 19 – Distribution of GEM firms according to formality*

	<b>Formality score</b>	<b>Number of firms</b>	<b>in % of sample</b>
Highly informal <sup>22</sup>	< 4	19	9%
Informal	4 to < 6	21	9%
Semi-formal	6 to < 8	73	33%
Formal	8 to < 9	55	25%
Highly formal	9 to 10	56	25%
Total		224	100%

*Note: Percentages do not add up to 100% due to rounding differences.*

### **6.3.4 – Applying the methodology to case studies**

The methodology was adapted to five case studies (all except CS1 where qualitative data were insufficient) in order to obtain an all-round assessment for those firms. In the absence of data on unbanked cash, only the other three dimensions were included in the model. The formality assessment was then compared to the accounting transparency score. The results, in Table 20, show varying degrees of informality that seem to be positively related to accounting transparency scores. Again, although the sample size is small, this result is compatible with Hypothesis H6.

Section 7.3 will investigate whether such informality is also related to financial constraints (H9).

## **6.4 – Motives for manipulation**

*H7: Accounting opacity is aggravated by opportunism (the opportunistic accounting hypothesis).*

After resources and informality, a third factor contributing to accounting opacity is opportunism, i.e. the active intervention of business owners to modify the view conveyed by the accounts.

<sup>22</sup> The threshold of 4 corresponds to a firm that either keeps separate accounts but does not reach 0,5 points in each of the other criteria, or fails to separate accounts and does not reach more than half the points in each of the other criteria.

Table 20 – Informality and accounting transparency score in case studies 2 to 6

	<b>CS2 (restaurant, TO: R3 million)</b>	<b>CS3 (textile, TO: R2,2 million)</b>	<b>CS4 (cleaning, TO: R200 000)</b>	<b>CS5 (tourism, TO: R1million)</b>	<b>CS6 (packing, TO: R1,4 million)</b>
Separating accounts	yes	yes	no	partially	partially
Quantity of records held	extensive	average	deficient	deficient	average
Format of records	computerised	physical filing	boxes	boxes and files => moving to software	physical filing
Sales records	computer-generated	partly cash register, partly invoice book	none (only few large contracts)	partly invoices, partly booking schedule	invoice book
Records of costs	main costs computerised	slips and invoices	wage register, otherwise missing	bank statements	slips and invoices
Controlling	computer-generated control sheets reviewed daily	vague	none	none	vague
Financial statements	in the office	external accountant	none	external accountant	in the office, but has to look
Overall formality assessment	<b>highly formal</b>	<b>semi-formal</b>	<b>highly informal</b>	<b>informal becoming formal</b>	<b>semi-formal</b>
Accounting transparency	<b>65.5*</b>	<b>46.5*</b>	<b>0</b>	<b>74.5</b>	<b>70.5#</b>

The relevance, possible causes, and effects of such manipulation are first identified using rich case study data. Based on this, a test is developed, which is then verified on a larger scale with data from the balance sheet sample.

From the five case studies that included financial statements, four provided some evidence of opportunistic accounting. This evidence, listed in Table 21, suggests that image-boosting and tax-saving are frequent motives for interventions in the accounts. Table 22 attempts to illustrate the relative contributions of opportunism, resources and informality to accounting opacity. It suggests that, while resources and informality affect the quantity and formal quality of information, the opportunism of entrepreneurs applying for bank facilities has a strong impact on intrinsic quality and manipulation scores.

*Table 21 – Opportunism or integrity of case study owners*

	<b>Evidence</b>	<b>Impact on accounts</b>	<b>Mindset / Purpose of interventions</b>
CS1	Financial statements delivered while applying for an overdraft were favourably distorted (considerably different from the accounting officer's version)	considerable	opportunism: image-boosting for bank
CS2	Owner's statement: "these accounts are those for the taxman; these are not the ones I would use if I decided to sell the business"	supposedly limited (no profit)	opportunism: tax-saving
CS3	Accountant's answer to questions about missing costs: "Yes, the costs are incomplete: this is only a draft that my client needed to apply for a loan"	sizeable	opportunism: image-boosting for bank
CS5	Owner's statement: "My brief to my accountant is to draw the financials for <i>my</i> information, not for anybody else"	n/a	integrity: strategic information
CS6	Minority member's statement when delivering draft accounts: "Our accountant has already prepared draft accounts, but we will have to sit with him and see how we can avoid paying tax"	limited (final accounts have more costs than draft)	opportunism: tax-saving

*Source: Interviews and review of financial statements*

*Note: CS4 is not mentioned here as they have not produced any accounts.*

Table 22 – Explaining the accounting transparency score of case studies

	Resources index and Informality	Motives for manipulation	Q+fq score (out of 45)	iq+m score (out of 55)	Total score
CS1	n/a	opportunism: applying for loan	10	-3.5#	6.5#
CS2	4. highly formal	opportunism: save tax	29.5	36*	65.5*
CS3	3. semi-formal	opportunism: applying for loan	29.5	17*	46.5*
CS4	1. highly informal	n/a	0	0	0
CS5	3-4. informal → formal	integrity	35.5	39	74.5
CS6	3. semi-formal	opportunism: save tax	33.5	37#	70.5#

Note: Q+fq: sum of quantity score and formal quality score (on a 45 points scale); T+m score: transparency score (on a 55 points scale) and manipulation add-on  
\*: small suspicion of manipulation; #: strong suspicion of manipulation

Case study data seem to suggest that the objective of image-boosting in firms applying for loans causes sizeable distortions of accounts in specific years and firms. To further probe this preliminary finding, a test for Hypothesis H7 was designed as follows:

*H7: Accounting opacity is aggravated by opportunism (the opportunistic accounting hypothesis).*

Test: Intrinsic quality and manipulation scores should be poorer in firms applying for finance.

To apply this test on a broader scale, the financial context was reviewed for all 33 firms from the balance sheet sample whose accounting transparency was scored. For thirteen of them, there was evidence that they were applying or had recently applied for a new bank facility or increase thereof, while for 20 there was no such evidence.



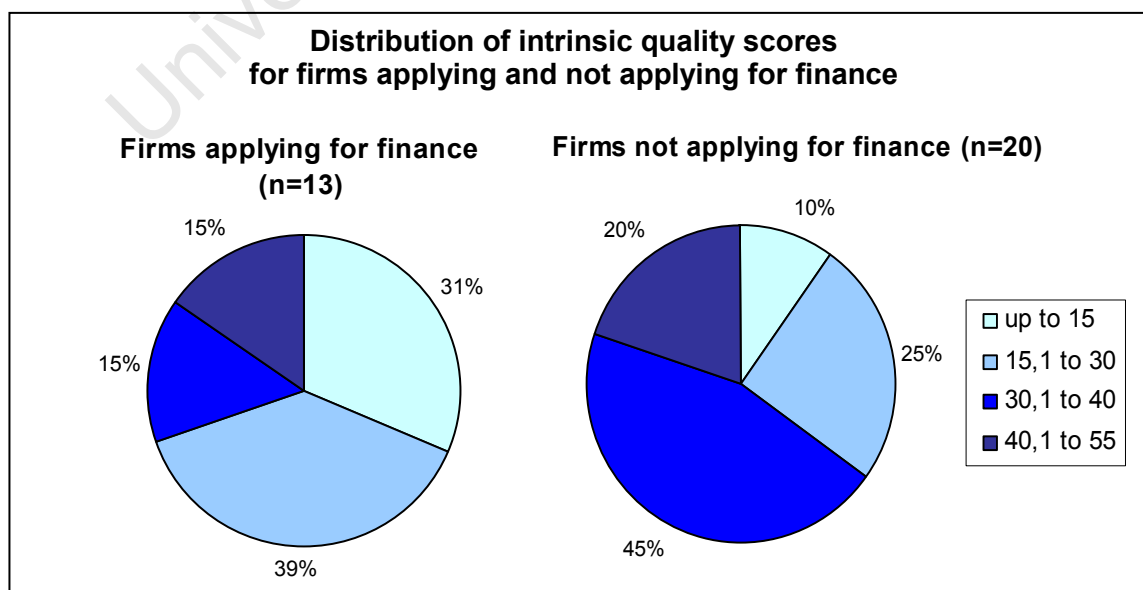
Table 23 and Figure 14 show the differences in intrinsic quality score and manipulation add-on according to the financial context of the business. The striking contrast between the two categories supports Hypothesis H7 in suggesting that firms applying for finance are more likely to manipulate their accounts and to have opaque financial statements.

Table 23 – Applications for finance, intrinsic quality and manipulation

	Firms applying for finance		Firms not applying for finance	
Intrinsic quality score:				
- under 15	4	31%	2	10%
- 15 to 30	5	38%	5	25%
- 30,1 to 40	2	15%	9	45%
- 40 to 55	2	15%	4	20%
Manipulation add-on				
none	4	31%	13	65%
* (slight suspicion)	5	38%	6	30%
# (strong suspicion)	4	31%	1	5%
Total	13	100%	20	100%

Source: Balance Sheet Sample, including case studies

Figure 14 – Transparency in firms applying or not applying for finance



Source: 33 firms from the balance sheet sample

Overall, the analyses performed in Section 6 are consistent with hypotheses H5, H6 and especially H7. The evidence suggests that resources, informality and, maybe more significantly, opportunism do contribute to accounting opacity.

We next investigate whether accounting opacity and its various dimensions are positively related to financial constraints.

## **Section 7. The link between accounting opacity and financial constraints**

Section 3.4 had identified two hypotheses related to the accounting opacity hypothesis. To test them, informational problems need to be put in relation to financial constraints. This, however, raises a practical problem, as most data sources available do not cover equally well these dimensions, as Figure 15 illustrates.

These data restrictions required testing the accounting opacity hypothesis in three steps. First, case studies were reviewed for clues (Section 7.1). Secondly, based on the balance sheet sample, use of finance was studied for firms with various accounting transparency scores (Section 7.2). Next, based on the GEM data, the access to bank debt and the level of financial constraints were related to informality measurements (Section 7.3).

### **7.1 – Accounting transparency and financial constraints in case studies**

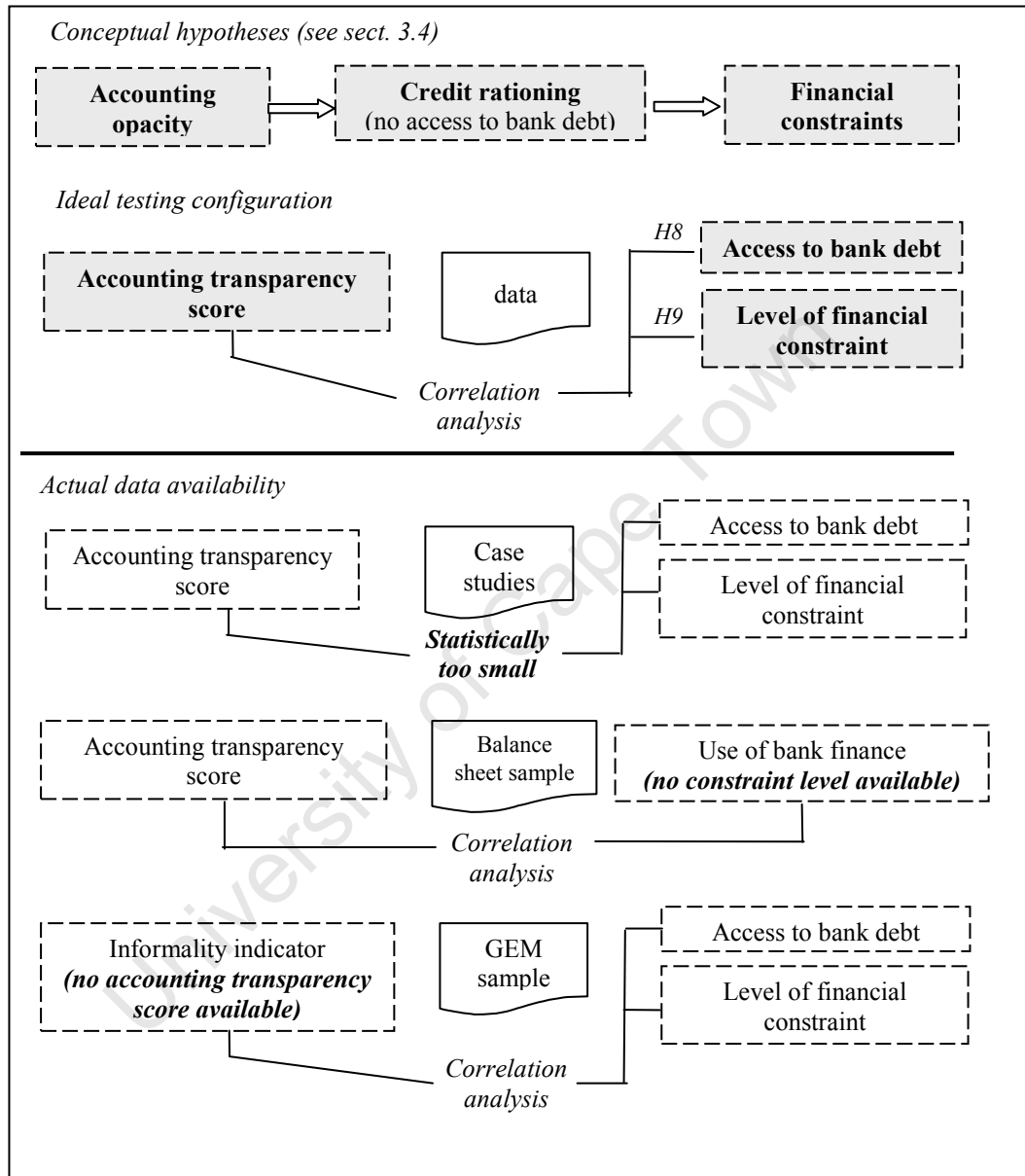
Table 24 shows, for each of the case studies, their accounting transparency score, the extent to which they have accessed bank debt, and their level of financial constraint.

If one considers first the relation between accounting transparency and access to bank debt, it appears that the case studies with the best score (CS5, CS6) have access to bank finance, although CS6's application for property finance was rejected. Among the case studies with very poor or non-existent accounting, one (CS4) was unable to access bank funding, while another (CS1) obtained a comprehensive package at start-up, followed by an overdraft facility two years later. It is worth noting that CS1's facilities were granted before CS1 produced its first annual financial statements, which explains why the poor quality of its accounting did not penalise it in accessing them. The particular case of CS1 will be commented on in greater detail in Section 7.2.3.

The data are also inconclusive on the link between accounting transparency and financial constraints: while both case study firms with opaque accounting are severely constrained (including CS1), a serious constraint is also experienced by one of the most transparent firms, CS6. It is clear, though, that CS1 and CS6's constraints are more related to internal management (lack of turnover and excessive owner's remuneration for CS1, poor debt collection for CS6), than to credit rationing.

Overall, the review of case studies is inconclusive as to the link between accounting transparency, access to bank finance and financial constraint. It reminds us that, when bank finance is granted at early stages of the firm, accounting transparency plays no role. Clearly, it is difficult to obtain a clear correspondence between the variables in such a small number of cases, since individual specificities interfere. Therefore, Sections 7.2 and 7.3 review the question on the basis of larger samples.

Figure 15 – Data restrictions constraining the testing of the accounting opacity hypothesis



*Table 24 – Accounting transparency, debt and constraint level in case studies*

	<b>Q+fq score (out of 45)</b>	<b>iq+m score (out of 55)</b>	<b>Total score</b>	<b>Access to bank debt</b>	<b>Level of constraint</b>
CS1	10	-3.5#	6.5#	yes, start-up package + OD	severely liquidity constrained
CS2	29.5	36*	65.5*	(indirectly, personal loan)	non-constrained
CS3	29.5	17*	46.5*	yes but limited	long-term constrained
CS4	0	0	0	no	severely liquidity constrained
CS5	35.5	39	74.5	yes (vehicle finance and later OD)	seasonally liquidity constrained (winter)
CS6	33.5	37#	70.5#	partly (OD, but not property finance)	severely liquidity constrained

*Note: OD = overdraft*

## **7.2 – Accounting transparency score and access to finance in the balance sheet sample**

*H8. Accounting opacity hinders the access to bank debt.*

This section investigates the relationship between accounting transparency scores and use of bank finance in the balance sheet sample. Three types of facilities are considered here: instalment sale agreements (ISA), term loans and overdraft facilities (OD). The use of finance is related, first, to the total accounting transparency score, and later to specific dimensions.

### **7.2.1 – Total accounting transparency score and use of bank debt**

Test a): There should be a positive relationship between the accounting transparency score and the use of bank debt.

The proportion of the sample which has accessed and/or uses a bank facility, is calculated for the most and least opaque thirds of the sample, consisting of eleven firms (when the analysis was repeated with smaller, hence more polarised, subsamples, it led to the same conclusions). In some cases the data are ambiguous as to the existence and type of facilities, leading to low and high estimates of the said proportions. The results are displayed in Table 25.

Table 25 – Use of bank debt and accounting transparency score

	Estimated proportion of firms using			Sample size
	ISA	Term loans	OD	
All businesses	58-64%	27-30%	58-67%	33
Relatively transparent firms (AT score >71)	45%	18%	73%	11
Relatively opaque firms (AT score < 50)	64-73%	27-36%	48-73%	11

ISA: Instalment Sale Agreement; OD: Overdraft; ranges reflect data uncertainty.

The table suggests that firms with more transparent accounting are *less* likely to use non-current debt facilities. For overdraft facilities, the data are inconclusive, as the apparent advantage of transparent firms may result from superior data (overdraft facilities may be available in more opaque firms, but this is not visible in the data).

This result contradicts the accounting opacity hypothesis, which raised the expectation that opaque firms would be more likely to be credit rationed. Even the two additional reasons mentioned in Section 3.3 (higher need for transparency and overall correlation with management quality) did not suffice to yield the expected positive relationship. There are four possible reasons for this counterintuitive result.

- Firstly, accounting opacity may affect small businesses *collectively*, with banks considering all small business financials as potentially opaque and therefore rationing them without regard to the individual information that

they provide. This possibility cannot be tested under the present methodology.

- Secondly, the use of debt finance may not be an adequate proxy for financial constraints. A number of firms have no need for finance, and this proportion may be higher among more transparent, hence better managed firms. To test for this possibility, Section 7.3 will use an alternative methodology to relate informality (a contributor to accounting opacity) to actual financial constraints.
- Thirdly, as discussed in Section 6.4, firms carrying bank debt may have used opportunistic accounting, thereby strongly affecting their accounting transparency. This manipulation effect may neutralise the correlation expected under the accounting opacity hypothesis.
- Fourthly, it is likely that the indicator chosen for accounting opacity is too sophisticated for the bank, whose internal work processes, capacity and cost constraints do not allow for a meticulous analytical process. Credit rationing may take place on the basis of an immediate judgment on information quality, such as the mere availability of financial statements and possibly their formal quality. This assumption is discussed in the following section.

### **7.2.2 – What matters for the bank: Quantity versus transparency**

Test b): There should be a positive relationship between the scores in the dimensions of quantity and formal quality, and the use of bank debt.

To test for the possibility that quantity and formal quality of financial statements are more relevant to banks than their intrinsic quality, the proportion of firms using bank finance is calculated again for the third of the sample with the best and lowest scores in the dimensions quantity and formal quality. The results are shown in Tables 26 and 27.

*Table 26 – Use of bank debt depending on quantity score*

	Proportion of firms using			Sample size
	ISA	Term loans	OD	
All businesses	58-64%	27-30%	58-67%	33
<u>Quantity of information:</u>				
Firms with quantity score $\geq 14$	73%	55%	91%	11
Firms with quantity score $\leq 10$	45-64%	9%	18-36%	11

*Table 27 – Use of bank debt depending on formal quality score*

	Proportion of firms using			Sample size
	ISA	Term loans	OD	
All businesses	58-64%	27-30%	58-67%	33
<u>Formal quality of information:</u>				
Firms with formal quality score $\geq 19.5$	55%	27%	82%	11
Firms with formal quality score $\leq 13$	73-82%	27-36%	45-64%	11

Note: ISA: Instalment Sale Agreement; OD: Overdraft; ranges reflect data uncertainty.

The statistics regarding formal quality are inconclusive, but results regarding the quantity score are striking. They suggest that firms which have provided extensive accounting information are significantly more likely to be granted any type of facility, than firms whose accounting data are scant. The differences are particularly striking with regard to term loans and overdrafts. Subject to the limitations already mentioned (self-sufficient firms may have no need for accounting information), this is consistent with the assumption that credit rationing affects firms, which are unable to provide regular and extensive financial statements.

This result may be distorted by the correlation of the quantity score with firm size and firm age, as small and young firms face specific obstacles in their access to finance, which are unrelated to informational issues. However, such size and age bias is unlikely to explain fully the wide difference between Tables 25 and



26, especially for term loans and overdrafts. The results therefore do confirm banks' effective pressure for the production of accounting statements, but cast doubts on banks' abilities, or willingness, to distinguish between intrinsically transparent and opaque financial statements. The following paragraphs present corroborative evidence on banks' apparent preference for quantity over quality.

### **7.2.3 – Banks' preference for quantity: More evidence**

Other interview and archival evidence gathered during data collection (see Annexure 8) suggested that Nedenterprise, the bank that supported this study, deployed substantial effort in collecting its clients' periodic management accounts (which were mainly used for key ratio monitoring), but did not usually request auditors' or accounting officers' reports or final versions of draft statements. It seems, thus, that the practical value which this bank attributes to official and validated financial statements is even lower than suggested by the literature (Friedlob & Plewa 1992:90).

Case study CS1 is a case in point (see CS1 narrative in Annexure 31). For the year 1997, the bank file contained management accounts (submitted in April 1998) as well as the accounting officer's formal financial statements (faxed to the bank at the beginning of the holiday season, on 17 December 1998). Even a superficial review would have revealed blatant contradictions between the two versions and prompted the bank to take some action. The failure of the bank to notice, and react to, CS1's falsified accounts, led to substantial losses when the CC was liquidated in 2000.

Banks' relatively superficial use of financial information and their lack of vigilance with regard to external validations have many reasons. Among them are (i) banks' preference for more timely sources of information such as direct contact with firm owners and monitoring of cash movements; (ii) the focus on short-term evolution of key business figures in order to anticipate cash shortages, which are arguably the most serious risk in SMMEs; and (iii) the general difficulty in determining the trustworthiness of financial figures. However,

requesting a signed report of the auditor or accounting officer seems a simple way of reducing manipulation risks. Without this effort, it does not seem rational to place such emphasis on the supply of financial documents. Indeed, it would send a signal to SMME owners that supplying *any* figures, realistic or not, suffices to increase their chances of obtaining a loan. The example of CS1 shows that when banks pay no attention to audited financial statements, dishonest entrepreneurs can manipulate the banks' favour through skilful filtering, timing and distorting of information.

To conclude on Hypothesis H8, the data suggest that it is not accounting opacity as such, which hinders firms' access to bank debt, but rather some firms' failure to submit a *sufficient quantity* of accounting data (regardless of quality). More research would be necessary to confirm this exploratory result.

The next section investigates the relation between informality and financial constraints.

### **7.3 – Informality and financial constraints in the GEM sample**

*H9 (modified): Informality causes **financial constraints**.*

Test: There should be a negative relationship between the informality indicator and the level of constraint.

To test whether Section 7.2's inconclusive result was due to the difference between use of finance and financial constraints, a second test was developed, which links financial constraints to informality, i.e. the implementation of some basic practices. This test is based on GEM data, for which the level of constraint, the implementation of each type of practice and the synthetic formality score were available.

The analysis of the link between informality and financial constraints was performed in two steps, examining first the effect of individual practices (see Table 28), and then the synthetic informality indicator (Table 29).

Table 28 – Individual practices and financial constraints

	Sample size	Average level of financial constraint	Proportion not constrained	Proportion significantly or severely liquidity constrained
Total sample	224	<b>1.49</b>	18.8%	39.7%
No separate account	32	<b>1.56</b>	18.8%	53.1%
Separate account	192	<b>1.47</b>	18.8%	37.5%
Keeping at least 50% of cash out of bank	22	<b>1.50</b>	13.6%	45.5%
Banking all their cash	124	<b>1.43</b>	21.0%	37.1%
less than 3 records	41	<b>1.58</b>	19.5%	48.8%
6 or more records	53	<b>1.48</b>	22.6%	35.8%
loose/handwritten records	44	<b>1.72</b>	3.3%	43.3%
all computerised records	30	<b>1.61</b>	18.2%	47.7%

Source: Analysis of GEM data, 2003.

Note: The “level of financial constraint” is expressed on a scale from 0 (unconstrained) to 3 (severely constrained); see Chapter II Section 3.2 for more details.

Table 29 – Informality level and financial constraints

	non-constrained	long term constrained	liquidity constrained (including moderately or severely)	debt trapped	Average level of financial constraint	sample size
<b>Total</b>	<b>19%</b>	<b>33%</b>	<b>43%</b>	<b>4%</b>	<b>1.49</b>	224
informal + highly informal (under 6)	13%	35%	50%	3%	<b>1.58</b>	40
semi-formal (6 to 8)	16%	30%	50%	3%	<b>1.55</b>	73
formal (8 to 9)	22%	33%	41%	5%	<b>1.49</b>	55
highly formal (9 to 10)	23%	36%	37%	5%	<b>1.34</b>	56

Source: Analysis of GEM data, 2003.

Notes: \* In order to obtain a sufficient sample size, highly informal and informal firms were amalgamated. \* Percentages do not add up to 100 due to rounding. \*\*“level of financial constraint” as for Table 28.

Table 28 supports the informality hypothesis: informal firms have a slightly higher average level of constraint, a lower proportion of unconstrained firms and, with the exception of format of records, a higher risk of liquidity constraints.

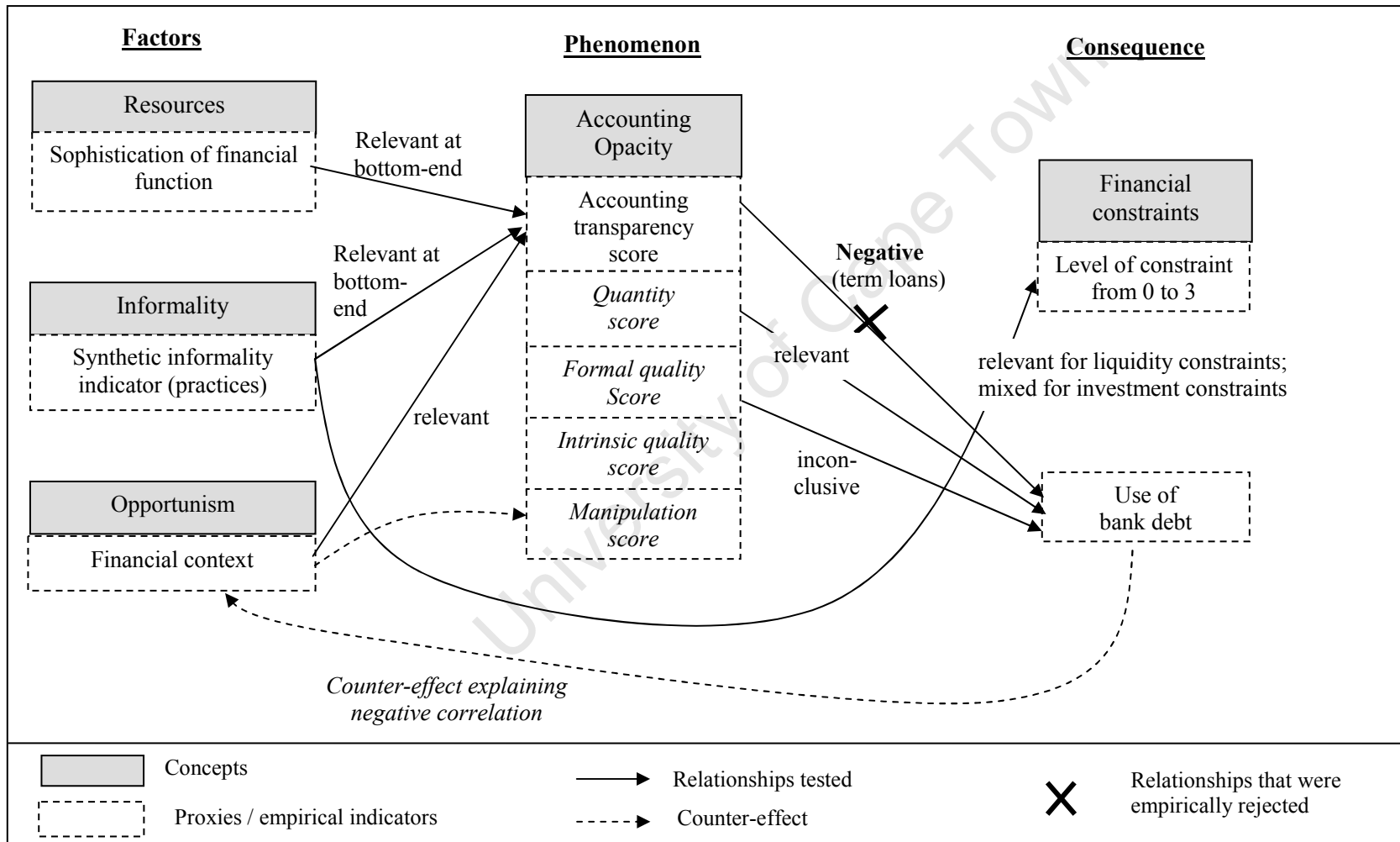
Table 29 confirms the finding from Table 28: the average level of financial constraints experienced by GEM firms decreases monotonically as formality increases, supporting the accounting opacity hypothesis. The table, however, brings to light more nuances regarding the types of financial constraints experienced. Firms in the unconstrained category, as well as those facing liquidity constraints, follow the expected pattern, with informal firms being more likely to experience cash shortages and less likely to be unconstrained. Long-term constraints, meanwhile, are not significantly different for informal or formal firms, and debt traps may even be more frequent among formal firms – probably reflecting the pressure of creditors to implement sound practices.

Apart from those two categories, the results support the accounting opacity hypothesis, although the causality may go in both directions (lack of formality may cause constraints, or the lack of funds may make it more difficult for entrepreneurs to implement proper practices).

Overall, the test of the relationship between informality and financial constraints is more conclusive than are the previous attempts at testing the accounting opacity hypothesis through a relationship between accounting transparency score and use of external finance. One may wonder whether these more conclusive results are a consequence of the superiority of financial constraints to the use of bank debt as an indicator of credit rationing, or whether the latter test masks a more simple relationship, in which more formal, hence better managed, firms suffer less financial constraints.

Figure 16 illustrates the results on the relationships that were empirically tested.

Figure 16 – The results of empirical tests under the accounting opacity hypothesis



## **Section 8. A brief review of other aspects**

This section briefly presents the results of various investigations that were carried out on two issues peripheral to the research: the effect of transaction costs on financial constraints and the use and effects of information substitutes. A more detailed presentation of the issues, the literature, the methodology and findings, can be found in Annexures 24-29.

### **8.1 – The role of transaction costs**

The scale effect hypothesis postulates that, because of fixed transaction costs, firms applying for a high amount of finance are more likely to access finance. As the tables in Annexure 24 show, the analysis of GEM data found that:

- The success of term loan applications strongly depends on the amount requested, with applications for amounts under R250 000 having slimmer chances of success.
- For overdraft applications, scale effects are less obvious. SMMEs' liquidity constraints, hence, need to be explained by different factors.

### **8.2 – The relevance and effects of information substitutes**

In a context of informational asymmetry, information substitutes are a mitigation strategy based on the use of indirect data to categorise the risks along rules of thumb. The analysis of case study and GEM data in this regard led to the following findings:

- Start-ups' access to facilities is eased by networks (franchisor, partner or accountant). In addition to more favourable assessments by banks, the effect is also psychological in strengthening the entrepreneur's confidence (see Annexure 25);
- For older firms, extreme credit histories (i.e. spotless records or blacklisting) have an effect on access to bank facilities, but mixed

records, which represent the majority of cases, are neutral (see Annexure 25);

- The ability to pledge collateral gives firms a slight advantage in their applications for overdraft, but is essential in applications for term loans. Coverage levels are often in excess of 100%, especially for small loan amounts (see Annexure 26);
- Against the theory of signalling, the owner's net worth seems to be a better predictor of his acceptance of collateral requirements, than project risk (see Annexure 27);
- While for white business owners the provision of a letter of guarantee or the cession of the member's loan is often regarded as sufficient, black business owners usually have to provide tangible securities (such as investments, fixed property, tangible assets). This difference may reflect inequalities in the owners' financial status rather than racial discrimination (see Annexures 28 and 29).

These results are generally supportive of the market dysfunction hypothesis, especially in the area of term loans.

## **Section 9. Conclusions**

This section concludes on the accounting opacity hypothesis by summarising the various hypotheses and the results of the tests performed. A synopsis is proposed in Figure 17.

### **9.1 – Accounting opacity, informality, and manipulation**

Even in a sample biased towards better managed firms, SMME financial statements were found to vary considerably in quality. Most do not fully comply with requirements for corporations, notably with regard to notes and cash flow

statements. In a few cases, gross structural mistakes were detected, denoting accounting incompetence. Intrinsic quality problems with regard to profits, current position and cash, and related parties transactions, were found in substantial portions of the sample (Section 5).

To explain this opacity problem, resources devoted to accounting were studied, revealing a wide spectrum of situations. A substantial proportion of South African entrepreneurs show little interest for accounting, implement only rudimentary financial functions, and do not fully benefit from the support of external accountants – a situation which appears to worsen accounting opacity (Section 6.2)

Informality similarly exacerbates accounting opacity, with the lack of separation between owner and business creating a strong opacity problem. Poor record-keeping and large amounts of unbanked cash also significantly affect accounting opacity (Section 6.3).

The most decisive impact on accounting opacity, however, seemed to come from owners' opportunism, with frequent cases of earnings aggressiveness on the dates of applications for finance (Section 6.4).

## **9.2 – Is accounting opacity related to financial constraints?**

The accounting opacity hypothesis was weakly supported by evidence, with more supportive results for liquidity constraints than for investment constraints.

On the short-term side, there was a strong correlation between informality and liquidity constraints, but the results were inconclusive for the link between accounts transparency and use of overdrafts – possibly because the use of overdrafts was an inappropriate proxy.



Figure 17 – Hypotheses tested under the accounting opacity hypothesis

<u>Hypotheses</u>	<u>Tests</u>	<u>Data</u>	<u>Result</u>
<b><u>The phenomenon of accounting opacity</u></b>			
H4. SMMEs' accounting is generally opaque	In biased sample, at least 25% of firms score below 50% and at least 66% score below 75%.	Balance sheet sample	<b>supported</b> (see Section 5)
<b><u>The roots of accounting opacity</u></b>			
H5. Lack of resources aggravate accounting opacity	There is a positive correlation between sophistication of financial function and accounting transparency score	Case studies	<b>Generally supported</b> (see Section 6.2)
H6. Informality aggravates accounting opacity	There is a positive correlation between formality indicator and accounting transparency score	Case studies	<b>Generally supported</b> (see Section 6.3)
H7. Opportunism aggravates accounting opacity	Firms applying for finance have poorer accounting transparency score	Case studies; balance sheet sample	<b>supported</b> (see Section 6.4)
<b><u>The effects of accounting opacity</u></b>			
H8. Accounting opacity hinders access to bank finance	a) Firms with good accounting transparency score are more likely to use bank debt	Case studies; balance sheet sample	a) Inconclusive for overdraft, <b>rejected</b> for term finance b) <b>supported</b> for the quantity score (see Sections 7.1-7.2)
	b) Firms with good score in the dimensions "quantity" and "formal quality" are more likely to use bank debt		
H9. Informality exacerbates financial constraints	Firms with a) good financial practices. b) a good formality indicator are less likely to be financially constrained	GEM sample	<b>supported</b> for liquidity constraints, inconclusive for long-term constraints (see Section 7.3)

On the long-term side, the relationship between informality and investment constraints was inconclusive, and the relationship between accounting transparency and use of term loans was negative. Use of debt was, however, strongly positively related to the *quantity* of accounting information produced – raising doubts on the ability or willingness of banks to distinguish between reliable and unreliable accounts.

Overall, these results suggest that the accounting opacity hypothesis may need to be restated, emphasising the *existence* of financial statements rather than their quality. The latter, being difficult to ascertain, may have a collective impact on the entire small business community, in line with Jaffee & Stiglitz' (1990) definition of credit rationing as a phenomenon that disregards businesses' individual features.

### **9.3 – Assessing creditworthiness in a context of accounting opacity**

In the context of the questionable reliability of accounting figures, the ambition of this research project to assess SMMEs' creditworthiness on the basis of their financial statements appears hazardous. It was necessary, therefore, to take precautions to avoid misleading conclusions. The strategies used to enable ratio-based sample analysis in spite of accounting opacity will be discussed in Chapter IV, Section 4.2.

### **9.4 – The roots of financial constraints: Market dysfunction vs. demand-side factors**

While the largest part of the chapter has been concerned with accounting opacity, the brief review of peripheral aspects (Section 8) creates a broader understanding of market dysfunction as an explanation of financial constraints.

On one hand, as Section 7 has shown, the role of accounting opacity in credit rationing and therefore financial constraints, was not unambiguously confirmed by the data available: the relationship between total accounting transparency

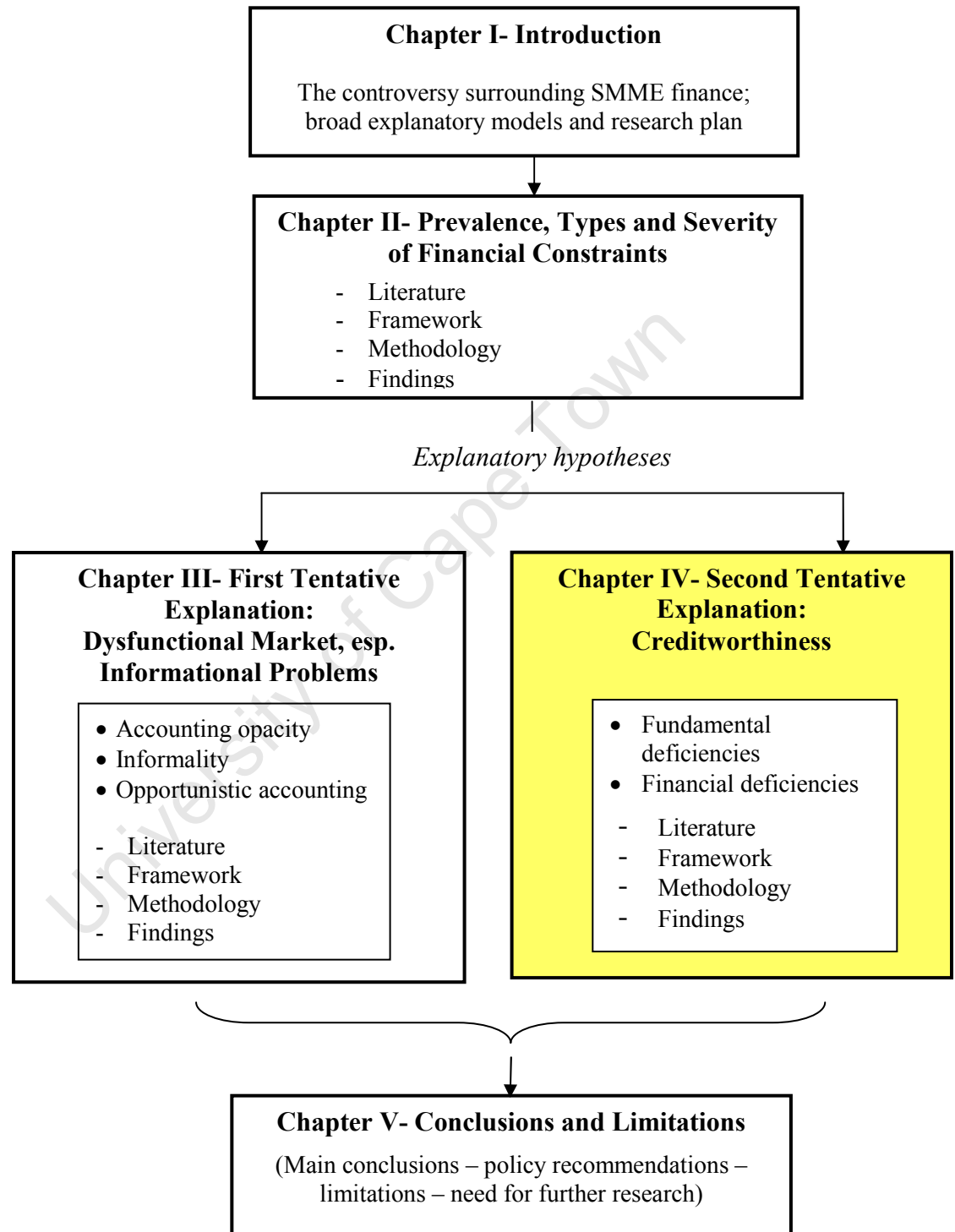
scores and financial constraints was *negative*, although the relationship between quantity scores and financial constraints was *positive*. This seems to reflect banks' emphasis on quantity rather than quality of accounting information. The effect of accounting opacity on SMME finance may also be collective rather than individual, with all SMME financials being viewed with suspicion regardless of their particular quality.

On the other hand, it has become clear that transaction costs are a substantial obstacle for the access of the smallest enterprises to term loans (Section 8.1). In spite of mixed findings on accounting opacity (Section 7), the relevance of information substitutes, especially collateral, for the success of finance applications (Section 8.2) can be interpreted as indirectly confirming the bearing of informational problems. These findings are especially strong in the area of term loans, suggesting that this is the area where market functions are least efficient.

These results have exploratory value and, in part, are limited by the fact that supply- and demand-side factors are intertwined. The next chapter will attempt to look more specifically at a crucial demand-side factor: the creditworthiness of SMMEs.

**Chapter IV**  
**The hypothesis of insufficient  
creditworthiness**

University of Capetown



## **Section 1. Outline of the chapter**

This chapter examines the other tentative explanation for financial constraints: the possibility that South African SMMEs are not sufficiently creditworthy.

Creditworthiness is a popular but seldom convincingly defined concept. For this reason, Section 2 reviews the literature on ways to approach and measure creditworthiness. Empirical literature on the actual quality of South African SMMEs is also reviewed, followed by a presentation of the mechanisms through which insufficient creditworthiness may impede a firm's access to finance.

This review forms the basis for a conceptual framework (Section 3), which first devises a practical approach to creditworthiness in its various dimensions. Thereafter, some expectations are formulated on the creditworthiness of South African SMMEs. A model of proof is then proposed on the link between creditworthiness and financial constraints. Section 3 closes with a synthesis and summary of the hypotheses explored in this chapter.

Section 4 prepares the way for empirical assessments by defining rigorous procedures to assess creditworthiness in a context of accounting opacity. A multi-dimensional assessment model, of which the most comprehensive part is a ratio-based model, is developed.

Section 5 then presents empirical assessments of the creditworthiness of the SMMEs in the balance sheet sample. Comparisons to international evidence are also performed.

Section 6 examines the relationship between creditworthiness and financial constraints as well as use of bank debt.

Lastly, Section 7 offers conclusions with regard to the creditworthiness hypothesis.

## **Section 2. Literature review on creditworthiness**

### **2.1 – Definitions of creditworthiness in literature**

Previous research has often recognised the need to control for creditworthiness when testing the hypothesis that SMMEs are treated unfairly on financial markets. However, there is surprisingly little academic literature on how to define and measure creditworthiness. Levenson & Willard (2000), for example, stress the crucial relevance of creditworthiness in a credit rationing model but are vague about its definition and omit it entirely in their empirical work.

One approach is to adopt the perspective of finance providers – literally interpreting creditworthiness as the banks' opinion on which enterprise is worth a credit (Čančer & Knez-Riedl 2005:144; see also Galetovic 1994:5). A number of studies have reviewed the screening criteria of financial institutions (Gab 2002, Mester 1997, Berger et al 2005, Zacharakis & Meyer 1998).

Creditworthiness could be defined as a discretionary judgement from financial institutions, whose standards vary according to the economic context (Wolfson 1996) and according to sociological factors (Lane & Quack 2001). To assess the risk of unfair treatment, though, it seems more appropriate to use explicit criteria referring to intrinsic qualities of the firms.

For the sake of empirical practicality, many studies use simple proxies, which are generally indicators of success or of risk. Quantitative indicators include growth of turnover, or profit or employment during a specific period (Levy 1996, Kesper 2000:14), as well as financial ratios such as debt ratio (Melnik & Plaut 1986), inverse coverage ratio (Guiso 2003:129) or other ratios (see Čančer & Knez-Riedl 2005:144-5). Qualitative criteria, which play an important role in Africa because of a lack of quantitative data, include (i) viability of the business and ability to repay out of the cash flow; (ii) character and reputation of the borrower; (iii) experience in the business and (iv) collateral (in the case of

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Ghana, Aryeetey et al 1994:64). The concept of *viability* was defined by Tucker (2000) as follows:

*“A viable business is one which has: entrepreneurial energy; the managerial skills necessary to manage the business and the resources successfully; a market which is willing and able to pay a profitable price for its product; and adequate risk and loan capital in the appropriate ratios”.*

More complex indicators include credit agency ratings (Dietsch 2003), which reflect mainly the firms' past payment behaviour<sup>23</sup>, as well as multiple-ratio models. In this connection, it is worth mentioning numerous failure prediction models such as Altman's Z ratio (Altman 1983). Chen & Shimerda (1981) listed over 100 ratios used in failure prediction studies, which usually combine measures of profitability, liquidity, cash flow and leverage. However, most failure prediction models were based on data from large corporations and may not apply easily to smaller firms; in addition, Garbers & Uliana (1994) show that most of these models do not transpose well to other populations.

Also interesting in this context is the approach adopted by the modified Du Pont scheme (Correia et al, 2007:5-22), which, by breaking the return on equity down into various ratios, is able to expose the strengths and weaknesses of a firm.

The firm's stability is another relevant aspect, especially for smaller firms (Beaver 1966), as firms with strong variations in financial ratios over time are generally deemed risky (McMahon 2000:24).

To summarise, the literature lacks a homogenous definition of creditworthiness. Qualitative criteria do not allow for the analysis of large samples, ratio-based approaches are usually not practicable for very small businesses, and there is no consensus about the essential vs secondary factors.

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<sup>23</sup> Credit ratings are based on various data sources, especially assessments by banks and trade partners as well as court data on the business or its principals (see TransUnion ITC 2003:13).



## 2.2 – Empirical literature on SMME creditworthiness

Although there is no homogenous empirical literature on SMME creditworthiness, there are a number of studies that reflect the variety of approaches.

A significant body of literature has studied SMME demographics, especially their survival rates. Internationally, the smallest businesses are vulnerable to failure, with a survival rate after five years approximately 20% lower among micro enterprises than among medium and large firms (Viennet 1990 for France, Baldwin et al 2000 for Canada); South Africa is no exception, as Table 30 illustrates. Comparisons must be made with caution, though, due to possible biases in sampling (size, age, location etc) or methodologies (e.g. treatment of mergers or acquisitions)<sup>24</sup>.

*Table 30 – Survival rates of SMMEs in various countries*

Percentage of firms surviving	UK	USA	Canada micro	Canada SME	Africa micro <sup>25</sup>	Cape Town
beyond 1 year	88%		72%	89%	app. 90%	
beyond 2 years		76%			app. 80%	81%
beyond 3 years	62%		46%	67%	app. 70%	71%
beyond 4 years		47%			app. 60%	
beyond 5 years	48%		33%	53%	app. 50%	
beyond 6 years			28%	48%		47%
beyond 10 years			18%	34%		27%

*Source: Adapted from DTI (2005) for Cape Town, Benassi (1995) for the UK, US Small Business Administration (1995) for the USA, Baldwin et al (2000) for Canada, and Marniesse (1998) for Africa.*

<sup>24</sup> Due to the lack of appropriate data by Statistics SA, there are no official mortality statistics for South Africa, but only estimations based on data from the Cape Town Regional Services Council (RSC) levy database, which presents several biases and accuracy problems (see von Blottnitz 2005).

<sup>25</sup> Marniesse (1998) has studied a sample of traditional urban micro enterprises in various African countries (Tunisia, Benin, Ivory Coast and Madagascar) as well as Guadeloupe.

However, there is a logical flaw in using SMMEs' survival rates as a creditworthiness indicator: mortality could be a consequence, rather than a cause, of credit rationing.

A more satisfying approach is to narrow the focus to individual loans. Internationally, SMEs' high default probabilities are well documented (see Dietsch 2003:100 for France) and can be used to justify banks' rejections of SME loan applications, since an average stand-alone credit to an SME is riskier than a credit to a large enterprise. There are two pitfalls to this approach though:

- Default probabilities can be affected by bank behaviour. As Hainz (2003:224) noted for Eastern Europe, banks' persistent extension of credit to defaulting customers may explain the poor performance of banks' loan portfolios.
- Banks can use portfolio effects to diversify their risks. Based on French and German data, Dietsch (2003:104) and Dietsch & Petey (2004:786) show that SMEs are less sensitive to systematic risk than large enterprises, enabling positive effects of large portfolio diversification. Expanding their portfolios of SME loans may therefore be in the banks' interests.

A further approach is to consider SMMEs' financial structure, which may be more vulnerable than that of larger enterprises. However, evidence is equivocal. Several authors have found that SMEs are less liquid and more indebted than larger enterprises (Chan et al 1985, Gupta 1969, Walker & Petty 1978, Guiso 2003:127-129, Hommel & Schneider 2003:59-61), but some studies have yielded different results. Davidson & Dutia (1991), for instance, find that small firms have higher debt ratios but are not less liquid or less profitable. Dietsch (2003:96) shows that debt ratios of French manufacturing SMEs are not significantly different from larger firms. Based on his study of Australian SMEs, Hutchinson (1989:155) argues that the stage and pattern of development of an SME is more relevant than its size in determining the financial profile.

Unfortunately, South African evidence on SMMEs is generally limited to qualitative statements, such as Rwigema & Venter's (2004) claim, that the limited resources that average South Africans are able to invest constrain their SMMEs' equity ratios.

### **2.3 – Creditworthiness and financial constraints**

Given the lack of consensus on defining creditworthiness and the lack of empirical data, it is hardly surprising that the literature is ambivalent on the causal relationship between the financial vulnerability of many SMMEs and their difficulties in accessing finance.

Internationally, Cressy (1996) suggests that insufficient human capital (which can be regarded as an indicator of creditworthiness), is the decisive reason for debt constraints. Indeed, a few small-scale empirical studies have linked credit approval to firm characteristics such as profitability (e.g. Bratkowski et al 2000:101). In South Africa, the GEM study (2003:47), which found a correlation between good management practices and access to finance, would tend to support Cressy's position.

However, other authors have emphasised the imperfect ability of banks to make lending decisions (De Young et al 2004). South African author Hawkins (2001) has argued that banks follow rules of thumb rather than sound creditworthiness assessments. A possible factor, as proposed by Galetovic (1994), is the concentration of credit markets, causing banks to privilege the surplus that they are likely to extract from firms, over their actual creditworthiness<sup>26</sup>.

Empirically, Dietsch (2003:111) found that French SMEs' credit availability is usually not influenced by their credit risk rating. Cressy's (1996) argument on the role of human capital is further challenged by Van Praag's (2002) finding

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<sup>26</sup> In Galetovic's terminology, creditworthiness refers to a low default risk (downside), while firm quality refers to high (upside) opportunities, i.e. productivity and profitability.

that, even when controlling for human capital factors, capital constraints hinder entrepreneurs in their performance.

Overall, what emerges from this literature review is its heterogeneity, with often vague or imperfect approaches towards creditworthiness, contradictory results and a lack of data. The scarcity of data is even more pronounced for South Africa. The discussion on the contribution of poor creditworthiness to financial constraints, therefore, is meagre and needs to be relaunched with a rigorous approach.

## **Section 3. Conceptual framework and research design**

### **3.1 – Conceptualising SMMEs' creditworthiness**

This section uses a grounding theory approach (Strauss & Corbin 1998) to remedy the gap in the literature by building a multiple-criteria framework that distinguishes between essential and secondary aspects and that can be operationalised into a ratio-based model.

#### **3.1.1 – General understanding**

We understand intrinsic creditworthiness as **the presumed ability of a business, based on its internal features like operating success or financing structure, to honour its financial obligations while creating value for the economy.** This approach differs from many models found in the literature, in the following respects:

- Creditworthiness is defined based on *intrinsic* characteristics of the business – independently from issues pertaining to the functioning of financial markets (communication quality, collateral or credit record).

- Creditworthiness is understood as a continuum rather than a binomial variable.
- Creditworthiness is a forward-looking concept: credit is worthwhile when it enables a firm to generate future revenue or value. The concept takes both risk and performance aspects into account and distinguishes between temporary deficiencies and fundamental shortcomings.
- The measurement of creditworthiness is primarily quantitative, but the concept must be compatible with findings on management quality.

### **3.1.2 – Open coding: The sequence of factors**

Open coding is a procedure recommended by Strauss & Corbin (1998) to allow for a richer model outside the confines of technical literature. For this purpose, a sequence of factors was developed that are likely to impede either the firm's performance or its repayment of loans. This sequence includes criteria pertaining to the viability of operations as well as the soundness of the firm's financial structure, and will form the basis for our creditworthiness assessment tool. In addition to technical details, Annexure 18 provides a detailed justification for the sequence provided here.

- If the business is persistently not selling well, or if the selling price is not covering the business costs, then the business concept seems fundamentally flawed. For practical reasons (see Annexure 18), we use the concept of breakeven as the link between the existence of a sufficient market and the adequacy of the selling price.
- Even firms with a buoyant market and profitable operations experience difficulties if their operations require substantial working capital. In

particular, businesses whose clients pay late or whose stock turns over slowly are vulnerable<sup>27</sup>.

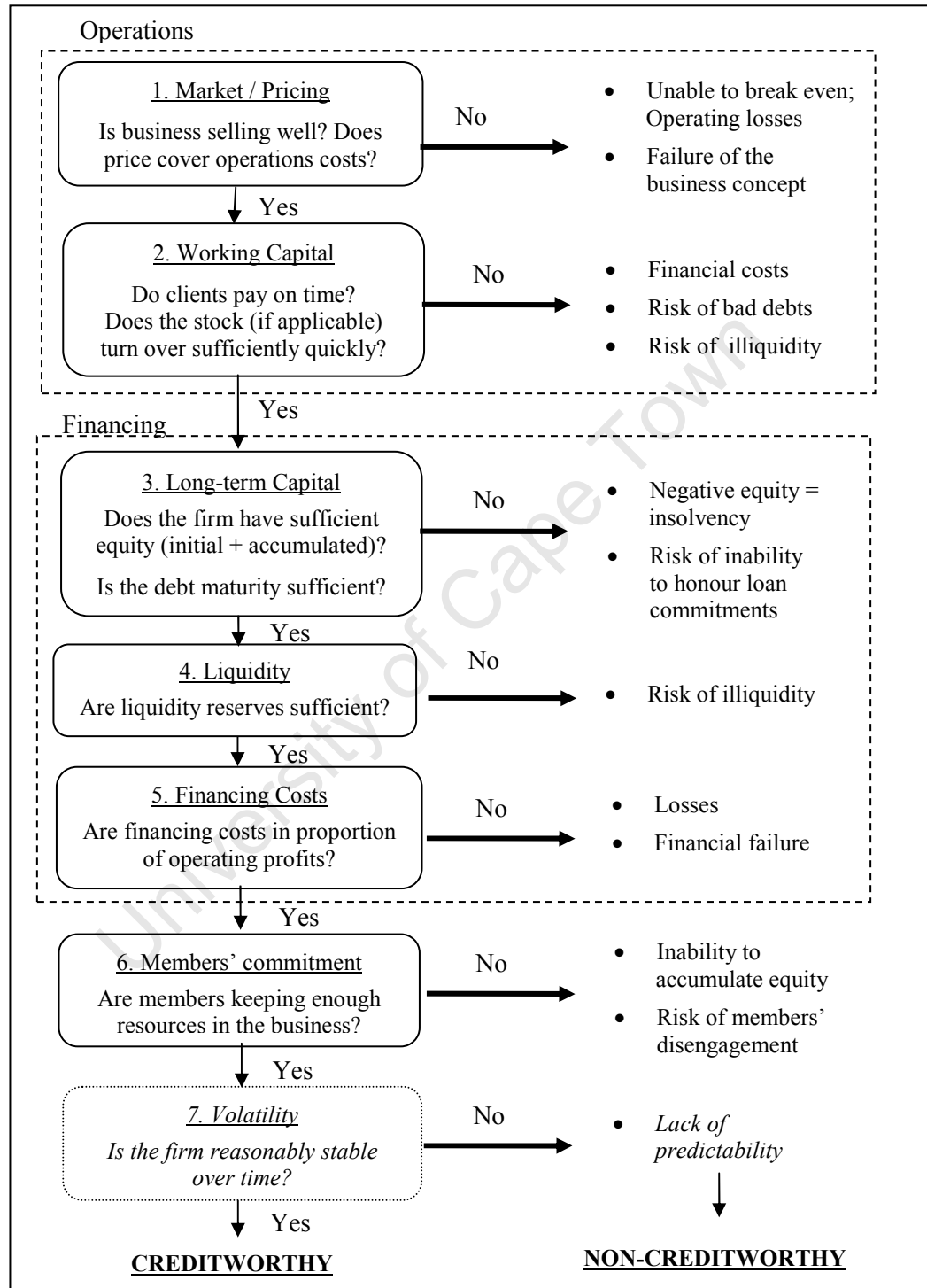
- SMMEs need sufficient equity (including members' loans) to support their operations, ensure solvency, especially in case of losses, and enable the business to sustain additional debt. The literature (Rwigema & Venter 2004, see Section 2) raises the expectation that lack of equity is a particular weakness of South African SMMEs compared to their international counterparts.
- To avoid the risk of illiquidity, a firm must match the maturity of assets and liabilities, and maintain sound structural cash reserves as a buffer for unexpected negative cash flow.
- SMMEs must be able to afford their financing structure in light of their operations, i.e. to cover financial costs.
- SMMEs need committed owner-managers who are prepared to work hard for a modest cash reward, until the operating cash flows become sufficient. As ABSA (2004:7) puts it, a business must be able to "afford its owner".
- Volatility is regarded as a limitation of creditworthiness, as creditors become unable to predict the firm's further development.

Figure 18 illustrates this sequence. For clarity purposes, the figure adopts a binomial presentation at this stage – however the actual concept definition is based on a continuum rather than a discreet approach.

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<sup>27</sup> It was initially planned to include debtor quality in this sequence. However, this criterion was dropped for lack of reliable data.

Figure 18 – Sequence of creditworthiness factors



The factors are further grouped into two categories, depending on their dependence on financial remedies. The rationale is that intrinsic creditworthiness

should be independent from access to credit, else it would be self-fulfilling. Therefore, problematic issues are classified as either *fundamental*, if they are unlikely to be improved by financial services, or *financial*, if they have a transitory character and may be cured by appropriate financial support. This rationale explains the voluntarily limited role played by illiquidity in our creditworthiness model: although strongly correlated with failure, illiquidity could be relieved through credit – unless it is a symptom of more fundamental shortcomings, in which case it will be captured elsewhere in the model.

From the seven factors presented above, the following are regarded as fundamental:

- the persistent inability of a firm to reach a sufficient level of turnover to cover its operating costs: this supposedly hints at unsatisfactory product quality or lack of market;
- the lack of members' commitment, in particular the owner's tendency to draw remunerations or dividends which the business cannot afford;
- the inadequacy of financing costs in relation to operating performance; indeed, this aspect is unlikely to be improved by standard SMME financial services, as additional facilities will only increase the interest burden.

The other aspects, with the exception of volatility, are regarded as being financially curable. The inclusion of sluggish working capital cycles as a financial rather than a fundamental factor can be debated, as it can be regarded as a basic management flaw, especially in the debt collection process; nevertheless, this situation may be improved by factoring, and generally appears easier to reverse than, for example, the lack of markets. As to the volatility issue, it is understood as resulting from the other factors, therefore it is not classified as a fundamental or financial flaw.



It is worth noting that the three criteria listed as fundamental correspond roughly to the viability definition proposed by Tucker (2000) (see Section 2.1), with capital adequacy being judged in relation to the firm's operating potential.

### 3.1.3 – Creditworthiness typology

Based on this understanding of fundamental and financial deficiencies, we propose to conceptually classify firms along two scales which, when divided into zones, lead to a matrix of possible diagnoses – each diagnosis reflecting a firm's situation at a given point in time. A firm can be:

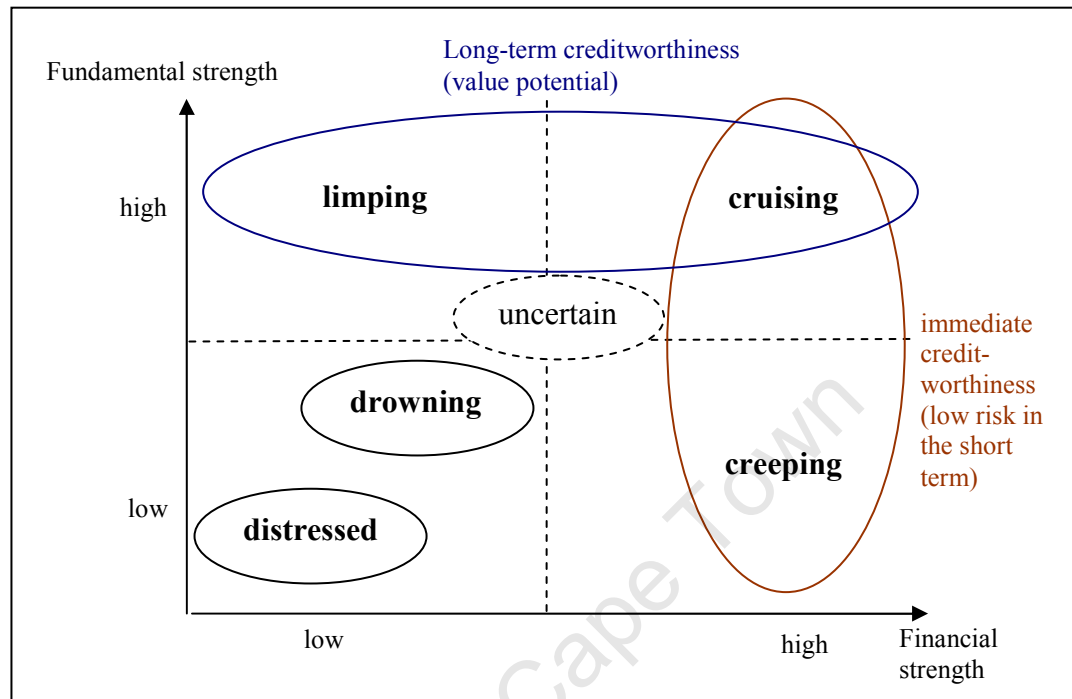
- (1) fundamentally sound with a strong financial structure – this firm would be described as '*cruising*';
- (2) financially strong but fundamentally unsuccessful, facing a risk that the lack of success would gradually erode its strong financial basis – this firm would be described as '*creeping*';
- (3) fundamentally sound, but built on a weak financial basis that made it vulnerable – this category carries the label '*limping*'<sup>28</sup>;
- (4) fundamentally and financially unsuccessful, therefore under serious risk of failure – such firm would be labelled '*drowning*' if its decline seemed reversible, or '*distressed*' if failure seemed unavoidable;
- (5) Of course, there is always a grey zone which is not easily classified into one of these categories – these firms would be labelled '*uncertain*'.

These six categories are represented on Figure 19's matrix.

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<sup>28</sup> We purposefully distinguish between the labels of "creeping" and "limping" with the following images in mind: a creeping insect is by its very nature unable to stand, while a limping animal is one that may need support in order to recover its ability to stand and run. Similarly, financial services providers cannot cure a 'fundamental' shortcoming, but can treat financial problems.

Figure 19 – Creditworthiness matrix



Source: own concept

Underlying this typology is the belief that a far-sighted creditworthiness assessment must take into account the difference between fundamental and financial aspects. Fundamental aspects are the most decisive in the long term, whereas financial deficiencies such as lack of equity or lack of liquidity can be resolved if the fundamentals are good.

Section 3.3 will come back to this understanding and propose testable hypotheses. But first, let us conceptualise the link between creditworthiness and financial constraints.

### 3.2 – Creditworthiness and financial constraints: A model of proof

Having shed light on the various dimensions of SMME creditworthiness, it is now necessary to come back to the link between creditworthiness and financial constraint. Since the investigations presented in Chapter III were not entirely conclusive on the role of accounting opacity in explaining financial constraints,

insufficient creditworthiness must be tested as an additional possible reason for SMMEs' financial constraints.

In this regard, the typology proposed in Section 3.1, especially the distinction between limping and creeping firms, is useful in conceptualising the dilemma between immediate and long-term creditworthiness assessments.

From an immediate perspective, a creeping firm would be creditworthy since its strong financial backbone makes the insolvency risk remote; however, when the fundamentals of the business are weak (e.g. the business is not selling well), the firm's ability to create value is doubtful and its financial structure is likely to deteriorate over a few years, putting the firm's survival at risk; consequently, creeping firms are not creditworthy in the long term. Conversely, limping firms with low liquidity and equity have a high immediate risk of default, but sustained financial support would enable these firms to become successful in the long run.

This duality questions the approach adopted by banks: if these adopt a short-term approach to SMME creditworthiness, limping firms, which need finance and deserve support under a long-term perspective, could rightfully complain of being unfairly rejected, whereas facilities granted to creeping firms may contribute to underperforming SMME loans. This chapter will attempt to test whether this is the case.

Meanwhile, a difficulty must be addressed here regarding possible spurious effects in empirically testing the link between creditworthiness and financial constraints or use of bank debt. Firstly, although some effort has been made to define creditworthiness beyond the immediate criteria of debt and cash available, these elements do influence the quality assessment of the borrower, as well as the level of financial constraint. A negative relationship between constraints and creditworthiness might therefore come from definitional similarities. It is therefore important to have a second test, which would show that the expected relationship does indeed arise from creditworthy firms' better *access* to bank finance.

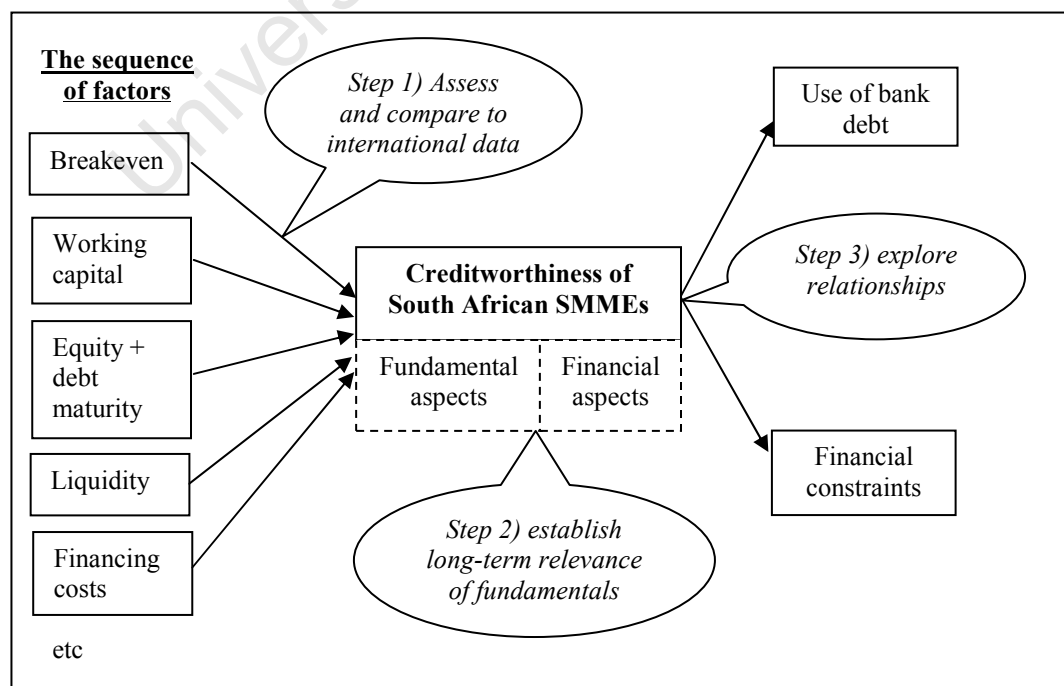
Unfortunately, as indicated in Chapter III, only case study firms provided sufficient information to enable assessment of the concepts of creditworthiness, financial constraints and access to bank debt, as defined in this thesis. The data in the balance sheet sample only covered the *use* of external finance, rather than financial constraints or access to debt. The difference between *use* of bank finance and access lies in the interference of demand factors: indeed, the absence of loans in non-constrained firms may come from the absence of need rather than a lack of access to bank finance. This situation will have to be taken into account when defining the hypotheses and tests.

The next section synthesises the conceptual framework and proposes hypotheses as well as tests to address these empirically.

### 3.3 – Synthesis and hypotheses

The conceptual framework on creditworthiness and its effect on financial constraints must be tested in three steps, which are represented in Figure 20.

Figure 20 – Three steps in testing the creditworthiness hypothesis



Accordingly, the following hypotheses are formulated.

*H10: South African SMMEs display particular weaknesses compared to their international counterparts, notably in respect of their equity ratios.*

Test: Equity ratios will be computed on the basis of the balance sheet sample and compared to international evidence.

*H11: A far-sighted creditworthiness assessment must take into account the difference between fundamental and financial aspects, as follows:*

*a) Ability to reach breakeven, members' commitment and adequacy between financial structure and operating performance are the three most fundamental creditworthiness factors in the long term;*

*b) If the fundamentals are good, lack of equity, excessive short-term debt and lack of liquidity can be relieved over a few years through adequate financial support.*

Test: Firms with poor ratios in respect of breakeven, members' commitment and capital adequacy are less likely to honour their credit commitments in the long term, than firms with good fundamental ratios but poor equity or liquidity ratios.

*H12: Creditworthiness is negatively related to the level of financial constraints, i.e. the least creditworthy enterprises are most likely to be constrained and vice versa.*

Test: Among case studies, financial constraints are more severe in firms with a poorer creditworthiness.

*H13: Creditworthiness is positively related to the use of bank finance, except for the most creditworthy firms, where lack of need is likely to cause a low utilisation of bank finance.*

Test: In the balance sheet sample, the least creditworthy and the most creditworthy firms have a lower use of bank debt, than the firms in the middle range of creditworthiness.

## **Section 4. Measuring creditworthiness with imperfect data**

To measure creditworthiness as conceptualised in Section 3, this section translates the framework into an operational set of tools. Following the advice of Mintzberg (1979:587), the assessment scheme draws, where possible, on qualitative data to support the interpretation of quantitative data from financial statements.

The following pages describe how qualitative assessments were done (4.1), how data were cleansed to reduce accounting opacity (4.2); how a ratio based model was developed and applied (4.3); and how quantitative and qualitative aspects are summarised in a balanced assessment of creditworthiness (4.4).

### **4.1 – The qualitative assessment model**

The model was based on existing literature, with the initial structure adopting the three non-financial screening criteria common to banks and venture capitalists: management team, product or service, and market (Banking Council 2000, GAB Consulting 2002, Zacharakis & Meyer 1998). For a more precise evaluation of the management team (which is often presented as the most important qualitative criterion), this dimension was divided into two aspects: the level of skills and the level of energy or commitment. In addition, to take advantage of the data provided by the case studies, a dynamic dimension was included, comprising an assessment of the past (the firm's track record) as well as the future prospects (firm's strategy).

Accordingly the qualitative assessment of case studies followed a six-tier approach, represented in Table 31. Each question is scored from 0 (poor) to 2 (good) according to the evidence available, and the sum results in a total score of 0 to 12. The results of the qualitative scoring will be presented in Section 5.

*Table 31 – Framework for qualitative creditworthiness assessment*

Source	Question	Indicators
literature (split)	(1) How skilled is the owner-manager?	training and qualifications; quality of answers; level of comfort in talking about various issues
literature (split)	(2) Is the owner-manager committed and does he show entrepreneurial energy?	attitude towards the business; physical presence in the business and/or working hours; feelings expressed; owner's general attitude during the interviews
literature	(3) Is the quality of the product or service good and recognised as such by the market?	Indications about the owners' care in ensuring customer satisfaction; quality control; market response
literature	(4) Does the market have good growth potential?	Indications from the owner or from other sources
dynamic	(5) Does the business have a good track record?	Number of years of existence of the business and trends; evidence of failure
dynamic	(6) Does the management's strategy make sense and does it respond to the firm's current risks and challenges?	Likelihood that strategy will produce turnover growth; likely evolution of financial risks; likely ability of the staff to cope with new strategy

## 4.2 – Dealing with accounting opacity

The review of accounting opacity (Chapter III) has confirmed that the figures published in small business financial statements must be interpreted cautiously: The balance sheet sample data are heterogeneous in scope (e.g. number of years provided, level of details); among the firms assessed, a fifth scored under 50% for intrinsic quality, and nearly half were suspected to have manipulated their accounts to some extent. At first sight, these findings cast doubts on the usability of financials for a ratio-based creditworthiness evaluation.

To deal with the problem, three mitigation strategies were adopted, which are presented below.

### 4.2.1 – Adjustment of financial statements

The adjustment of accounting data was inspired by a growing body of scholarly literature on data cleansing processes (Dekhbakhsh 2002, Maletic & Marcus 2000, Fox et al 1994, Hernandez and Stolfo 1998, Kimball 1996), bearing in mind the risks of user interventions on datasets. From this literature, three principles emerged that guided the adjustment process and avoided exacerbating opacity through excessive adjustments: they were the principles of *relevance*, *transparency* and *consistency*. Due to the specific needs of accounting data, the principle of *balance* was added.

The principle of *relevance* means that only material errors were corrected. The principle of *transparency* implies that items were only adjusted if their value could be derived logically, and that all adjustments undertaken were clearly documented. To achieve *consistency* across the years and enterprises, depreciation and amortisation rates were applied uniformly. This caused numerous adjustments on the carrying value of fixed and intangible assets which – taken in isolation – may not have been necessary, but were deemed appropriate for better comparability across the businesses. The requirement of *balance* implied double-entry adjustments, with balancing entries being either specific (when it was clear that the mistake had affected a specific accrual), or unspecific by means of a control account<sup>29</sup>.

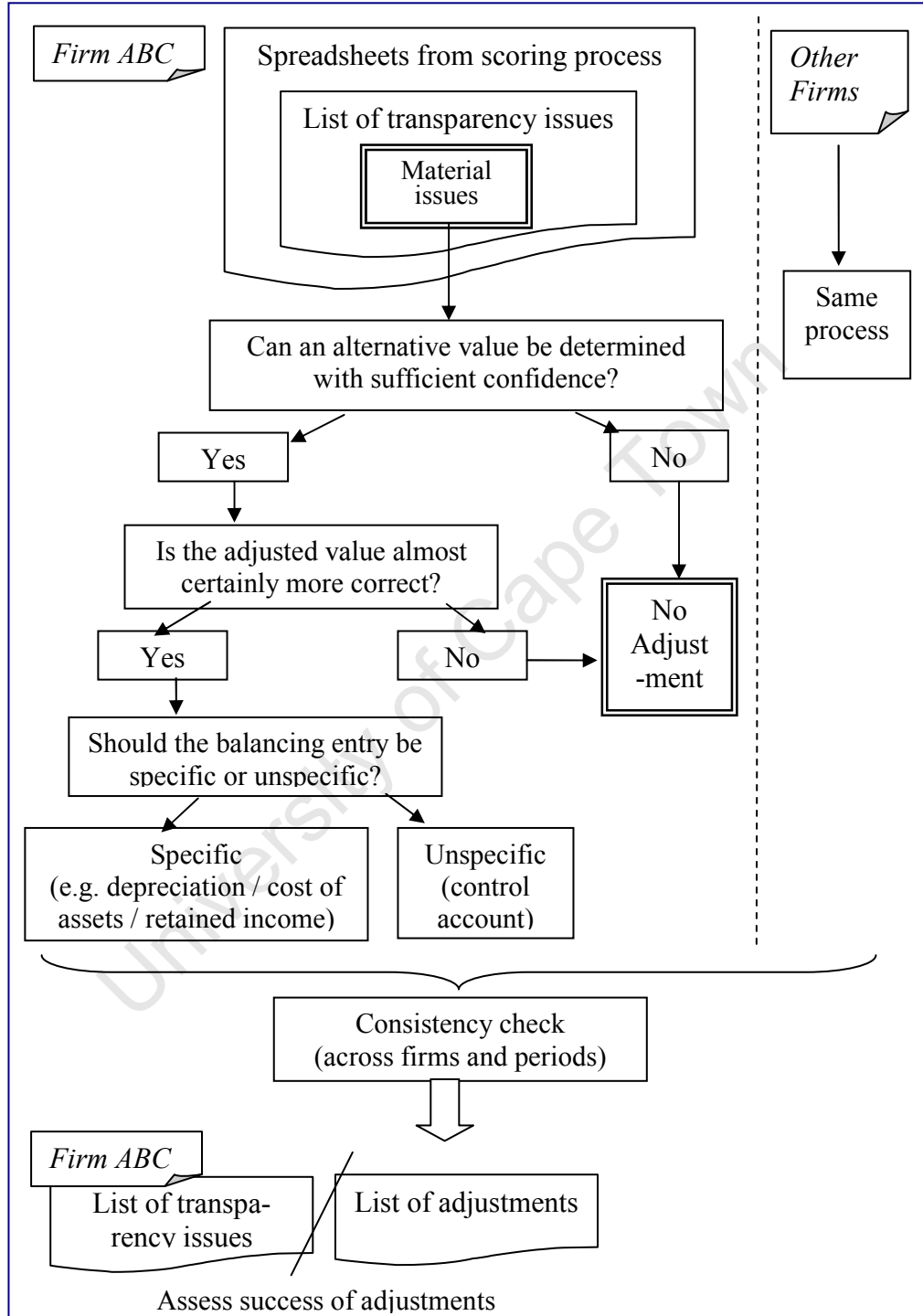
Figure 21 summarises the process followed for the adjustment of financial statements. A full list of the adjustments undertaken, as well as explanatory details, is provided in Annexure 16.

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<sup>29</sup> For example, Wec03 had booked most of its equity and liabilities with a negative sign and made it up by a disproportionate suppliers' control account – it was then easy enough to correct this by restoring positive values for the equity and liabilities and accordingly reducing the amount of suppliers' credit. In contrast, Wec01 booked its tax liability twice, under current liabilities and under retained income – but it was not evident which other asset or liability had been affected by this mistake – the removal of one liability was therefore balanced through a control account under current liabilities.



Figure 21 – Process for the adjustment of accounting data



Adjustments proved a satisfying way of remedying some weaknesses, such as the omission of depreciation or financial costs or the mismatch between retained income, tax liabilities and the profit and tax history. Other income and expenses

or balance sheet items (turnover, operating costs, extraordinary costs, inventory, trade payables or receivables) were not adjusted, unless required and enabled by strong data (e.g. case studies).

The adjustment process led to slightly adjusted sets of financial statements for seventeen businesses, and more substantial adjustments for 40% of the database (27 enterprises). In some cases the adjustments addressed all the material issues contributing to accounting opacity, while in other cases, adjustments were only partly successful, e.g. restoring a credible picture of performance but leaving some doubts on the financial structure.

#### **4.2.2 – Selective inclusion**

In some firms, adjustments seemed unlikely to restore a convincing picture of the business' status, especially when there were gross structural mistakes in the balance sheets or a presumption of manipulated turnover.

For those firms, the usable parts of financial data were singled out (e.g. the income statement but not the balance sheet, or the 2000 statements but not those of 2001) and only these were entered into the ratio analysis. Such selective inclusion was preferred to a sheer exclusion, which might have led to a bias in the sample, should accounting opacity be related to creditworthiness.

#### **4.2.3 – Layering the sample**

The next step was to define three tiers to reflect different levels of data reliability. Thus, the creditworthiness assessment for the upper tier could be regarded as reliable, whereas tentative analyses of the lower tiers could generate additional insights, which would need to be interpreted more cautiously. Businesses were classified twice into these tiers: once prior to the adjustments, then again after adjustments.

The tiers were defined as follows: those with a total score exceeding 60/100 and an intrinsic quality score exceeding 30/55 were deemed sufficiently robust for a reliable creditworthiness analysis. For the second tier, an intrinsic quality score

of 20 to 29.5 was deemed sufficient to run tentative ratio analysis, with reasonable assurance that the results would be correct. All businesses with a poorer score would be classified into the third tier.

The results showed that adjustments were generally successful in upgrading a number of poorer accounts to higher tiers: the first tier represented half of the initial sample, but 62.5% of the sample post adjustments. The second tier contained fifteen businesses prior to adjustments and sixteen post adjustments (25% of sample). As to the last tier, initially made up of seventeen firms, it was reduced to eight businesses, whose poor accounts were only maintained in the sample for a tentative extension of the core results. Table 32 shows how the sample was layered (a precise table is provided in Annexure 17).

*Table 32 – Layering the sample (pre- and post-adjustment)*

Label	Criteria	Group size, pre-adjustment	Group size, post-adjustment
<u>tier 1</u> robust accounts	AT > 60 and IQ > 30 or sourced from accountants without qualification	32	40
<u>tier 2</u> workable accounts	IQ > 20-29.5 or IQ > 30 but AT < 60 or sourced from accountants with qualification (except CS3: IQ=17 but additional data)	15	16
<u>tier 3</u> for extension	IQ < 20 or less than two final BS/IS provided	17	8

*Note: AT = Accounting transparency score (out of 100);  
IQ = Intrinsic Quality score (out of 55) (see Chapter III)*

#### **4.2.4 – Sensible choice of ratio formulas**

The fourth strategy was to select ratio formulas that minimise the impact of data unreliability. A sensible ratio framework, for example, assesses performance based on operating profit prior to member's salary, rather than net profit; recoups

interest earned and paid with the year-end cash balances to avoid mis-assessments of the firm's liquidity; includes the member's loan in the equity and, where possible, works with average values over several years rather than a once-off value, in order to minimise the effect of outliers.

These issues will be discussed in greater detail in presenting the ratio model (Section 4.3).

These four precautions (adjustments to accounting figures; selective inclusion of problematic accounts; separate assessment of tiers; and sensible definition of ratio formulas) made it possible to attempt a ratio-based assessment of creditworthiness. Indeed, in spite of their shortcomings, accounting data remain the most reliable indicators of performance and financial health. The next section describes how the ratio framework was defined and calibrated.

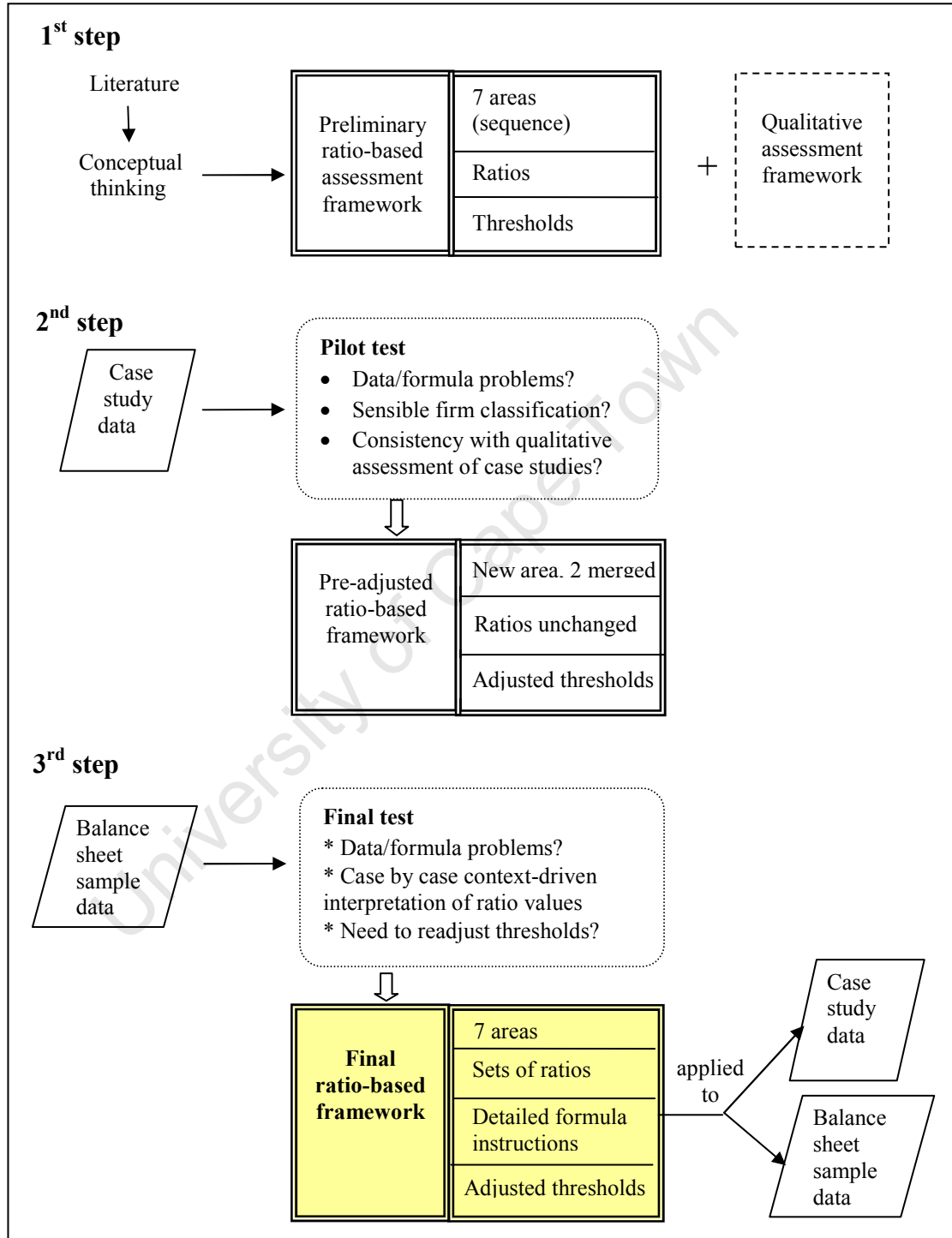
### **4.3 – Ratio framework**

The ratio methodology, which aims to provide an objective and standardised reflection of the firm's situation, is the central part of the creditworthiness assessment model. The framework is analytical and dimensional and uses a numerical weight and sum approach for synthesis (Scriven 1994:54 and 344-355).

The aspects of creditworthiness assessed correspond to the sequence presented in Section 3.1, and are evaluated individually by means of one or several ratios, as well as benchmarks chosen to represent a serious and a mild problem respectively. The separate assessment of dimensions helps to localise the problems and minimise contagion in the event of data quality issues. The aspects are then synthesised in an index reflecting the number and degree of fundamental and financing difficulties.

In order to build a scheme that is rigorous yet does justice to the enterprises' context, the ratios and thresholds were determined in a long iterative process, which is represented in Figure 22.

Figure 22 – Iterative process for determining the ratios and thresholds



As the chart shows, the initial framework was adjusted several times as the interpretation of ratio values was found to depend on the firm’s context, trends

and other data. Pattern comparison and interpretation (Eisenhardt 1989:540) were key to the process. For example, the framework-testing based on the balance sheet sample (bottom third of Figure 22) included the following steps:

- (1) Compute input data for all the sample businesses, taking note of data restrictions (such as the occasional lack of cost breakdown);
- (2) Review the spectrum of values of each input figure (for example, negative or zero values);
- (3) Identify possible formula problems and seek ways to correct the results in order to avoid distortion of the ratios;
- (4) Calculate the ratios for each year and each firm;
- (5) Make corrections where necessary, including outliers or errors;
- (6) Examine the final ratios in terms of trends and means over a period;
- (7) Classify firms according to the preliminary thresholds;
- (8) For each ratio, examine more closely the firms falling into the threshold categories, seeking individual clues explaining their poor performance (considering the evolution over time, the components of the ratio etc);
- (9) Use case-to-case comparisons to understand similarities between poor performing cases or contrasts between poor- and well-performing firms;
- (10) Verify whether tentative clues are consistent with the ratio values found in other enterprises.

This results in a complex scoring framework, which is presented in the following pages. More detailed explanations, formulas and justifications of thresholds can be found in Annexure 18.

### **4.3.1 – Market and Pricing**

Turnover sufficiency is assessed in two steps: the current turnover is benchmarked against the firm's breakeven, which is derived from the firm's past

cost structure. Then, the growth potential is estimated according to the past growth rate, which is benchmarked against inflation. This results in two ratios.

The margin (or deficit) over breakeven (later MBE) is calculated as follows:

$$\text{Margin over breakeven} = \frac{\text{Latest Turnover}}{\text{Estimated Breakeven}} - 1$$

Turnover growth is calculated (where data are available) as:

$$G = \frac{\text{Latest Turnover}}{\text{Previous Turnover}} - 1$$

A negative MBE is a problem, since it means that the business has not achieved sufficient turnover to cover its fixed costs. This is frequent among young growing firms that still need to increase their sales.

The turnover problem is arguably serious when a firm is *more than two years away* from breakeven. Indeed, since the sample's SMMEs are at least 18-months old, two more years of significant losses could irreversibly erode their financial structure, as it would mean that they would be at least 3,5 years old and still not profitable. To simplify calculations, a firm was deemed to have a serious turnover problem if it had a negative MBE and below-inflation growth, or a positive real growth but a MBE under -40% (see Annexure 18 for justification of this threshold).

### 4.3.2 – Working capital

To evaluate the sufficiency of working capital, the rotation of each item is considered, in days of turnover:

$$\begin{aligned} \text{Need for working capital} &= \text{Inventory turnover} + \text{Customer credit} \\ &\quad - \text{Supplier credit} - \text{Customer advances} \\ &\quad (\text{in days of turnover}) \end{aligned}$$

The pilot test of the framework revealed that the average duration of supplier credit was relevant in its own right to identify working capital risks. Indeed,

some firms balance their working capital through extensive use of supplier credit, and may face problems if their suppliers change their credit policy. This was the case for CS6, which took on average 68 days to pay its suppliers, thus helping the firm to balance its working capital but making it vulnerable to pressure.

Since firms' cash cycles tend to follow a monthly cycle (with salaries paid at month-end), the thresholds for mild and serious working capital problems are set at 30 and 60 days respectively. These thresholds apply across industries, even though they are more likely to be reached in some sectors than in others. In addition, suppliers' credit exceeding 60 days, coupled with a positive need for working capital, is understood as a sign of vulnerability (mild problem).

### 4.3.3 – Equity

For small and very small firms, profits or losses can cause great fluctuations of the equity ratio from one year to the next. Therefore, the assessment is based on (a) the mean equity ratio over the period, (b) the last equity ratio and (c) the evolution of equity over time.

The members' loans are included in the equity ratio as they bear equity risk, being often ceded as a guarantee to lenders:

$$\text{Equity ratio} = \frac{\text{Equity} + \text{Members' loans}}{\text{Total Assets}}$$

$$\text{Mean equity ratio} = \text{Average (ER (t), ER (t-1), etc)}$$

When at least three years of data were available, the year-to-year variations of equity were observed, with three types of evolution matching the concept of a clear equity growth pattern: a negative equity which becomes and stays positive, an uninterrupted equity growth, or a compound equity growth in excess of 15% p.a. over the period (as explained in Annexure 19).

A negative equity ratio, which results from accumulated losses and the member's inability to cover them, is doubtless a serious problem, since the firm is



technically insolvent. A mild equity problem corresponds to the absence of a clear equity growth pattern, combined with a low equity ratio. Based on international benchmarks (see Annexure 18), the threshold was set at 20% of total assets.

#### 4.3.4 – Debt maturity structure

The risk of excessive reliance on short-term debt was assessed by means of two ratios: the current debt ratio, which is industry related, and the net current debt ratio, which should not be widely dependent on the industry (see Annexure 18 for a justification of this choice):

$$\left\{ \begin{array}{l} \text{Net current debt ratio} = \frac{(\text{Short term debt} - \text{Short term assets})}{\text{Total assets}} \\ \text{Current debt ratio} = \frac{\text{Short term debt}}{\text{Total assets}} \end{array} \right.$$

Based on international benchmarks (see Annexure 18), current debt ratios of 50% and 75% were selected as thresholds for mild and serious over-reliance on short-term debt. However, these high ratios are only a problem if current debt significantly exceeds current assets – i.e. if the net current debt ratio exceeds 10%.

#### 4.3.5 – Liquidity reserves

The focus of the liquidity assessment was on a medium-term picture (refer to Annexure 18 for the practical difficulties of this when working with accounting data). Following an approach similar to Beaver (1966), cash deficits indicate vulnerability if they are unlikely to be covered by future cash flows. Liquidity was therefore assessed according to the mean liquidity ratio (MLR) for firms with positive net liquidity, and a cash flow to overdraft ratio (CFOD) for firms with a net overdraft:

$$\text{MLR} = \text{Mean} \left( \frac{\text{Cash} + \text{Cash equivalents} - \text{Bank Overdraft}}{\text{Total assets}} \right)_{\text{period}}$$

$$\text{Cash flow to Overdraft}^{30} = \frac{\text{Last operating cash flow}}{\text{Mean net overdraft}}$$

Some SMMEs voluntarily keep their liquidity ratio low, for various reasons: existence of external emergency cash reserves (overdraft facility or owner's funds); investment opportunities; low return on liquid assets. Therefore, the mean liquidity ratio is only presumed problematic if negative. The lack of liquidity is deemed a serious problem if the mean liquidity ratio is below -5% of total assets and the cash flow to overdraft ratio is below 1 (including negative cash flows).

#### 4.3.6 – Financial costs

The adequacy of financing structure and operating performance is measured by the interest coverage. The member's salary was excluded from the coverage calculation as it was found to be frequently used as profit distribution, rather than being a fixed cost.

$$\text{Interest coverage} = \frac{\text{Operating profit}}{\text{Interest} + \text{Finance charges}}$$

Undoubtedly, SMMEs have a serious problem if their coverage ratio is lower than 1. The threshold for the mild problem is more difficult to determine as the operating profit, as defined, must cover financial costs and the member's salary – which are not related in terms of proportions. Therefore the threshold is arbitrarily set at 2,5. This is higher than the threshold of financial vulnerability used by Guiso (2003), viz. 1,4.

The pilot testing of the framework revealed that interest coverage ratios are highly unstable; therefore it was decided to review them according to lowest, highest and mean value for the period.

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<sup>30</sup> This ratio bears some similarities to the Beaver ratio (Beaver 1966), but its focus is on overdraft rather than total debt.

### 4.3.7 – Owner commitment, especially remuneration scheme

The net flow of cash between a business and its owner (i.e. the member's net cash remuneration) can be an indicator of the owner's commitment to the business, especially when compared to the firm's cash flow.

In light of the firm's lifecycle, two cases appear problematic: (1) when the member's cash reward significantly exceeds the cash flow, liquid assets are depleted, causing a serious problem; (2) when a growing business pays too high salaries, it cannot accumulate new resources, causing a mild problem.

This is assessed by the following indicators:

$$\left\{ \begin{array}{l} \text{Monthly member's cash reward} = \frac{\text{Members' cash reward}}{\text{number of members} \times \text{number of months}} \\ \text{Reward to Cash Flow (RCF)} = \frac{\text{Members' reward}}{\text{Adjusted Cash Flow}} \end{array} \right.$$

The problem of owners embezzling the resources of businesses can, at any point in time, rapidly endanger the survival of the business. Therefore the attention will be on the highest values, rather than on the period's average.

Generally, over-remuneration of members was only presumed when the absolute monthly salary per member exceeded R 7,000 (i.e. 32% above the national average). For businesses in a growth phase, the RCF mild threshold was set at 75%; for all businesses, a RCF of 100% and more was deemed to indicate value depletion and hence a serious problem (see Annexure 18 for a justification of these thresholds).

### 4.3.8 – Volatility

For all firms which had provided at least two sets of financials, instability was further assessed by calculating standard deviations for all the static ratios, i.e. the operating margin (which was more practical than the margin over breakeven),

the need for working capital, the equity ratio, the current debt ratio, the liquidity ratio and the interest coverage.

Defining thresholds was difficult, as the six standard deviations had widely different ranges of values. Therefore, each firm's volatility was assessed relatively to the sample. For each of the six ratios, the firms in the 15% lowest and highest volatility percentile were identified. Firms which were never classified among the most stable, but were 3 or more times among the least stable, were regarded as having a serious volatility problem. Firms which had been 3 or more times among the least stable, but 1 or 2 times among the most stable, were considered as having a mild volatility problem.

#### **4.3.9 – Summary of ratios and thresholds**

Table 33 summarises the ratio methodology. It is important to bear in mind that these ratios only acted as a guideline. Qualitative evidence, when available, could override the ratio-based results and modify the scoring. For example, interview evidence made it clear that CS2 was unlikely to sustain the previous years' turnover growth.

#### **4.4 – Balanced appraisal**

The diagnoses of each aspect of a creditworthiness assessment are synthesised in a penalty approach, based on the distinction between fundamental and financial shortcomings.

Each weakness identified in any of the dimensions discussed above generates a penalty of 1 (mild) or 2 points (serious), which are deducted from an initial capital of sixteen points. Fundamental, financial and, if available, volatility indexes are then calculated and synthesised to give a total score. Figure 23 illustrates the scoring logic.

Table 33 – The ratio framework for a ‘diagnosis’

Question	Ratios	Threshold “mild”	Threshold “serious”
<p><u>1. Market / Pricing</u></p> <p>Does the business have enough markets/clients? Are the operations profitable?</p>	<p><u>Margin over breakeven:</u></p> $MBE = \frac{LatestTurnover}{EstimatedBreakeven} - 1$ <p><u>Turnover growth:</u></p> $G = \frac{LatestTurnover}{PreviousTurnover} - 1$	$\begin{cases} -40\% < MBE < 0 \\ G > inflation \end{cases}$	$\begin{cases} MBE < 0 \\ G \leq inflation \end{cases}$ <p>or</p> $\begin{cases} MBE < -40\% \\ G > inflation \end{cases}$
<p><u>2. Debtors and Inventory</u></p> <p>Is the business able to finance its operations?</p>	<p><u>Need for working capital</u></p> <p>NWC = stock + customer credit - supplier credit – customer deposits (in days of turnover)</p> <p><u>Supplier credit</u></p> $SC = \frac{TradePayable}{Turnover} \times 360 \text{ (if applicable)}$	<p>NWC ≥ 30 days</p> <p>or</p> $\begin{cases} NWC > 0 \\ SC > 60 \text{ days} \end{cases}$	<p>NWC ≥ 60 days</p>

Question	Ratios	Threshold “mild”	Threshold “serious”
<p><u>3. Equity</u> Does the firm have sufficient equity?</p>	<p><u>Equity ratio</u> <math display="block">ER = \frac{\text{Equity} + \text{Members' loans}}{\text{Total Assets}}</math></p> <p><u>Equity growth pattern</u> Negative equity turns positive or steady increase in equity</p>	<p>{ ER &lt; 20% No clear equity growth pattern</p>	<p>ER &lt; 0%</p>
<p><u>4. Debt maturity</u> Is the debt maturity adequate?</p>	<p><u>Net current debt ratio</u> <math display="block">NCD = \frac{(\text{Short term debt} - \text{Short term assets})}{\text{Total assets}}</math></p> <p><u>Current debt ratio</u> <math display="block">CD = \frac{\text{Short term debt}}{\text{Total assets}}</math></p>	<p>{ NCD &gt; 10% CD &gt; 50%</p>	<p>{ NCD &gt; 10% CD &gt; 75%</p>
<p><u>5. Liquidity</u> Are liquidity reserves sufficient?</p>	<p><u>Mean Liquidity ratio</u> <math display="block">MLR = \text{mean} \left( \frac{\text{Cash \&amp; equivts} - \text{Overdraft}}{\text{Total assets}} \right)</math></p> <p><u>Cash flow to Overdraft</u> <math display="block">CFOD = \frac{\text{Last operating cash flow}}{\text{Mean net overdraft}}</math></p>	<p>{ MLR &lt; 0 CFOD &lt; 1 or MLR &lt; -5% CFOD &gt; 1</p>	<p>{ MLR &lt; -5% CFOD &lt; 1</p>

Question	Ratios	Threshold “mild”	Threshold “serious”
<p><u>6. Financing costs</u> Are financing costs consuming all operating profits?</p>	<p><u>Interest coverage</u></p> $IC = \frac{\text{Operating Profit}}{\text{Interest} + \text{Finance Charges}}$	<p>Mean IC &lt; 2,5</p>	<p>Mean IC &lt; 1</p>
<p><u>7. Owner’s commitment</u> Can the business afford its owner?</p>	<p><u>Monthly member’s reward (MMR)</u></p> $MMR = \frac{\text{Members' cash reward}}{\text{number of members} \times \text{number of months}}$ <p><u>Reward to Cash Flow (RCF)</u></p> $RCF = \frac{\text{Members' cash reward}}{\text{Adjusted Cash Flow}}$	<p>Growing business:</p> $\begin{cases} RCF \geq 75\% \\ MMR \geq R 7000. \end{cases}$	<p>All businesses:</p> $\begin{cases} RCF \geq 100\% \\ MMR \geq R 7000 \end{cases}$
<p><u>8. Volatility</u> Is the business stable?</p>	<p>Standard deviations of: operating margin, need for working capital, equity ratio, current debt ratio, liquidity ratio and interest coverage</p>	<p>≥3 ratios within the 15% highest percentile; 1-2 ratios within 15% lowest percentile</p>	<p>≥3 ratios within the 15% highest percentile; none within 15% lowest percentile</p>

The SMMEs could then be allocated to the categories defined in Section 3.1 (Figure 19), following a system of thresholds as illustrated in Table 34<sup>31</sup>.

*Table 34 – Criteria for classification into the creditworthiness categories*

Category	Criteria
Cruising	Total score $\geq 15$
Uncertain	$\left\{ \begin{array}{l} 8 \leq \text{Total score} < 15 \\ \text{Fundamental score} > 4 \\ \text{Financial score} > 5 \end{array} \right.$
Limping	$\left\{ \begin{array}{l} 8 \leq \text{Total score} < 15 \\ \text{Fundamental score} > 4 \\ \text{Financial score} \leq 5 \end{array} \right.$
Creeping	$\left\{ \begin{array}{l} 8 \leq \text{Total score} < 17 \\ \text{Fundamental score} \leq 4 \\ \text{Financial score} > 5 \end{array} \right.$
Drowning	$\left\{ \begin{array}{l} 8 \leq \text{Total score} < 15 \\ \text{Fundamental score} \leq 4 \\ \text{Financial score} \leq 5 \end{array} \right.$
Distressed	Total score $< 8$

This section has presented a comprehensive methodology for assessing SMME creditworthiness based on qualitative and accounting data. The framework incorporates qualitative data from interviews as well as a fully fledged method to improve the usability of small business accounting data, compute and interpret ratios and synthesise them into a sensible creditworthiness assessment. The application of the framework is work-intensive and is therefore not practical for all research situations. Nevertheless, this framework does go a long way in redressing the gaps in the literature on assessing small business creditworthiness.

The next section turns to empirical findings resulting from the application of this comprehensive methodology to the three tiers of the balance sheet sample and the case studies.

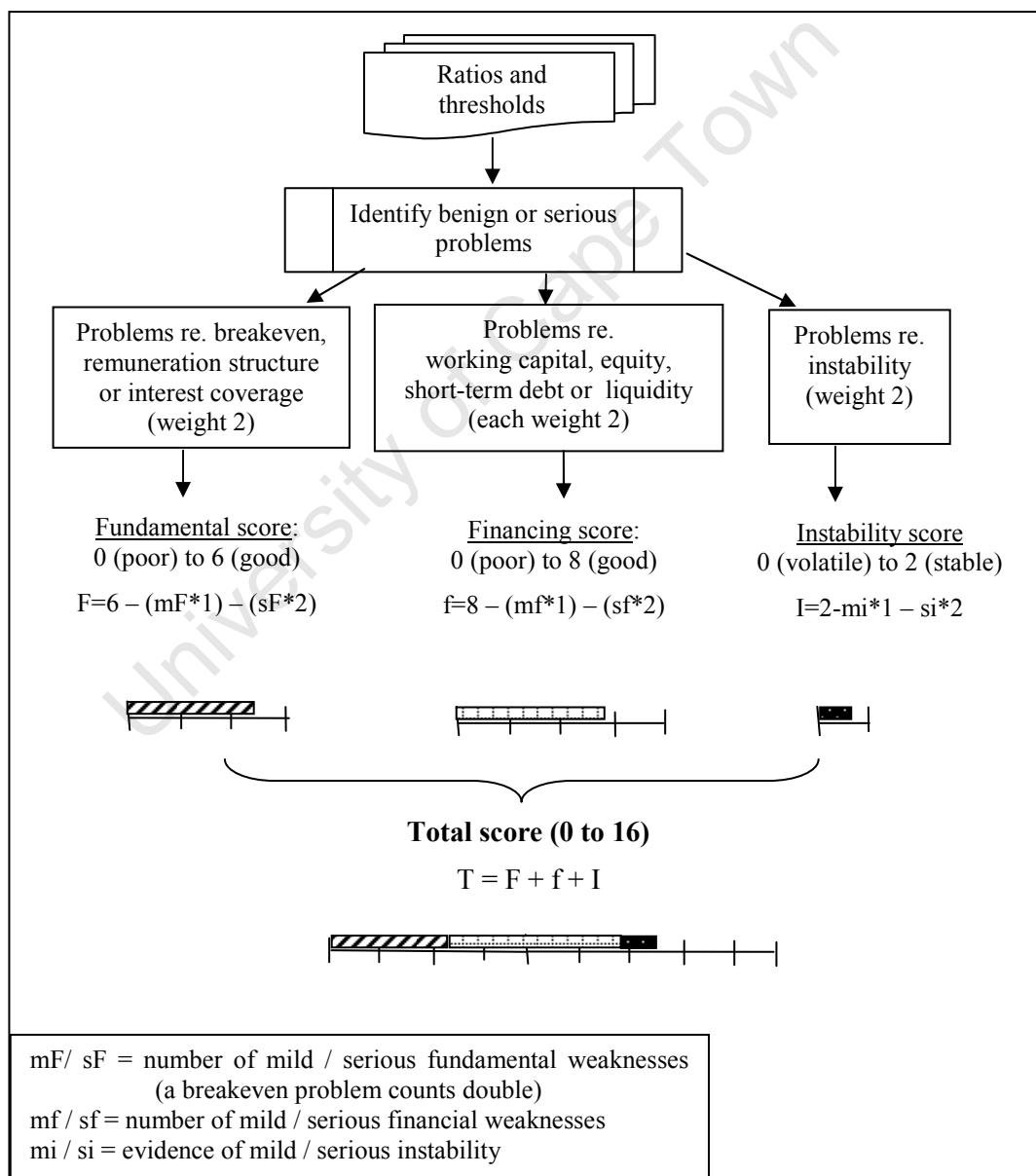
<sup>31</sup> Due to the penalty-based approach, in which only firms with visible problems have a lower score, thresholds had to be numerically high in order to capture firms with problems.



## Section 5. Assessed creditworthiness of SMMEs

The results of the creditworthiness analysis are presented in three steps. First, the eight aspects of the sequence are presented individually (Section 5.1). Then, comparisons with international data are proposed on some of those aspects (5.2). Section 5.3 concludes with a balanced assessment of the firms in the sample.

Figure 23 – Balanced creditworthiness scoring model



## 5.1 – Review of individual weaknesses of SMMEs

This section reports on the extent to which the 64 SMMEs<sup>32</sup> from the balance sheet sample suffer from the various weaknesses identified in the framework, and seeks clues on the types of firms most prone to those problems. For clarity, each dimension is introduced with a frame in which the parameters of the study (P:) are given. More details are available in Annexure 19.

### 5.1.1 – Lack of turnover

*P: A persistently negative margin over breakeven indicates an inability to sell or cover the business costs, and represents a fundamental flaw. If turnover growth is above inflation, the problem is mild. If the business is not growing in real terms, or if its margin over breakeven is below -40%, the problem is serious.*

Despite occasional difficulties in applying the breakeven calculation to SMMEs (see discussion in Annexure 19), turnover deficiencies were encountered in fourteen out of 66 firms; nine were in the lower tiers of accounting transparency.

Firms with turnover deficiencies can be further classified into three categories: (1) some firms seemed unlikely ever to reach breakeven, because their real growth was insufficient and their deficits were high; (2) in other firms, the turnover deficit appeared mild considering their young age or their real turnover growth; (3) yet other firms experienced problematic growth. These three categories are illustrated in Table 35.

Several young (or recently acquired) firms suffered from either heavy initial fixed costs or variable cost ratios in excess of 100%. Except for one of them, which was expected to reach breakeven as it grew, the extent of turnover deficiency did not bode well. Also worrying were the turnover deficits of older

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<sup>32</sup> Owing to variable data quality, the sample size for some ratios differs from 64. Annexure 18 indicates for each ratio the firms that were excluded or alternative sets of data that were included.

firms, including three case studies (furniture business CS1, township-based services company CS4 and franchise restaurant CS2).

*Table 35 – Classification of firms with turnover problems*

	<b>mild deficit (-40% &lt; MBE &lt; 0, growth &gt; inflation)</b>	<b>serious deficit (MBE &lt; - 40% or no real growth)</b>	<b>problematic growth pattern (BE growth &gt; TO growth)</b>
Young firms	1	4	
Older firms		6	3

Another unexpected cause for concern was the problematic growth pattern found in some firms, characterised by strong increases in fixed costs. These rises in fixed costs resulted either from continuous investments or from rising administrative costs, or a combination of both. Under this pattern, turnover growth ironically exacerbates the gap to breakeven. The sample yielded three firms which changed from profits to deficits as their fixed costs rose faster than their turnover. A further three firms were threatening to follow the same pattern, with a slim margin over breakeven and fixed costs growing at a rate exceeding 100% p.a.

Table 36 illustrates the clues gained from case studies CS1, CS2 and CS4 as well as the cases of problematic growth pattern, on the reasons for, and the possible consequences of, turnover problems (see case study narratives in Annexures 31 to 36).

To conclude, over a fifth of the sample (fourteen firms) suffered from turnover insufficiency. Considering the sample's bias towards better-managed SMMEs, the proportion is likely to be higher in the overall SMME population. However, the problematic growth experience of a few SMMEs is also reminiscent of the negative consequences of growing turnover by raising fixed costs.

### 5.1.2 – High need for working capital

*P: Firms with a need for working capital exceeding 60 days have a serious problem. Firms with a need for working capital exceeding 30 days or a positive need for working capital coupled with supplier credit in excess of 60 days, have a mild problem.*

Table 36 – Causes and consequences of turnover problems

	Causes of turnover problems	Consequences of turnover problems
case studies (CS1, CS2, CS4)	<ul style="list-style-type: none"> <li>• Intense competition (all three case studies);</li> <li>• Aggressive pricing strategy eroding the margins (CS1, CS4)</li> <li>• Heavy fixed costs aggravated by advertising (CS2)</li> <li>• Lack of a well-situated sales outlet (CS1, in Montague Gardens for the middle / lower-end of the market);</li> <li>• Lack of focus and expertise (CS4: “we take whatever we get in the tendering business” (from building to cleaning or catering);</li> <li>• Poor customer service (CS4), e.g. unilaterally breaching contracts with customers.</li> </ul>	<ul style="list-style-type: none"> <li>• Liquidation (CS1) after 4 years without a genuine profit (the reported profits were fake)</li> <li>• Planning to sell company (CS2)</li> <li>• “failed in the way of survivalist businesses”: suspended and re-emerged (CS4a’s operations transferred to CS4b), because liquidation process is too expensive while owners have no other survival strategy</li> </ul>
problematic growth pattern	<ul style="list-style-type: none"> <li>• Continuous investment =&gt; fixed assets become a burden (e.g. plate hiring service Dir01: fixed costs rise by 90% p.a.)</li> <li>• Lack of discipline or premature controls =&gt; Rising administrative costs (e.g. sports equipment retailer Wec02: fixed costs rise by 51% p.a.)</li> </ul>	<ul style="list-style-type: none"> <li>• Initial profits turn into losses (BD5, Wec2, Dir01)</li> <li>• Margin over breakeven erodes rapidly (Gob5, Wec8, PWC1), threatening to turn to losses (currently 11-12% with fixed costs increasing at 130-205% p.a.)</li> </ul>

Subject to accounting accuracy (risks of under- and overstatement of current assets and debts are discussed in Annexure 18), the analyses suggest that the

working capital cycle of most SMMEs is either balanced, or in deficit (i.e. financed by non-trade resources).

As Table 37 shows, seventeen firms (26% of the sample) had a high or very high need for working capital. This probably reflects SMMEs' weak bargaining power in the supply chain. In addition, four SMMEs were at risk due to excessive supplier credit. A closer examination of firms with a high need for working capital shows that their problem most often stems from high customer credit, and occasionally from high stock or insufficient supplier credit. The case studies give some clues on the reasons for these situations (see case study narratives in Annexures 31-36), which are summarised in Table 38.

*Table 37 – Need for, or surplus of, working capital (in days of turnover)*

	<b>comfor- table surplus NWC &lt; -10</b>	<b>balanced cycle: -10 to +10</b>	<b>small need: 10.1 to 30</b>	<b>mild problem: 30.1 to 60</b>	<b>serious problem: NWC &gt; 60</b>	<b>mild problem (supplier credit &gt;30 + 0 &lt; NWC &lt; 30)</b>	<i>sample size</i>
Tier A	6	14	11	6	3	3	40
Tier B	5	6	1	3	2	0	17
Tier C	2	1	2	2	1	1	8
Total	13	21	14	11	6	4	65 <sup>33</sup>

<sup>33</sup> See Annexure 18 Section 2 for the list of firms included and excluded from this and other calculations.

*Table 38 – Reasons for working capital problems*

Type of problem	Number of firms	Comments
Customer credit > 60 days	10	Reasons: <ul style="list-style-type: none"> <li>• SMMEs have weak bargaining power <ul style="list-style-type: none"> <li>○ Serving public sector (tender business CS4)</li> <li>○ Long supply chain (tour operator CS5)</li> </ul> </li> <li>• Insufficient debtor management <ul style="list-style-type: none"> <li>○ Lack of management awareness and insufficient staff allocation (CS6)</li> </ul> </li> </ul>
High inventories > 60 days	5	Problem mainly found in: <ul style="list-style-type: none"> <li>• Manufacturing (e.g. jeweller BB7: 189 days)</li> <li>• Specialised retail (e.g. clothing shop Gob2: 102 days)</li> </ul>
Lack of supplier credit (< 5 days)	8	Reasons (other than lack of need): <ul style="list-style-type: none"> <li>• No suppliers in services sector (transport firm Ned1, tourism business CS5)</li> <li>• Exorbitant cost in townships, 25-50% per month (CS4)</li> </ul>
Unsustainable use of supplier credit (> 60 days)	10	Consequence: <ul style="list-style-type: none"> <li>• Suppliers refuse to supply more materials =&gt; risks of operational disruption (CS6, whose supplier credit reaches 95 days of turnover)</li> </ul>

To conclude, it appears that working capital weaknesses affect at least a third of non-food-retail SMMEs<sup>34</sup>. Apart from specialised businesses, which have to keep high amounts of stock, the main cause for concern is the poor payment culture, rooted in lack of awareness and slack debtor management, which exacerbates SMMEs' naturally unfavourable supply chain position. The lack of working capital can be disruptive to SMMEs' operations.

<sup>34</sup> Supermarkets and restaurants, which are the most frequent activity of SMMEs in South Africa, are under-represented in the sample. However, with their cash-based business and their fast-moving inventory, these businesses hardly have working capital problems.

### 5.1.3 – Lack of equity

*P: Firms with a negative equity have a serious problem, as they are technically insolvent. Firms whose equity ratio is under 20% also have a problem, unless there is clear evidence that their equity is growing.*

Subject to the risks of distortion caused by poor reporting, the data, as presented in Table 39, suggest that the equity ratios are relatively symmetrically distributed, with most SMMEs having ratios between 20 and 50%, and an almost equal number having lower or higher ratios. The median equity ratio is substantially better in Tier A than in Tiers B and C.

The qualitative findings from case studies as well as a closer examination of the nineteen firms from the balance sheet sample with low equity ratios (below 20%), help us to understand the reasons for and consequences of low equity ratios. These are represented in Table 40.

*Table 39 – Distribution of equity ratios (mean over the period)*

	<i>median equity ratio</i>	<i>equity ratio ≤0</i>	<i>0-20%</i>	<i>20.1-50%</i>	<i>50.1-75%</i>	<i>&gt;75%</i>	<i>sample size</i>
Tier A	35,4%	5	5	16	8	6	40
Tier B	29,2%	1	5	5	4	2	17
Tier C	28,0%	1	2	1	1	1	6
Total	33,6%	7	12	22	13	9	63

Equity ratios appeared to be dependent on firm size, with a median equity ratio of 52% for micro enterprises, 35% for very small and as low as 24% for small enterprises – possibly indicating that micro and very small enterprises find it more difficult to access credit than small firms. In medium-sized enterprises, though, the median equity ratio was higher (31%). Section 5.2 compares these results with European data.

*Table 40 – Causes and consequences of low equity problems*

	<b>Causes of low equity ratios</b>	<b>Consequences of low equity</b>
case studies (CS1, CS4, CS5)	<ul style="list-style-type: none"> <li>• Low initial investment and subsequent losses (township businesses CS4 and coloured tourism business CS5)</li> <li>• Heavy start-up investments (franchise furniture factory CS1)</li> </ul>	<ul style="list-style-type: none"> <li>• Clear equity growth pattern in tourism business CS5</li> <li>• Liquidation in CS1, failure in CS4</li> </ul>
other firms	<ul style="list-style-type: none"> <li>• Capital intensive firms (i.e. manufacturing, construction or transport firms)</li> <li>• Small enterprises, as opposed to micro and very small</li> </ul>	<ul style="list-style-type: none"> <li>• clear equity growth pattern is rare (only CS5 and printing company Dir02)</li> <li>• Important non-financial debt, e.g. from sister companies or trade credit</li> </ul>

To summarise, three in ten businesses in the sample, especially capital-intensive firms, had low or negative equity ratios, causing a significant risk of bankruptcy. Lack of data made it difficult to identify clear signs of recovery from negative equity.

#### **5.1.4 – Excessive reliance on short-term debt**

*P: A net current debt ratio (NCDR) exceeding 10% means that firms use short-term funds to finance long-term assets. If their current debt ratio exceeds 50% (75%), they are deemed (seriously) overly reliant on short-term debt. This may indicate an inability to access long-term finance.*

The ratios on current debt and net current debt were subject to the same technical (data) reservations as the study of the working capital cycle.

The analysis (see detailed table in Annexure 19) shows that net current debt ratios are symmetrically distributed, with almost a quarter of the sample having a balanced ratio, matching the maturity structure of their assets and liabilities. Among those which financed fixed assets with short-term funds (NCDR>10%), half had a current debt ratio higher than 50% (Table 41).



*Table 41 – Current debt ratio (CDR) of firms with a high NCDR*

	<b>NCDR &gt;10% CDR ≤ 50%</b>	<b>NCDR &gt;10% 50% &lt; CDR ≤ 75% (mild problem)</b>	<b>NCDR &gt;10% CDR &gt; 75% (severe problem)</b>
Tier A	8	6	3
Tier B	3	2	1
Tier C	1	0	1
Total	12	8	5

None of the case studies was diagnosed as being overly reliant on current debt. However, the sample analysis reveals that high current debt ratios often occur in firms with a negative equity, especially when operating in the trade and services sector. Firms in capital-intensive industries are less likely to depend on short-term debt, probably as a result of their easier access to asset finance (see detailed table in Annexure 19).

### **5.1.5 – Lack of liquidity reserves**

*P: Liquidity reserves are insufficient if the mean liquidity ratio (MLR) is negative and the operating cash flow does not cover the overdraft. When the MLR is under -5% with a cash flow to overdraft (CFOD) lower than 1, the survival of the firm is threatened.*

Subject to the difficulties of balance-sheet based liquidity analyses, and given the impossibility of measuring slack consistently and neutralising short-term variations, the analysis shows that many businesses operate under a zero or negative liquidity situation. However, surprisingly many businesses have positive and sometimes high liquidity ratios. As Table 42 shows, the likelihood of positive liquidity was particularly high among firms with more opaque accounting, possibly due to distortions in their accounts<sup>35</sup>.

<sup>35</sup> Anecdotal evidence suggests that these ratios may be distorted, either by under-reporting of current assets (as in CS3, where, after correction of total assets to reflect interview data, the liquidity ratio drops from 25% to 13%), or by the high start-up cash reserves in young firms,

Table 42 – Distribution of liquidity and cash flow to overdraft ratios

	<b>MLR <math>\leq</math> -5% CFOD &lt; 1 (severe problem)</b>	<b>MLR <math>\leq</math> -5% CFOD <math>\geq</math> 1 (mild problem)</b>	<b>-5% &lt; MLR &lt; 0 CFOD &lt; 1 (mild problem)</b>	<b>-5% &lt; MLR &lt; 0 CFOD <math>\geq</math> 1</b>	<b>0 <math>\leq</math> MLR <math>\leq</math> 20%</b>	<b>MLR &gt; 20%</b>	Sample size
Tier A	8	9	1	2	14	6	40
Tier B	5	0	1	2	8	1	17
Tier C	0	1	1	0	5	0	7
Total	13	10	3	4	27	7	64

The analysis further reveals that:

- Among the thirty firms with a negative liquidity, almost half (fourteen) had a cash flow exceeding their overdraft, and hence had a good chance of improving or at least maintaining their liquidity ratio.
- Among the seven firms with a high overdraft (>25% of total assets), only CS6 was able to generate an equivalent operating cash flow.

Table 43 illustrates some reasons for low liquidity ratios and indicates that very small firms are most prone to liquidity problems.

Table 43 – Causes of liquidity problems

	<b>Causes of low liquidity ratios</b>
case studies (CS1, CS4, CS5)	<ul style="list-style-type: none"> <li>• Failure to keep liquidity reserves for the low season (tourism business CS5)</li> <li>• Tendency to spend all cash surpluses either to increase stock (CS3) or to buy new equipment (CS6, CS4)</li> </ul>
other firms	<ul style="list-style-type: none"> <li>• 55% of very small enterprises in the sample had a mild or severe liquidity problem, as opposed to 29% of small and medium sized firms (see table in Annexure 19).</li> </ul>

as in Wec01. In other cases, though, high liquidity ratios are real, as in cash-based businesses whose equipment is paid for (as copy shop Ned12).

### 5.1.6 – Inability to cover interest costs

*P: Firms have a coverage problem if their mean interest coverage is lower than 2,5 and a serious problem if it is lower than 1.*

The interest coverage synthesises a firm's operating and financing aspects. A large majority of firms in the balance sheet sample (69%) have a coverage of over 2,5. However, as Table 44 shows, the frequency of coverage problems is substantially higher (over 55%) in more opaque tiers, than in the most transparent Tier A (17.5%). Since the sample is biased towards more transparent firms, this result is positively distorted.

Table 44 – Mean interest coverage

	Coverage < 1	1 to 2.5	2.6 to 20	>20 and no interest	Sample total
Case studies	CS1, CS2, CS4*		CS5, CS6		6
Tier A	3	4	22	11	40
Tier B	5	5	3	5	17
Tier C	3*	2	2	3	10
Full sample	11 16%	11 16%	27 40%	19 28%	67 100%

Source: Calculations based on adjusted financial statements, except for CS4, where they were based on an income statement simulation for the years 1998 and 2000.

Table 45 – Causes of coverage problems

	Causes of low coverage ratios
case studies (CS1, CS4, CS5)	<ul style="list-style-type: none"> <li>• Low profitability (restaurant CS2, furniture business CS1)</li> <li>• High debt (furniture business CS1, township business CS4)</li> </ul>
other firms	<ul style="list-style-type: none"> <li>• Coverage problems more frequent among very young firms (possibly because firms with poor coverage do not survive beyond a few years)</li> </ul>

Table 45 provides some insights gained from case studies on the reasons for coverage problems (see also table in Annexure 19).

### 5.1.7 – Lack of commitment to the business

*P: For growing businesses, problems arise with owners' level of commitment when the member's reward to cash flow (RCF) exceeds 75% with a monthly reward exceeding R7 000. For all businesses, a RCF exceeding 100%, coupled with a monthly reward over R7 000, indicates a serious problem.*

Although the members' remuneration scheme appeared to be clearly relevant in the case studies, data limitations in the balance sheet sample made it difficult to review. Subject to those limitations, the balance sheet sample data suggest that few firms pay their owners a high salary exceeding cash flows (see Table 46). However, a small number of growing businesses pay most of their cash flows to members, apparently failing to see the need for income retention to increase their equity.

*Table 46 – Firms with high members' remuneration*

	young or growing; maxRCF>75% and R>7000 (mild problem)		maxRCF>100% and R>7000 (serious problem)		
	one year	several years	one year	several years	possible member loan effect <sup>36</sup>
Tier A	2	3	4	0	3
Tier B	3	1	0	0	
Tier C	0	0	0	1	
Total	5	4	4	1	3

<sup>36</sup> These are firms whose RCF exceeds 100% and monthly pay exceeds R7000 at one point in their history when including the decrease in members' loan; but the values go back below thresholds when the variation in members' loan is ignored. Their classification as problem firms is conditional on the assumption that the decrease in members' loan represents a trend and not a short-term fluctuation.

This review helps to identify cases of apparent over-remuneration of the member(s), which may hint at a lack of commitment of the members to their business. In three of the businesses singled out in this way, additional information (including sale of business or resignation of members) corroborated this interpretation (see details in Annexure 19).

In the case studies, qualitative sources supported quantitative data, highlighting different attitudes with regard to entrepreneurs' commitment to their business, as illustrated in Table 47.

*Table 47 – Member's commitment in the case studies*

	<b>Remuneration pattern</b>	<b>Working hours</b>	<b>Statements / attitude</b>	<b>Conclusion on commitment</b>
Furniture business CS1	estimated salary: R20 000/month (1998) and R15 000/month (first half of 1999), far beyond the cash flows	not available	apparently embezzled the firms' resources prior to its liquidation	low commitment: personal enrichment
Franchise restaurant CS2	no salary (no profits)	"I spend far too little time in this business"	planning to sell (serial entrepreneur)	pragmatic, rather disengaged
Safety wear business CS3	on average, member salary =75% of cash flows, but <R7 000/month			fine, but salary retention would have helped to build up equity
Tourism entrepreneur CS5	in the first 4 yrs, salary was under R2 000/month, of which part was retained as member's loan until 2000	twelve hours per day seven days per week	"they will have to shoot me several times before I sell"	high commitment

### 5.1.8 – Volatility

*P: Firms with comparatively high standard deviations of their key ratios have a problem of instability.*

The data showed that some firms are significantly more volatile than others. As Table 48 shows, among the 42 businesses for which such an analysis could be done, eleven firms are classified as volatile or very volatile (see Annexure 19 for further details).

*Table 48 – Volatility of firms in Tiers A, B and C<sup>37</sup>*

	very stable	stable with contradictions	volatile with contradictions	very volatile	total
Tier A	4	3	4	3	27
Tier B	1		1	1	9
Tier C			2		4
Total	5	3	7	4	42

A closer look at the data suggests that turnover growth and investment patterns may explain key ratio volatility (see Annexure 19), with the highest volatility being found in firms with high turnover and asset growth, while stability is mainly found among firms with a moderate, but not low, turnover and asset growth.. The examples of CS1 and Gob18 suggest that remuneration patterns may also cause volatility, but the sample was too small to verify this assumption.

## 5.2 – International comparisons

*H10: South African SMMEs display particular weaknesses compared to their international counterparts, notably in respect of their equity ratios.*

Wherever possible, the ratio values are compared to results obtained in European studies. A major source of data for this is a series of papers on SME finance in

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<sup>37</sup> Due to unequal data availability (firms with less than 3 accounts being more frequent in Tiers B and C), the comparison of tiers does not yield significant insights.

various countries, published by the European Investment Bank in 2003, where the authors have used different creditworthiness indicators (equity ratio and current ratio for Germany; equity ratio and credit rating for France; capital structure and inverse coverage ratio for Italy). Therefore, for each indicator, this review selects the comparable results.

### 5.2.1 – Comparison of trade credit terms

Tables 49 and 50 (see also more detailed tables in Annexure 20) provide a comparison of credit terms with a Zimbabwean sample, which, as Fafchamps (1999) indicated, is not significantly different from developed economies (Dun & Bradstreet, as quoted by Fafchamps 1999).

*Table 49 – Comparison of supplier credit terms, SA-Zimbabwe*

	South African SMMEs, 1997-2002 (balance sheet sample)				Zimbabwean industrial firms, 1997-98 (Fafchamps)			
	All (62) <sup>38</sup>	micro & very small (33)	Small (18)	medium (11)	All (167)	Micro (13)	Small (56)	medium (49)
1-15 days	29%	33%	39%	0%	13%	15%	7%	18%
16-30 days	31%	42%	11%	27%	41%	62%	43%	31%
31-45 days	19%	15%	17%	36%	23%	15%	25%	27%
46-60 days	3%	0%	6%	9%	13%	8%	12%	12%
over 60 days	18%	9%	28%	27%	11%	0%	12%	12%
average delay (days)	32	24	41	49	45	30	42	42

*Source: Fafchamps 1999 for Zimbabwe / Balance sheet sample for South Africa (based on firms which do receive supplier credit)*

<sup>38</sup> Table 49 is based on firms which do receive trade credit, and Table 50 on those which do grant customer credit. This led to the exclusion of two SMMEs from Table 49 and 17 SMMEs from Table 50.

Table 50 – Comparison of customer credit terms, SA-Zimbabwe

N=	South African SMMEs, 1997-2002 (balance sheet sample)				Zimbabwean industrial firms, 1997-98 (Fafchamps)			
	All (47)	micro & very small (25)	Small (12)	medium (10)	All (164)	Micro (20)	Small (50)	Medium (43)
1-15 days	34%	40%	33%	20%	11%	30%	16%	2%
16-30 days	15%	24%	8%	0%	38%	30%	42%	49%
31-45 days	9%	0%	25%	10%	21%	10%	14%	30%
46-60 days	19%	28%	8%	10%	15%	15%	14%	9%
over 60 days	23%	8%	25%	60%	15%	15%	14%	9%
average delay (days)	40	33	36	61	50	46	54	41

Source: Fafchamps 1999 for Zimbabwe / Balance sheet sample for South Africa (based on firms which do grant their customers credit)

The two tables suggest that the sample's credit terms are more skewed towards the extremes than in Zimbabwe: there is a stronger representation of very short credit (probably due to greater representation of micro and very small businesses, which do not receive much trade credit), and of very long credit (over 60 days).

Subject to possible distortions due to accounting opacity (with some firms either omitting to account for their trade payables or receivables, or inflating them), this result seems to hint at a frequent problem of working capital management in South African firms, whose slow payment culture may increase vulnerability.

### 5.2.2 – Comparison of equity ratios

International literature generally does not include micro or very small firms, restricting comparisons to the small and medium businesses. The statistics provided in Table 51 suggest that the equity ratios in our sample are slightly lower than those found in EU manufacturing and construction firms or in French SMEs, but higher than those of German SMEs and Italian manufacturing firms.



*Table 51 – Comparison of South African with European equity ratios*

	<b>micro</b>	<b>very small</b>	<b>small</b>	<b>medium</b>	<b>large</b>
South Africa: Balance sheet sample					
mean	52%	44%	20%	28%	n/a
median	52%	35%	24%	31%	
EU manufacturing and construction firms (Wagenvoort 2003b:28)	n/a	n/a	34%	35%	36%
German SMEs 2000 (Hommel & Schneider 2003:84)	n/a	n/a	13%	17%	21%
French SMEs (Dietsch 2003:97)					
<i>first quartile</i>	n/a	n/a	18%	21%	21%
median			32%	33%	33%
<i>fourth quartile</i>			47%	47%	47%
Italian manufacturing firms: median (Guiso 2003:124)	n/a	n/a	20%	23%	24%

This table does not support Hypothesis H10, since equity ratios of South African SMMEs appear to be within the range of values found in Europe. This may indicate that South Africans are able to keep the size of their businesses in line with the limited resources that they are able to invest. This finding will be discussed again in Chapter V Section 1.3.

### 5.2.3 – Inverse coverage ratios

Guiso (2003:130) uses the inverse coverage ratio, with a threshold of 0.7, as indicator of financial fragility<sup>39</sup>. In his sample of small manufacturing firms, he finds that over a quarter of firms exceed this critical threshold. Even when focusing on manufacturing and building firms, SMMEs in the balance sheet

<sup>39</sup> The inverse coverage ratio is calculating by dividing interest and financial charges by the operating profit. This ratio was not part of this thesis' methodology and does not appear in Table 33, but it was computed for the sake of comparison. Guiso (2003) chose the threshold of 0,7 because for a firm with an inverse coverage ratio in excess of 0,7 a decline in profitability equivalent to one standard deviation would make the firm unable to meet its interest obligations.

sample appear considerably less fragile than in Guiso's sample, as Table 52 shows.

*Table 52 – Comparison of inverse coverage ratio with Italian SMEs*

	South African sample		Italian sample
	All	builders and manufacturers	manufacturing firms with less than 30 employees
Median inverse coverage ratio	0.13	0.19	0.312
Percentage of firms with inverse coverage >0.7	6.3%	0.0%	27.7%

*Source for the Italian statistics: Guiso 2003:127*

Although our sample's inherent bias calls for caution, these results serve to weaken the frequent assumption that SMMEs are significantly less creditworthy in South Africa than elsewhere. Table 53 summarises the observations from international comparisons. More details on comparisons of ratios can be found in Annexure 20.

*Table 53 – International comparison of ratios*

Ratio	Comparables found in literature	Remarks / conclusion
Trade credit terms	Zimbabwean industrial firms, 1997-98 (Fafchamps 1999)	Firms in our South African sample are more likely to have either very short, or very long periods of trade credit
Equity ratio	EU manufacturing and construction firms (Wagenvoort 2003b:28) German SMEs (Hommel & Schneider 2003:84) and French SMEs (Dietsch 2003:97) Italian manufacturers: median (Guiso 2003:124)	On average, firms in our South African sample have higher equity ratios than German SMEs and Italian manufacturing firms. After controlling for size effects, equity ratios are similar to French SMEs and EU manufacturing and construction firms.
Interest coverage ratio	Italian manufacturers: median (Guiso 2003:124)	On average, firms in our South African sample have far better interest coverage than Italian firms

Having examined each of these aspects separately, it is time to consider a more holistic assessment of the creditworthiness of SMMEs.

### 5.3 – Balanced appraisal

Based on the distinction between ‘fundamental’ and ‘financial’ aspects, SMMEs were classified into the six categories defined in the conceptual framework, namely *cruising*, *uncertain*, *limping*, *creeping*, *drowning* and *distressed*.

As Table 54 shows, the proportion of creditworthy firms appears to be linked to the firm’s accounting quality, at least in the *cruising* and *distressed* categories. This relationship is not surprising, considering the expected effect of good management on both financial transparency and creditworthiness. However, it has implications for this research in terms of bias of the sample data. Indeed, the balance sheet sample is, per construction, biased towards businesses with better accounting: a number of businesses had to be removed from the sample for lack of usable financial statements. Considering this bias and the apparent relationship found above, it is probable that the sample overestimates the creditworthiness of South African SMMEs.

Table 54 – Creditworthiness typology and accounting transparency

	<b>Cruising</b>	<b>Uncertain</b>	<b>Limping</b>	<b>Creeping</b>	<b>Drowning</b>	<b>Distressed</b>	<b>Total</b>
Tier A	13	11	6	5	4	1	40
Tier B	3	5	2	2	2	2	16
Tier C	1	4	2	0	0	3	10
Total	17	20	10	7	6	6	66 <sup>40</sup>

Annexure 20 provides a more detailed analysis and profile of each category in the creditworthiness typology. Although the limits are fluid, the six categories seem to have their own identity and typical features. The tentative profiles of firms in each category are summarised in Table 55.

<sup>40</sup> The sample size here includes CS4 and two versions of Ned6 (see Annexure 21).

Table 55 – Tentative profiles of SMMEs in each creditworthiness category

Category	Tentative profiles
<b>Cruising</b> (Total score $\geq 15$ ) 17 businesses	a) “lifestyle businesses” traditional low-risk trade firms (retail, wholesale, restaurants); often franchises b) “successful entrepreneurial ventures” innovative firms managed by their founder, with high growth, profits and modest current debt (financed either by equity or ISA)
<b>Uncertain</b> $8 \leq \text{Total score} < 15$ Fund-score $> 4$ Fin-score $> 5$ 20 businesses	a) very young conventional firms insufficient turnover, often equity or interest coverage problems; but these may level out as the firm grows. b) high-differentiation business services volatile, often with working capital problems c) capital-intensive firms, such as builders or manufacturers often higher debt, tense liquidity or working capital problems
<b>Limping</b> $8 \leq \text{Total score} < 15$ Fin-score $\leq 5$ Fund-score $> 4$ 10 businesses	a) young capital-intensive businesses low equity, often problems with interest coverage or equity (may level out as firm grows) b) older firms with high working capital needs high overdraft these firms are usually relatively stable
<b>Creeping</b> $8 \leq \text{Total score} < 15$ Fund-score $\leq 4$ Fin-score $> 5$ 7 businesses	a) young firms with poor potential, but highly capitalised b) ‘passionate ventures’, not profitable, but highly capitalised [c) poor accounting]
<b>Drowning</b> $8 \leq \text{Total score} < 15$ Fund-score $\leq 4$ Fin-score $\leq 5$ 6 businesses	Young/very young SMMEs which are both unlikely to reach breakeven (poor business idea, poor pricing) and financially deficient, with a slim equity and high short-term debt
<b>Distressed</b> Total score $< 8$ 6 businesses	Mostly young firms, undercapitalised, and unable to reach breakeven, or overpaying their members. All firms are illiquid and nearly bankrupt.
Total: 66 businesses	

To summarise on the creditworthiness of the firms in the balance sheet sample, while keeping in mind the sample's bias, this review has revealed a number of creditworthiness problems. However, the South African SMMEs in the sample do not score badly compared with European firms. The main difference to European firms seems to be the frequently slow working capital cycle – presumably a consequence of South Africa's slow payment culture.

On individual weaknesses, the review has revealed that:

- Lack of turnover is a problem for over 20% of SMMEs, with many firms unlikely to attain breakeven and three presenting a problematic growth pattern, in which fixed costs grow faster than turnover;
- The need for working capital is usually high, except among food retail SMMEs. This comes mainly from customers' slow payment, possibly due to ineffectual debtor management, and leads to a considerable, and sometimes unsustainable, use of supplier credit;
- With a median equity ratio of 34%, the sample is not generally undercapitalised. Businesses in the 'small' category and in asset-intensive sectors are more likely to be undercapitalised;
- In 20% of firms, short-term debt is excessive compared to the maturity structure of assets. The problem often results from a negative equity;
- Sixteen firms present liquidity problems, with an overdraft exceeding their cash flow. Six of the seven firms with a high overdraft (in excess of 25% of total assets) appear unlikely to recover as they are unable to generate an equivalent cash flow;
- The interest coverage statistics are better than in comparable Italian businesses, possibly because South African SMMEs have a more limited access to financial debt. The 21 firms with a mean coverage ratio under 2,5 were predominantly very young, highly indebted and/or poorly performing;

- Five firms paid their members a high salary exceeding cash flows, thus impairing their resources, while nine young or growing firms had a remuneration pattern impeding accumulation of equity for growth;
- Eleven firms were identified as volatile. Instability tended to be exacerbated by high turnover and asset growth as well as excessive remuneration patterns.

Meanwhile, the holistic assessment has revealed that 56% of the firms in the sample could be classified as either cruising or uncertain – i.e. raising no serious concern of creditworthiness. A quarter of the sample, however, was either limping (i.e. characterised by a weak financial structure in spite of its good operating potential), or creeping (having a strong financial backbone but little chance of success). The remainder, by combining fundamental and financial deficiencies, threatened to fail.

Although these proportions are not representative of the South African SMME population, the review was helpful in drawing the profile of each category. More importantly, the creditworthiness diagnosis of each firm will be useful in testing for relationships with use of finance and financial constraint, in Section 6.

But before this is done, a dynamic look at the case studies will consider Hypothesis H11 on the superior creditworthiness of limping over creeping firms (Section 5.4).

## 5.4 – The dynamics of creditworthiness

The following hypothesis had been proposed in Section 3.3:

*H11: A far-sighted creditworthiness assessment must take into account the difference between fundamental and financial aspects, as follows:*

*a) Ability to reach breakeven, members' commitment and adequacy between financial structure and operating performance are the three most fundamental creditworthiness factors in the long term;*

*b) If the fundamentals are right, then lack of equity, excessive short-term debt and lack of liquidity can be relieved over a few years through adequate financial support.*

Test: Firms with poor ratios in respect of breakeven, members' commitment and capital adequacy are less likely to honour their credit commitments in the long term, than firms with good fundamental ratios but poor equity or liquidity ratios.

To illustrate how a creditworthiness assessment can change over time, two case studies were rated at three different points in time: furniture manufacturer CS1 and tour operator CS5. A slightly more subtle assessment method, with intermediary thresholds, was adopted in order to capture changes from one year to the next. The results are showed in Table 56 (see also more detailed tables in Annexure 23). These cases had a similar initial total score (12/16 and 13/16) but different types of weaknesses (mainly fundamental for CS1, purely financial for CS5). The retrospective review shows the contrasting evolutions of both firms.

#### **5.4.1 – Furniture business CS1: From ‘creeping’ to ‘distressed’**

CS1's creditworthiness gradually deteriorated from an uncertain situation early 1998 to financial distress in 2000, when it was liquidated.

In January 1998, less than two years after the franchise business was started, it suffered from a lack of turnover, which could still appear as an early-stage weakness. However, the combination of relatively high debt and poor profitability caused interest coverage problems. Together, these two factors created a poor fundamental score. Apart from the low equity, though, the financial ratios were acceptable.

Later, the firm's inability to break even became clear, and, coupled with the owner's unsustainable salary, caused an aggravation of the fundamental score, pushing the business from the uncertain into the drowning and finally the distressed category. It is noteworthy that over these years, CS1's financial score deteriorated more slowly than the fundamental score. This observation supports the belief that the fundamental score is more appropriate to anticipate problems.

Dysfunctional market or insufficient creditworthiness?

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Table 56 – Evolution of CS1's and CS5's creditworthiness assessments

	Furniture business CS1			Tourism business CS5		
	Period up to Jan 1998	Period up to Dec 1999	Jun 2000	Period until Feb 2001	Period until Feb 2002	Period until Feb 2003
<b>Penalties:</b>						
Turnover deficiency	0.5	2	2			
Excessive member remuneration		1	2			
Excessive financing costs	2	2	2			
Lack of working capital						
Excessive debt	0.5	1	1	2	1	1
Excessive short-term debt						
Lack of liquidity reserves			1	1	0.5	
<b>Scores:</b>						
<b>Fundamental score (out of 6)</b>	<b>3.5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>6</b>
<b>Financial score (out of 8)</b>	<b>7.5</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>6.5</b>	<b>7</b>
<b>Instability (out of 2)</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Total score (out of 16)</b>	<b>12</b>	<b>9</b>	<b>7</b>	<b>13</b>	<b>14.5</b>	<b>15</b>
<b>Category</b>	<b>Creeping</b>	<b>Drowning</b>	<b>Distressed</b>	<b>Limping</b>	<b>Uncertain</b>	<b>Cruising</b>



### **5.4.2 – Tourism business CS5: From ‘limping’ to ‘cruising’**

The opposite evolution was observed in tourism business CS5.

Having started with a slim equity base and accumulated two years of losses, the business found itself in a very uncomfortable financial situation in 2001, with a negative equity and tense liquidity. By that time, though, it had already reached breakeven and was able to cover its financial charges, so its fundamental score was good, justifying the classification as limping.

Thanks to the member’s commitment, the retention of the member’s salary and a further improvement of turnover and operating profits, the business slowly accumulated equity and cash, moving into the uncertain category in 2002. Eventually, the tremendous turnover growth and operating profitability helped to restore an acceptable, albeit still low, level of equity and allowed the firm to graduate to cruising at the time of the study.

The comparison of CS1 and CS5, although anecdotal, is consistent with the hypothesis that limping firms, if supported, are more likely than creeping firms to strengthen their financial structure and become sustainable.

## **Section 6. The relationship between creditworthiness and financial constraints**

The next paragraphs will present the results of the empirical testing of Hypotheses H12-13, as proposed in Section 3.3.

### **6.1 – Creditworthiness and financial constraints**

*H12: Creditworthiness is negatively related to the level of financial constraints, i.e. the least creditworthy enterprises are most likely to be constrained and vice versa.*

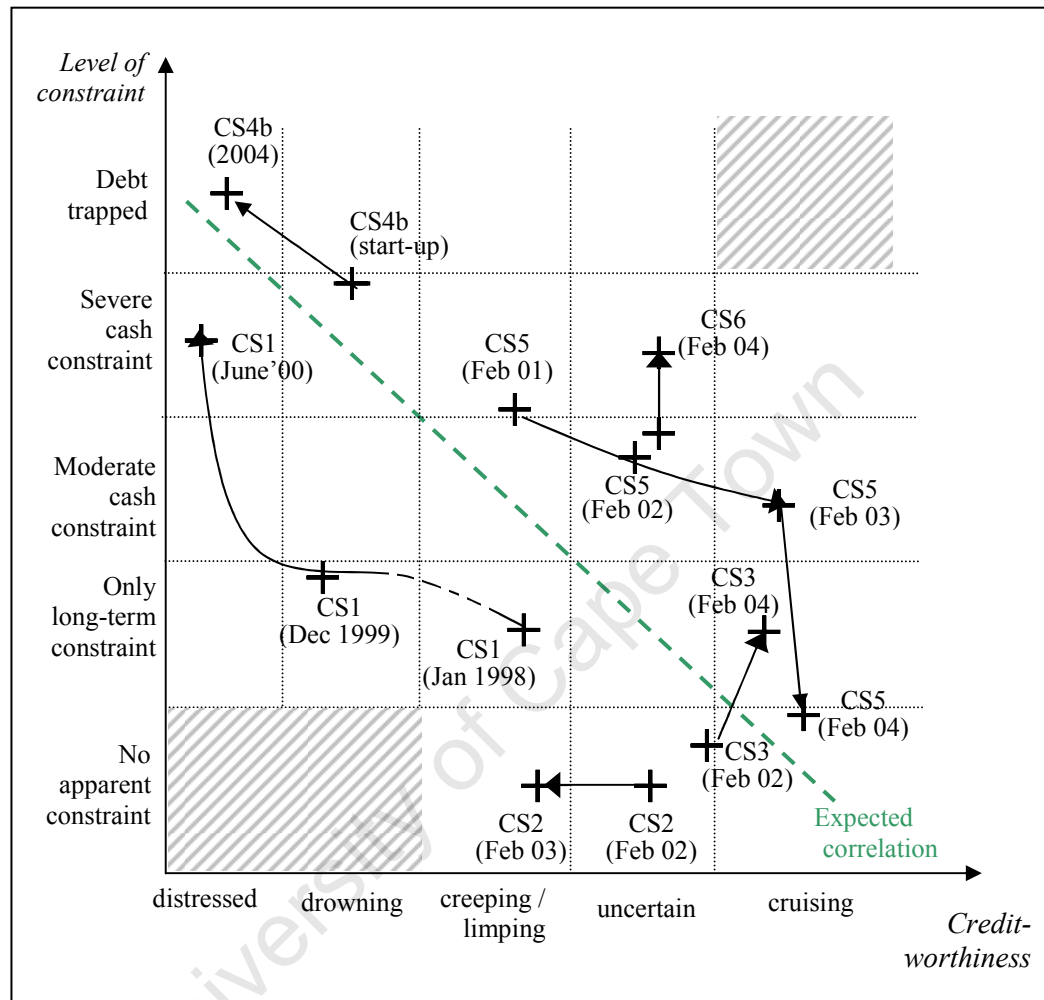
Test: Among case studies, financial constraints are more severe in firms with a poorer creditworthiness.

Since only the case study data cover the dimensions of financial constraints and creditworthiness, this test can only be done on six firms. To mitigate this limitation by examining a more substantial number of data points, the history of all case studies was included in the review. The result is illustrated in Figure 24.

At the bottom end, CS1 and CS4 exemplify the expected relationship between the strongest level of constraint (debt repayment constraint) and the poorest creditworthiness category (distressed). The evolution of CS1 also approximately follows the expected relationship, being labelled as 'creeping' in January 1998, at a time when it experienced only investment constraints (in spite of bearing heavy financial debt). In December 1999, CS1 was already drowning, although its cash constraints appeared still moderate from the financials. Only in the last six months did the cash constraints severely deteriorate. CS4b has been uncreditworthy (drowning) from the start, experiencing severe cash constraints, which led to a debt-trap situation after only a few months.

At the top end, the correspondence between unconstrained and creditworthy firms is less evident; CS2 is creeping but shows no signs of constraints, while CS3 and CS5 are classified as cruising but do experience moderate financial constraints. Even CS6, in spite of its severe cash constraints, remains in the second-to-best creditworthiness category.

Figure 24 – Case studies' levels of financial constraint and creditworthiness



Notes: Methodology for financial constraint: see Chapter II; for creditworthiness assessment: see Chapter IV. The arrows approximate the evolution of the firm's positioning on the diagram, from the first year for which data are available, to the time of the case study.

The positions of cases CS1(1999), CS2, CS5(2003) and CS6 on Figure 24 deviate substantially from the axis representing the expected relationship. The distance is even fairly large if one considers that the model cannot be expected to generate cases in the extreme corners of the diagram, which have been greyed out: indeed, by construction, a firm that is debt-trapped would inevitably suffer from equity and liquidity problems, and cannot be labelled as cruising. Similarly, to be qualified as drowning or distressed, a firm would need to experience a

number of financial deficiencies, which cannot but imply either long-term, or liquidity related constraints.

An appropriate interpretation of this finding requires an individual consideration of these four case studies. After its third year of operation, in 1999, CS1 had proven its inability to reach breakeven. The financial charges, as well as the generous member's salaries, placed great strain on the slim operating profits and the equity ratio had dropped below 5%: a clear case of poor creditworthiness. That the firm, in these circumstances, experienced only moderate financial constraints, seemed to be the result of a sluggishness in the bank system: having granted substantial funds at start-up, followed by an overdraft facility two years later on the basis of falsified financial reporting, the main bank had, in the following year, maintained the facilities and CS1 had been able to obtain vehicle finance from a second bank. This particular example indeed illustrates the bank's lack of consideration of a gravely deteriorated creditworthiness.

CS2 was a different case altogether, not least because the financial support it gained from the bank was indirect through a personal loan to its owner. As a consequence, the bank was not expected to monitor closely the performance of the business. In addition, in spite of its failure to reach breakeven and generate profits and a salary for its member, the business did not, strictly speaking, run an immediate financial risk. Liquidity levels were acceptable and the firm's substance value was high. Under this circumstance, even if it had wanted to, it would have been difficult for the bank to justify a withdrawal or restriction of its support.

CS5, which was classified as creditworthy but complained of liquidity shortages especially in winter, was also no clear case of bank misjudgement. Indeed, the business had received extensive support for the acquisition of its vehicles, and was still able to tap into this source for more investments. It tended, however – certainly for cost reasons – to use internal liquidity rather than exclusively long-term bank funds – to finance these fixed assets. The tight liquidity that resulted, especially in winter, could have been mitigated through a more extensive use of

instalment sale facilities. What is more, CS5's bank had repeatedly offered the owner an overdraft facility to bridge the slower cycle of cash in winter – an offer which the owner had repeatedly declined for fear of being “caught in a circle of debt”. Eventually, towards the end of the case study and possibly facilitated by our discussions, the business accepted the offered overdraft and put an end to its liquidity constraints.

The last is crating firm CS6, whose creditworthiness analysis had revealed generally sound potential, with a sustained turnover growth, well-controlled costs and extensive loans by the minority member, ensuring a reasonable equity ratio. However, resources available for investment were low for a business that required a substantial amount of space, machinery and vehicles: their application for industrial property finance had been rejected and the business turned to immobilising short-term resources in fixed assets. The financial tightness, thus, was shifted to more immediate liquidity shortages, aggravated by sloppy debtor management, with trade receivables reaching as much as 96 days of turnover in February 2004. The business benefited from an unusually high overdraft limit (8,3% of its turnover), but exceeding this limit became the norm rather than the exception. While CS6's liquidity shortage was real, extending the overdraft limit would not have resolved the problem. The answer was more likely to lie, partly, in more stringent debtor management and, partly, in finding more appropriate solutions for the financing of long-term assets. But, apart from the unsuccessful application for property finance, the business did not seem to be aware of the problem or to have solicited the bank's support in this respect.

An optimistic conclusion on this review would be that, at best, the relationship expected in Hypothesis H12 is not automatic, and that there is some variance in the way it applies to individual enterprises. A more pessimistic interpretation would be that financial constraints frequently do affect firms that would not deserve them, while other businesses, in spite of their low quality, are able to experience lower levels of constraints – however, the responsibility for this status quo cannot be primarily attributed to misjudgements by the bank, and the

examples available (CS1, CS5) suggest that the expected relationship may be restored after some time.

To appreciate the probably exaggerated character of the deviations from the norm represented on Figure 24, it is useful to remember that, in collecting data for the case studies, a particular effort was made to target constrained firms, as it was feared that non- or low-constrained case studies would not deliver enough insights into the relevant issues.

To shed yet more light on this result and restore a more representative picture, therefore, the analysis above needs to be complemented by a broader-based review. Section 6.2 focuses on the relationship between creditworthiness and use of finance in the balance sheet sample.

## 6.2 – Creditworthiness and access to finance

*H13: Creditworthiness is positively related to use of bank finance, except for the most creditworthy firms, where lack of need is likely to cause a low utilisation of bank finance.*

Test: In the balance sheet sample, the least creditworthy and the most creditworthy firms have a lower use of bank debt than the firms in the middle range of creditworthiness.

Reviewing the relationship between creditworthiness and the use of finance presents various caveats:

- The sample's bias and small size, causing a small number of observations in the poorer categories;

- The possible divergence between use of and access to finance, with only the former being visible from the financial statements<sup>41</sup>;
- The time mismatch, with our creditworthiness assessment sometimes occurring several years after bank facilities were granted.

Nevertheless, Table 57, which shows the frequency of utilisation of various types of finance in each creditworthiness category, does provide valuable insights to triangulate the results from Section 6.1.

*Table 57 – Proportion having accessed bank funds, in each category*

Category	Instalment sale	Bank overdraft	Term loan	Sample size
Cruising	50%	39-50%	22%	17
Uncertain	55%	40-50%	20-25%	20
Limping	64%	91%	9-18%	10
Creeping	0%	40%	0%	6
Drowning or distressed	45%	55-64%	8%	12
<b>Total</b>	<b>49%</b>	<b>51-58%</b>	<b>15-18%</b>	<b>65</b>

*Note: Drowning and distressed firms have been analysed jointly owing to the small sample sizes.*

The table suggests that the relationship between creditworthiness and use of finance depends on the type of facility considered.

The use of **term loans** appears to be positively related to creditworthiness; there is only one example of a term loan among the least creditworthy categories, viz. the furniture business CS1 (distressed). It is possible, however, that more examples similar to CS1 would have been uncovered if the sample was not biased. It is also possible that the relationship suggests an opposite causality, namely that long-term finance helps firms to strengthen their financial structure.

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<sup>41</sup> For example, the existence of minor negative cash amounts in a balance sheet can hint at a low utilisation of an overdraft facility, or at an occasional unauthorised overdraft, while the absence of such amounts can mean an absence of the facility or the existence of a facility that is not used. A review of interest charges and cash balances helped to apply best judgment, but when no clear conclusion could be reached, firms were classified as a possible case of overdraft, leading to low and high estimates of the numbers of firms with overdraft. The same approach was used for term loans.

Subject to these limitations, the data on term loans support the hypothesis that banks are careful to discern the most deserving firms when attributing their riskiest loans.

The use of **bank overdrafts** and **instalment sales** follow a different pattern, with three noteworthy facts.

- (1) The expectation that the most creditworthy firms would (owing to their more limited needs) have a below-average use of bank finance is not confirmed by data. Subject to the average being distorted by the sample's bias, its similarity with the values for cruising firms hints at the ability of supply factors to override demand at the top end of the SMME spectrum. This echoes the experience made by tourism business CS5 which, although reluctant to apply for a bank overdraft, eventually accepted its bank's repeated offers, even though the amount was higher than what the owner would have desired.
- (2) In the middle range of creditworthiness, limping firms are highly dependent on these forms of finance, while creeping firms use them significantly less. The explanation arguably lies on the demand side, as the need for these facilities depends on the firm's own resources as well as the buoyancy of business activity. It is also possible that the higher risk rating of limping firms makes them more dependent on overdraft and instalment sales, as banks would find it too risky to grant them term loans.
- (3) In addition, the use of overdraft and instalment debt in drowning and distressed firms is close to average. Here, supply-side considerations are likely to be predominant, illustrating banks' relative success in limiting uncreditworthy firms' access to finance. Nevertheless, approximately half of the drowning or distressed firms do hold bank funds on their balance sheets.



Overall, this review suggests that banks are relatively able to discern creditworthiness when awarding long-term loans, while the granting of less risky types of facilities such as instalment sales and overdrafts is more strongly determined by demand factors. Limping firms, in spite of their risks, benefit most from bank facilities. Misjudgements on creditworthiness do however take place, leading to distress of debt-stricken firms.

## **Section 7. Conclusion**

The purpose of this chapter was to investigate the creditworthiness factor as a potential reason for SMMEs' financial constraints. A creditworthiness model was thus developed, tested and applied. This model focuses specifically on the long-term viability of SMMEs by distinguishing between fundamental and financial weaknesses, with it being possible to cure the latter with appropriate financial services. The model was used to classify the 66 firms from the balance sheet sample as cruising, uncertain, creeping (if they are currently financially sound but fundamentally not successful), limping (if their fundamentals are sound but their financial structure is shaky), drowning or distressed.

Applying the model to our sample created a first set of ratio values for South African SMMEs, which can be used as reference in future research. These ratios were also, where possible, compared to existing international statistics, showing that the businesses in our sample were not generally of poorer quality than European firms. The synthesis of ratios shows relatively good ratings, with the bulk (56%) of our sample being classified as either cruising or uncertain, while only 18% are in the two least creditworthy categories. However, this is unlikely to reflect the whole South African SMME population: indeed, we found some evidence that creditworthiness is positively related to accounting transparency, which means that the balance sheet sample is probably biased towards more creditworthy SMMEs.

The creditworthiness model also yielded a testable implication on the likely evolution of limping as opposed to creeping firms. The expectation was that

firms with good fundamentals but a weak financial structure (limping) would be more likely to recover and become successful ventures, than firms with poor fundamentals but a strong initial financial structure (creeping). The dynamic review of case studies, especially CS1 and CS5, offered substantial support for the predictions of our theory.

We also find that the level of financial constraints on the one hand and the use of bank finance on the other hand are only weakly related to creditworthiness. The relationship is most visible in the use of long-term loans, where South African banks seem to be successful in screening good debtors. By contrast, overdraft and asset finance would appear to be granted according to a more complex model: in the high-creditworthiness segment, where the need for bank finance is presumed to be low, supply factors seem to override demand, supporting the maxim that banks prefer to grant finance to those which need it least. In the middle range, though, demand factors would appear to be more decisive, explaining the high use of bank debt in limping firms, compared to the low use in creeping firms. As to the least creditworthy enterprises, granting of bank facilities is substantial, probably owing to a strong demand, but not higher than average, hinting at some ability of banks to limit their exposure to bad accounts. These interpretations remain speculative and would need to be tested by additional research.

# **Chapter V**

## **Conclusions**

University of Cape Town

## **Section 1. Financial constraints, market dysfunction and insufficient creditworthiness: Connections between the constructs**

The research objectives on page 9 proposed the following agenda:

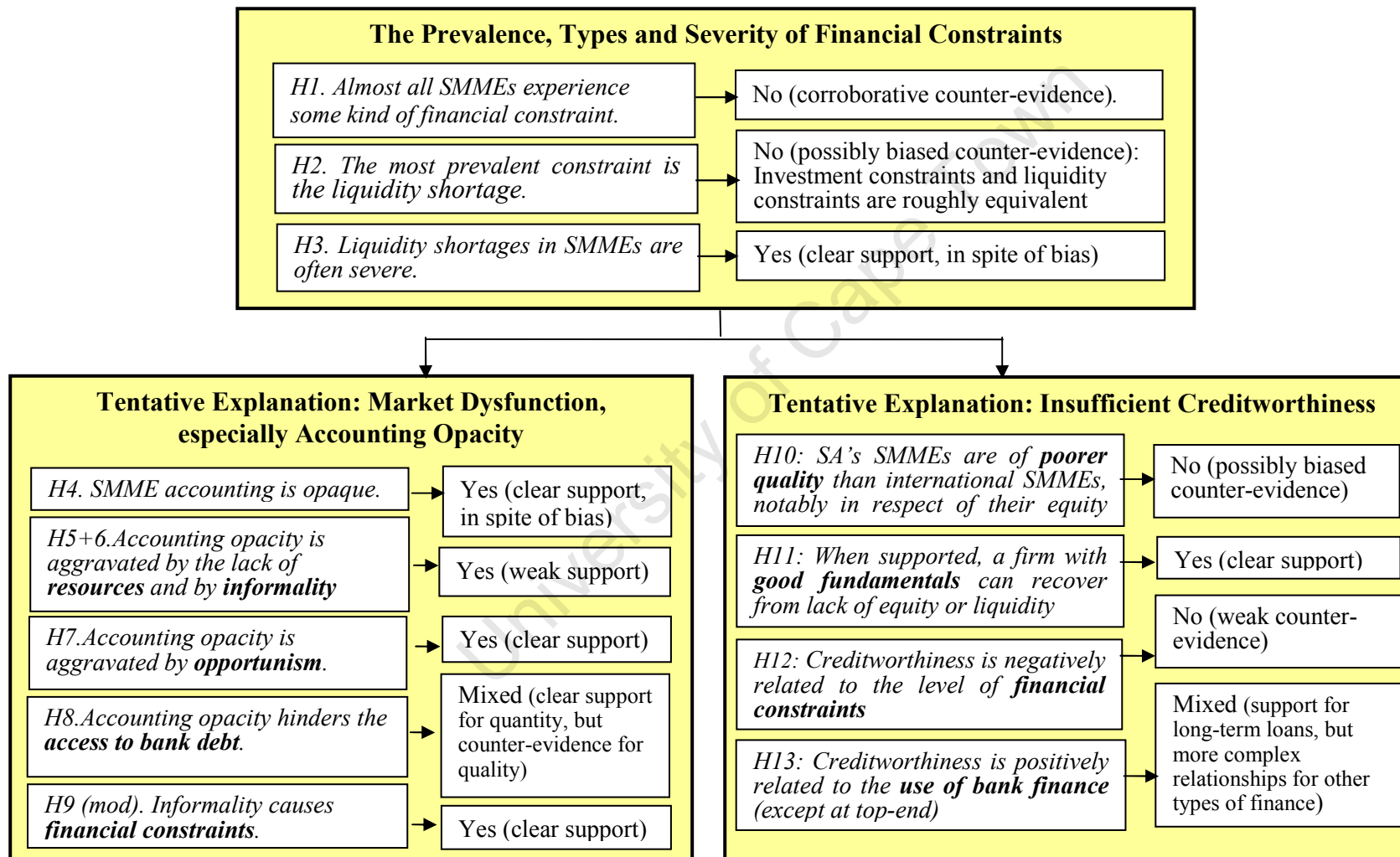
- 1) exploring the main aspects of financial constraints among South African urban SMMEs,
- 2) assessing the informational opacity of SMMEs and its possible effect on access to finance, and
- 3) examining SMMEs' financial profile to identify possible evidence of poor creditworthiness and its impact on access to finance.

Accordingly, the last three chapters have explored in some depth SMMEs' financial constraints as well as tentative explanations for them: accounting opacity (as a factor of market dysfunction) and lack of creditworthiness.

This investigation, which in several respects was venturing into new areas, has gone to some length to avoid the excessive simplifications and amalgamations found in the socio-political debate. Nuanced concepts have been defined and their various dimensions laid out. Original models have been designed to measure empirically the relevance of these concepts. Furthermore, a database of financial statements of micro, very small, small and medium formal enterprises from the Cape Town area has been established, which, in spite of its weaknesses, is believed to be unique in its kind on the African continent.

The developed concepts and evaluation models were applied to this database, in order to test a number of hypotheses, with varied success. Figure 25 illustrates the hypotheses that were tested and the resulting findings. Rather than reviewing the thirteen hypotheses, one by one, the next sections concentrate on those which produced clear evidence.

Figure 25 – Overview of hypotheses tested



## 1.1 – Financing constraints

On financing constraints, there was unambiguous evidence, verbalised by the business owners themselves, that a substantial portion of SMMEs were non-constrained. According to the data, that proportion was estimated at between 20% and 40%. Three remarks can help to establish whether this finding is biased. On one hand, the apparent correlation between accounting transparency and financial soundness suggests that the quality of the sample's SMMEs is above the average, causing a risk of over-estimation of the proportion of unconstrained firms. On the other hand, modest retail enterprises, which form a great part of the SMME population and are likely to operate under low constraints due to their typically low growth, are underrepresented in our sample: this effect may balance the possible over-estimation of non-constrained firms. In addition, the difficulties encountered when seeking case study candidates that were effectively constrained *de facto* support the assumption that many enterprises in the formal economy are unconstrained. These remarks imply that the 20% to 40% of non-constrained firms may be too low, rather than too high an estimate.

This result indicates that financial constraints, no matter how hotly debated, are not *the* key obstacle to survival of the hundreds of thousands of South African formal business owners. They remain, however, an essential growth limitation for the more entrepreneurial and innovative business ventures. Since these ventures are deemed to have the greatest potential contribution to economic growth, employment and national investment, research on financial constraints remains highly relevant.

On the types and severity of financial constraints, the methodology adopted suggested that investment constraints were approximately as frequent as liquidity constraints, but that cash shortages usually had more severe effects on the businesses. Some evidence was presented, though, to suggest that the

two types were occasionally linked, when a business made up for the lack of long-term funds by using short-term resources to invest in fixed assets.

This indicated a gap in the market in providing SMMEs with financing solutions to cover their long-term needs: while the acquisition of some types of assets, particularly vehicles and computer equipment, could easily be supported by instalment sale facilities, there seemed to be a need for similar standardised, easy-to-use solutions to finance industrial property or specialised equipment. Short-term debt, of course, was frequently available by means of overdraft facilities, but there were indications that such facilities did not always fulfil their purposes, as liquidity constraints persisted in spite of these facilities.

## **1.2 – Accounting opacity**

In a first attempt to explain financial constraints, the functions and dysfunction of financial markets were reviewed, with a particular emphasis on the exchange of accounting information.

The financial statements produced by SMMEs were analysed in an uncompromising way, and assessed in terms of their ability to provide faithful and useful insights on the operations and financial status of the business. The results varied from one business to the next, but in general the information produced was found to be insufficient in quantity and in formal quality, often in contravention of legal requirements for close corporations or companies. More worrying yet, there were a number of instances where intrinsic data found in the financial statements were fraught with inconsistencies or failed to make sense considering the firm's activity and characteristics. In some of the more inconsistent cases, business owners were suspected to have intervened in the accounts to get them to convey a particular picture of their business.

On the reasons for accounting opacity, it was difficult to find clear support for the theories of lack of resources and informality, due to the wide variance observed and the small number of data points available to test for this possibility. Conversely, the data strongly supported the opportunistic accounting hypothesis, especially the expectation that firms that were or had been applying for finance were more likely to manipulate their accounts and have a high number of inconsistencies in their financial statements.

The effect of accounting opacity on access to finance was not as expected. Against expectations, the data showed a more limited, rather than better, access to finance for the more transparent enterprises. A further test, done to interrogate this counter-intuitive result, yielded a substantially better access to bank debt for those firms that produced a large quantity of accounting information, regardless of quality. Bank file and interview data were used to triangulate this evidence and yielded a strong, albeit sad, interpretation of these results. Subject to representativeness of the data, South African banks appear to create a double incentive on their SMME clients, namely the incentive to maximise the quantity of accounting information computed, while distorting this accounting information as needed to convey the desired view. The fact that the bank does not ask for auditors' reports and does not seem to compare different versions of financial statements, *de facto* allows abuses by unscrupulous accountants and business owners, occasionally at great cost for the bank.

There was more obvious support of the link between informality (defined as the failure to implement basic financial management practices) and financial constraints. But while this test was conceived as an alternative approach of the accounting opacity hypothesis, with informality used as a proxy for accounting opacity, the positive result may reveal a spurious effect in the sense that more formal firms are better managed and therefore less prone to financial constraints, regardless of market mechanisms.



### **1.3 – Creditworthiness**

The second broad tentative explanation for financial constraints was the lack of creditworthiness in South African SMMEs. Again, the financial statements collected, after being adjusted to improve their reliability, were subjected to in-depth analysis in order to generate ratios on a number of aspects that had been identified as relevant for a creditworthiness assessment. According to sets of thresholds defined with the support of international literature, the ratios obtained were classified as acceptable, poor or very poor, following which each firm in the sample was allocated to a creditworthiness category, depending on the number of poor or very poor scores.

A first patent result of this process was the finding that the enterprises assessed were not usually of poor quality compared to international data. Their equity ratios, in particular, which had been expected to be low owing to the lack of resources available for investment of most South African entrepreneurs, were found to be in line with European norms. Financial fragility, measured by the inverse interest coverage, was also found to be substantially better in our sample than in a roughly comparable Italian sample. The main area in which the SMMEs in our sample appeared to face stronger difficulties was their working capital cycles, with larger proportions of firms having either no access to supplier credit, or considerably long trade debt periods, raising the risk of bad debt and chain reactions. This latter finding, though, may have been distorted by accounting opacity.

Again, the suspicion of a sample bias must be raised, since creditworthiness appeared to be positively related to accounting transparency. Conversely, as discussed in Section 1.1, the sample strongly under-represented the multitude of modest neighbourhood retail enterprises, which, in spite of their rudimentary accounting, are likely to present few creditworthiness problems, so that the bias discussion cannot be unambiguously resolved.

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The acceptable equity ratios of South African SMMEs raise two more observations. Firstly, the international comparison had to be limited to the small and medium enterprises, as the micro and very small enterprises, which form the bulk of South African SMMEs, are more marginal in developed economies and as there are no widely available ratio data on them. The equity ratios of those micro and very small enterprises were, in our sample, significantly higher than those of small and medium enterprises, illustrating their apparently better creditworthiness (*ceteris paribus*). However, and this is the second observation, higher equity ratios could also be interpreted as proof of their more limited access to debt, and it could well be that the reason for their particular difficulty lies in their insufficient size, which raises transaction cost problems (see below). This would be a different interpretation of the insufficient levels of capital of South African SMMEs, not in terms of equity ratio and creditworthiness, but in terms of affordability of a business size sufficient to act as a credible player on the credit market.

Coming back to our creditworthiness model, the enterprises were classified into six categories, depending on their scores in fundamental and financial types of weaknesses. The expectation was raised that, when adequately supported, firms with sound fundamentals but a weak financial structure ('limping') were more likely to succeed in the long run than firms with a strong financial backbone but poor fundamentals ('creeping'). A comparative dynamic review of furniture case study CS1 and tourism case study CS5 strongly supported this hypothesis, with CS1's creditworthiness degrading from a 'creeping' verdict to liquidation, while CS5's score improved from 'limping' to the best category, viz. that of 'cruising' firms.

The study of the link between creditworthiness and financial constraints yielded, once more, ambiguous results. The review of case studies found a number of deviations from the expected relationship, with two firms (CS1 in 1999 and CS2) experiencing low levels of constraints compared to their

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poor fundamental quality, while two other firms (CS5 and CS6) suffered from rather severe liquidity constraints considering their relatively good creditworthiness scores. These cases provided palpable evidence of the occasional divergence between a firm's merit and its financial comfort, but the contextual details exposed indicate that, with the exception of CS1, banks were not usually to blame for this discrepancy.

The relationship between creditworthiness and use of finance yielded interesting thoughts about the interaction of supply and demand factors at various levels. For long-term loans, South African banks seemed able to screen out risky debtors and grant their facilities to the most deserving ones – with CS1 representing a notable exception. For other types of facilities, demand and supply naturally follow opposite curves: demand is highest and supply is likely to be the most parsimonious in the least creditworthy firms and vice-versa. In the equilibrium, banks appeared able to 'create their demand' in the most creditworthy segment and to contain the demand coming from poor quality SMMEs, while in the middle range, they generally followed demand patterns. These reflections would need to be tested in further research.

#### **1.4 – A subtle balance of multiple factors**

Overall, neither the accounting opacity hypothesis, nor the creditworthiness hypothesis, is strongly supported by the evidence presented. The ambiguity of empirical results probably reflects the fact that granting bank debt, and thus resolving financial constraints, is a process that obeys multiple criteria and factors. Creditworthiness is one of them, as is the (perceived) quality (which includes quantity) of the information delivered by the business to its bank. Undoubtedly, there are other relevant aspects, such as the entrepreneur's personal skill in approaching his/her bank, the existence of network effects, the securities offered, or the amount of debt required and its sufficiency or insufficiency in a transaction cost perspective. Some of those

aspects, although peripheral to this thesis, have been analysed and have yielded relatively strong results, especially in the area of term loans (see Chapter III Section 8 and Annexures 24 to 29).

Another factor, which is less evident *a priori* but whose relevance is strongly suggested by case study data, is the frequent ambiguity of entrepreneurs' demand for finance, with entrepreneurs lamenting the lack of liquidity but reluctant to accept their bank's offer of an overdraft facility. Debt aversion, the lacking self-consciousness of entrepreneurs and maybe excessive perceived costs inhibit the process of transforming a confused need into a formal, well-prepared application for finance, which a bank can formally accept or reject. Although cases of self-rationing are often rooted in a perception of low chances of success, they also involve other processes. Under these circumstances, a relationship between a phenomenon like financial constraints and each of its factors can only be imperfect.

## **Section 2. Implications and recommendations**

### **2.1 – Financial constraints: General implications**

This thesis has addressed the controversy on the role of SMME finance (see p.2), with some groups lamenting the lack of support by financial institutions, and others incriminating small business owners and their poor management. The necessary conclusion flowing from this research is that both approaches need to be combined.

The finding, flowing from Chapter II, that the financial constraints experienced differ in varying parts of the SMME population implies that a form of solidarity between SMMEs can be of some benefit, as businesses can learn from each other's strengths and weaknesses. The literature has suggested that SMME networks often have positive effects, even in sectors

where co-operation is difficult, such as retail (see, for example, Janszen & Masurel 1998, Parker et al 2003).

Next, the mismatch between the types of needs and the types of facilities accessed (as touched upon in Chapter II and more exhaustively in the case studies) implies that it is necessary to improve the accessibility of some currently non-standard types of term finance for small enterprises, including industrial property finance. Banks may also need to invest resources into counselling their clients as to the best facilities to suit their needs. While such counselling does already take place in some branches, case study evidence shows that in other areas, counselling is limited and there tends to be an “overdrafts-suit-all-purposes” mentality – this is not conducive to good SMME development.

## **2.2 – Implications of accounting opacity**

Chapter III has shown that accounting opacity is a true problem, even if its effect on access to finance was not confirmed empirically. In fact, South Africa has a sophisticated legal framework to ensure sound accounting practices within registered corporations (which represent the majority of formal businesses), but this framework does not reach its purpose of creditor protection, not least because the creditors themselves (i.e. the banks) fail to make it work. The implications discussed in this section, hence, may not have a direct effect on lessening financial constraints, but would nonetheless probably enhance the smooth functioning of capital markets.

The study has revealed the two most relevant factors for accounting opacity: the informality of financial management and the existence of motives for manipulation, especially on loan applications. The following levers appear likely to reduce accounting opacity:

- Banks could revise their use of accounting information. While it is understandable that they need frequent and timely reports on their

clients' operations, such short-term information could remain rudimentary (in the form of key figures rather than full financial statements, which are costly for a small business); in contrast, annual statements should be requested yearly, bear a professional validation, and be used seriously to verify the credibility of interim reports. To the extent that such validation occurs only on a yearly rather than monthly basis, and relies on existing legal mechanisms, this practice might even reduce the banks' internal costs, while better serving their interests than the current practice.

- Government institutions should enforce more strictly the legal framework, with its requirement for professionally validated accounts. When the South African Revenue Service (SARS) allows SMMEs to file unaudited draft financials, and does not subsequently request a final audited version<sup>42</sup>, a message is sent to entrepreneurs that audits may not be worthwhile after all. The burden and risks of a stricter implementation of the legal framework should here be weighed against the benefits of an adequacy between legal theory and practice.

In addition, the thesis' findings are generally supportive of the following types of interventions:

- Offering or enhancing mentoring programmes as well as low-cost training, including public subventions to private providers, is likely to have a positive effect on the financial practices on small businesses.
- Options to reduce the cost of qualified accounting officers to the smaller enterprises could be helpful. Examples can be a double deductibility of accountants' fees or a bolder 'community service

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<sup>42</sup> See interview evidence presented in Annexure 16.

year' for willing accounting students in the same spirit as currently practised in the medical profession;

- Awareness campaigns, targeting both entrepreneurs and lenders, could convince them of the potential usefulness of accounting and the importance of reports by auditors and accounting officers.

The financial literacy objectives of the Financial Sector Charter (2003:13) provide a good framework for organisations to become involved in some of the areas mentioned above.

### **2.3 – Creditworthiness: General implications**

The majority of the firms in the sample were not particularly uncreditworthy. Banks should therefore be careful when using the argument of poor quality of South African firms, which may not be the actual reason for their financial constraints.

However, SMMEs do tend to suffer from various weaknesses which may be tackled by appropriate training or mentorship efforts. In particular, there appeared to be a need for creating awareness among business owners of the following issues:

- When a business is not selling enough to cover its operating costs, increasing the overdraft will not resolve the problem. Growing turnover by investing more and more into fixed assets will not do so either, since it is likely that ancillary costs will increase faster than sales, thus aggravating the deficit in spite of the growth;
- Capital retention (i.e. accumulation of profits) is important because it strengthens a business and helps it to face unfavourable developments; profit retention is especially important in businesses planning to grow, as they must be able to afford more debt;
- It is important to maintain cash reserves, especially in firms whose business is cyclical or seasonal – this implies that it is preferable to

use medium-term debt instruments (such as instalment sales) to acquire fixed assets, as diverting liquidity into fixed assets may prove irreversible when the cycle turns unfavourable;

- Perhaps most importantly, it is necessary to mentor and train business owners and their staff on ways to optimise their working capital by managing debtors more efficiently and taking precautions against bad debt; they should acknowledge that debtor protection is a process that takes time and requires resources, but it can be critical to a firm's survival; they should also better appreciate the risks of over-stretching supplier credit.

On banks' reaction to creditworthiness, the findings are too meagre to generate recommendations, but the example of CS1 suggests that banks should guard against overloading start-ups with debt that will create an excessive interest burden – and when they do grant start-up facilities, they should ensure – within the limits of practicability – that their close monitoring policy is enforced, so that they are able to act swiftly when the business appears unable to reach its objectives.

### **Section 3. Limitations, main contribution and need for further research**

Being exploratory in nature, this research presented various weaknesses and limitations. It also left a number of issues unresolved and its usefulness resided mainly in preparing the ground for future research.

#### **3.1 – Limitations**

The main limitations of the research were the following:



The data used were heterogeneous and presented quality problems; in spite of the efforts made to mitigate the poor data quality, some residual uncertainty could not be suppressed.

The study methods employed, especially the case study and survey methods, created an external validity problem (van der Stede et al, 2005; Cooper and Morgan 2008), which was partly mitigated by a multiple-method design. Even then, the question of bias could not be resolved entirely. It may be useful at this stage to repeat that this study sought to investigate *formal* enterprises, with formality being practically defined by the existence of financial statements. It may therefore be argued that the bulk of SMMEs that were not represented in the sample because of their failure to provide financial statements, belong to the informal sector and therefore could not and should not have been included in the study. It is likely, though, that the balance sheet sample, which privileged firms with an over-average quality of accounting, was biased towards better-managed firms. Nevertheless, it was not entirely clear whether such bias was compensated by the under-representation of small neighbourhood retail businesses.

On the conceptual side, the thesis used elaborate constructs, such as the accounting transparency score or the creditworthiness score, whose measurement was complex and time-consuming. On one hand, the sophistication of these indicators was necessary to do justice to the complexity of the phenomena. On the other hand, however, this sophistication constitutes a weakness in two respects. Firstly, these indicators could not be expected to reflect actual practices by small business practitioners, especially banks. Thus, empirical attempts to link these concepts to practical realities such as the access to finance, could only lead to an imperfect match. Secondly, the complexity of the models developed may restrict their usability in further research. However, the modular structure of the scoring tools makes it possible to use parts of them as may be required in different research projects.

Perhaps a more fundamental flaw of the research was the fact that the bulk of the data used (i.e. the balance sheet sample) did not allow for an assessment of financial constraints as defined. Use of bank finance could be measured, but this would not suffice to identify financial constraints unambiguously. As a result, all relationships, which formed the conceptual fundament of the research, were difficult to establish. Triangulation was used to mitigate this weakness.

### **3.2 – Main contributions**

This research has contributed to increasing the body of knowledge on SMME finance in South Africa; in addition, it has developed methods that can be useful in future research.

Empirical knowledge of South African SMMEs was improved through the production of first empirical evidence on a number of issues, which will serve as benchmarks to be tested by further research:

- an estimation of the proportion of unconstrained SMMEs in South Africa;
- an empirical assessment of the extent of accounting opacity among South African SMMEs, which identifies particularly problematic aspects;
- a list of financial ratios of SMMEs corresponding to different qualitative profiles, and their comparison to international evidence.
- In addition, the case study narratives (Annexures 31-36) provide rich qualitative and quantitative data that can be used for further grounded theory-building (for example in the area of the demand for finance). The narrative for township enterprises CS4a and CS4b (Annexure 34) represents one of few detailed documents on African semi-formal micro-enterprises and the specific approach that their survivalist owners have to business and to finance.

Moreover, the understanding of SMMEs' financial constraints was improved by the following insights:

- Lack of accounting data causes difficulties in accessing finance, but in South Africa, poor data quality does not impede access to credit;
- The relationship between creditworthiness and financial constraints is weak, so that poor financial soundness of enterprises cannot be deemed to be the main factor for financial constraints;
- According to the findings in Annexures 24-29, transaction costs and the unavailability of collateral truly hinder access to term loans for some of the smallest enterprises and constitute a case of market dysfunction; this is less evident for the access to overdraft facilities.

In addition to these contributions to knowledge, the thesis has developed concepts and methods, which can be useful to future research. This includes:

- the development of a framework for the conceptualisation of financial constraints and their typology, in a way that strictly distinguishes between the phenomenon and its roots: such distinction was hitherto lacking in the South African literature;
- a conceptualisation of the phenomenon of accounting opacity in its four dimensions, and the development of a comprehensive empirical tool to measure the reliability of SMME financial statements;
- the design of a creditworthiness model which uses financial ratio methodology to classify SMMEs into categories, distinguishing between fundamental and financial difficulties. While such models existed beforehand, this one presents the advantages of being tailored to SMMEs (for example in the way it treats members' loans) and of tackling reporting weaknesses in the very definition of ratio formulas.

The methods developed are especially tuned for use in contexts with weak data availability, and are therefore particularly valuable to researchers investigating financial constraints in other developing countries.

### **3.3 – Need for further research**

#### **3.3.1 – Replicating to enlarge the statistical basis and update**

All tentative conclusions presented in this research were based on a fairly small number of observations, for concepts which – as emphasised repeatedly throughout the thesis – are prone to individual variations. For this reason alone, any replication of all or part of the research on different enterprises would help in multiplying the data points and testing the statistical significance of the tendencies observed, as well as exploring richer interpretations.

In particular, the question of bias needs to be interrogated further. Field data collection focused on the bulk of small enterprises, e.g. the neighbourhood retail businesses, would help to clarify the accounting opacity, creditworthiness and link of both these constructs to financial constraints that prevail in this essential segment of the small business economy.

Furthermore, updating the findings by using recent data would potentially bring insights on possible improvements since the beginning of the decade, which is the period of reference of most of the data presented here.

#### **3.3.2 – Further research into accounting opacity**

Accounting opacity remains an area that raises many questions.

Firstly, it is intriguing to understand more precisely how (and how often) aberrations like the ones that have been described in Chapter III and in the annexures arise. This would require working closely with accounting professionals of several SMMEs (including the less competent ones). The

purposes would be to understand the extreme disparities from one firm to the next in the process of establishing financial statements, and to establish the role of incompetence as opposed to opportunism. This is extremely challenging research, aiming at shedding light on the invisible, i.e. establishing rigorous audit-like procedures in entities that are largely informal, and seeking explanations for probably largely haphazard phenomena. Such research would have to be run in multiple case studies and would be relatively resource-intensive, but would potentially deliver fascinating insights on accounting opacity.

Secondly, there is a need to interrogate further the link between accounting opacity and access to credit, as the finding made in this research (that the quantity, rather than the quality, of accounting information is relevant in opening SMMEs access to credit), would need to be corroborated by more systematic data-gathering. Here the purpose would be to study more closely the way banks request and utilise accounting information. The data should be based on a representative sample of South African banks and, within each bank, the different hierarchical levels of involvement in the credit decision (local branch, head office, credit control department).

Thirdly, if accounting opacity is primarily a matter of imbalance between the legal requirements and their (financial, time-related and human) costs, researchers must engage with the question of the appropriateness of revising the accounting requirements for the smallest of businesses, much in the spirit of Friedlob & Plewa's works (1992).

### **3.3.3 – Market dysfunction**

Since the relevance of transaction costs has been established for term loans, it would be worth investigating more closely the nature of the costs involved. Again, in-depth case studies of the work processes and cost structure of various banks could help shed light on these aspects and possibly identify levers to reduce these costs and mitigate the problem.

The relevance, effects and problems of information substitutes would also need to be researched in greater depth. A more systematic collection and analysis of data on credit records, networks and relationship banking could corroborate the insights of this thesis. Collateral would also deserve additional and deeper investigations to shed light on its multiple functions, to understand the way in which banks determine their quantitative requirements and to examine the possible discriminatory effects of its use in the South African context.

### **3.3.4 – Deeper-going investigations of creditworthiness**

Additional creditworthiness research would greatly enhance the usefulness and usability of the present research. Especially desirable is any research which would have the effect of increasing the availability of ratios as references for various segments of SMMEs, both in South Africa and abroad, including other African countries. Basing novel analyses on existing enterprise databases, whether from credit bureaus or even the SARS, would greatly reduce the cost of data collection. Although accounting opacity would have to be dealt with appropriately, the use of such databases would enhance the potential for more wide-scale and differentiated analyses, e.g. grouping enterprises by industry, size class or other profile criteria.

### **3.3.5 – Exploration of the demand for finance function**

Lastly, the present study has created awareness on the need for research on a hitherto unexamined issue: the ambiguity of SMMEs' demand for finance. The phenomenon of self-rationing appears to play a role in small firms' financial constraints, and it would be most useful to understand more precisely whether the dominant issues relate to debt aversion, transaction costs linked to credit applications, low perceived chances of success, or any other reason.

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Note: This bibliography lists the sources that are quoted in the five chapters of the thesis, as well as some articles that are referenced to in the annexures.

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## Annexure 1 – Small business thresholds

Sector or sub-sectors in accordance with the Standard Industrial Classification	Size class	Total full-time equivalent of paid employees <i>Less than:</i>	Total annual turnover <i>Less than:</i>	Total gross asset value (fixed property excluded) <i>Less than:</i>
Agriculture	Medium	100	R 5.00 m	R 5.00 m
	Small	50	R 3.00 m	R 3.00 m
	Very small	10	R 0.50 m	R 0.50 m
	Micro	5	R 0.20 m	R 0.10 m
Mining and Quarrying	Medium	200	R39.00 m	R23.00 m
	Small	50	R 10.00 m	R 6.00 m
	Very small	20	R 4.00 m	R 2.00 m
	Micro	5	R 0.20 m	R 0.10 m
Manufacturing	Medium	200	R51.00 m	R19.00 m
	Small	50	R13.00 m	R 5.00 m
	Very small	20	R 5.00 m	R 2.00 m
	Micro	5	R 0.20 m	R 0.10 m
Electricity, Gas and Water	Medium	200	R51.00 m	R19.00 m
	Small	50	R13.00 m	R 5.00 m
	Very small	20	R 5.10 m	R 1.90 m
	Micro	5	R 0.20 m	R 0.10 m
Construction	Medium	200	R26.00 m	R 5.00 m
	Small	50	R 6.00 m	R 1.00 m
	Very small	20	R 3.00 m	R 0.50 m
	Micro	5	R 0.20 m	R 0.10 m
Retail and Motor Trade and Repair Services	Medium	200	R39.00 m	R 6.00 m
	Small	50	R19.00 m	R 3.00 m
	Very small	20	R 4.00 m	R 0.60 m
	Micro	5	R 0.20 m	R 0.10 m
Wholesale Trade, Commercial Agents and Allied Services	Medium	200	R64.00 m	R 10.00 m
	Small	50	R32.00 m	R 5.00 m
	Very small	20	R 6.00 m	R 0.60 m
	Micro	5	R 0.20 m	R 0.10 m

<b>Sector or sub-sectors in accordance with the Standard Industrial Classification</b>	<b>Size class</b>	<b>Total full-time equivalent of paid employees</b> <i>Less than:</i>	<b>Total annual turnover</b> <i>Less than:</i>	<b>Total gross asset value (fixed property excluded)</b> <i>Less than:</i>
Catering, Accommodation and other Trade	Medium	200	R13.00 m	R 3.00 m
	Small	50	R 6.00 m	R 1.00 m
	Very small	20	R 5.10 m	R 1.90 m
	Micro	5	R 0.2 m	R 0.10 m
Transport, Storage and Communications	Medium	200	R 26.00 m	R 6.00 m
	Small	50	R 13.00 m	R 3.00 m
	Very small	20	R 3.00 m	R 0.60 m
	Micro	5	R 0.20 m	R 0.10 m
Finance and Business Services	Medium	200	R 26.00 m	R 5.00 m
	Small	50	R 13.00 m	R 3.00 m
	Very small	20	R 3.00 m	R 0.50 m
	Micro	5	R 0.20 m	R 0.10 m
Community, Social and Personal Services	Medium	200	R13.00 m	R 6.00 m
	Small	50	R 6.00 m	R 3.00 m
	Very small	20	R 1.00 m	R 0.60 m
	Micro	5	R 0.2 m	R 0.10 m

*Source: SCHEDULE to the National Small Business Act, as revised by the National Small Business Amendment Bill – March 2003*

This definition presents several technical pitfalls:

- There is no rule on how to categorise an enterprise when the various indicators do not coincide;
- It is not always easy to allocate each enterprise to one particular sector;
- Staff statistics are often ambiguous, as SMMEs tend to work with flexible staff structures (non-remunerated contributions of family members, casual staff, etc).
- This definition is not harmonised with the VAT tax threshold.

## Annexure 2 – Comparison of South African and International SMME definitions

Country / Region	Source	Maximum turnover			Maximum staff			Maximum assets		
		Micro	Small	Medium	Micro	Small	Medium	Micro	Small	Medium
Europe	European community		€ 5 m	€ 20 m		50	250		€ 2 m	€ 10 m
	EuroStat				9	99	499			
Canada	Canadian Bankers Association								250000 \$	
	Industry Canada					100 or 50	500			
South Africa	Small Business Act (general) <sup>1</sup>	R 0.15 m	R 3 - 10 m	R 8-25 m	5	50	100-200	R 0.1 m	R 0.6 -2.5 m	R 2 - 7.5 m
	Small Business Act (SA trade)	R 0.15 m	R 35 m	R 70 m	5	50	100	R 0.1 m	R 6 m	R 12 m

<sup>1</sup> The official South African definition is dependent on the industrial sector. Therefore, we distinguish here between ‘general’ SMMEs (all sectors except trade, agriculture and mining) and the trade SMMEs. Agricultural and mining enterprises are omitted here.

### Annexure 3 – Profile of the GEM sample

<b>Number of years operating</b>	<b>Number of firms</b>	<b>%</b>
2 or less	36	16%
2,5 to 5	48	22%
5,5 to 9,5	78	35%
10 and more	59	27%
<b>Total</b>	<b>221</b>	<b>100%</b>
<i>Average age</i>	<i>7,6 Years</i>	
<i>Median age</i>	<i>5 Years</i>	

<b>Annual turnover</b>	<b>number of firms</b>	<b>%</b>
R 100 000	20	9%
R 0,1 to 0,99 million	85	38%
1 to 4,99 million	84	38%
>= R 5 million	35	16%
	<b>224</b>	<b>100%</b>
<i>Average turnover</i>	<i>2 420 902 Rand</i>	
<i>Median turnover</i>	<i>1 000 000 Years</i>	

<b>Number of employees</b>	<b>Number of firms</b>	<b>%</b>
<3	18	8%
3 to 9	110	49%
10 to 24	71	32%
>=25	25	11%
	<b>224</b>	<b>100%</b>
<i>Average staff</i>	<i>12 employees</i>	
<i>Median staff</i>	<i>8 Employees</i>	

<b>City</b>	<b>Number of firms</b>	<b>%</b>
Johannesburg	60	27%
Cape Town	71	32%
Durban	61	27%
Port Elisabeth	32	14%
<b>Total</b>	<b>224</b>	<b>100%</b>

<b>Sector</b>	<b>number of firms</b>	<b>%</b>
Manufacturing	72	32%
Construction	26	12%
Wholesale, Retail and repairs, trade and service of motor vehicles, hotels and restaurants	67	30%
Transport, tourism and communication	6	3%
IT, business services, financial services and engineering	42	19%
Community, Social and Personal Services	11	5%
	224	100%

<b>Gender and race of respondent*</b>	<b>number of firms</b>	<b>%</b>
Male	185	83%
Female	39	17%
Black	83	37%
Indian	65	29%
Coloured	74	33%
White	2	1%
Total	224	100%

\* NB respondent is not necessarily the only or the main shareholder in the business

<b>Educational level of respondent</b>	<b>number of firms</b>	<b>%</b>
Has not completed school	37	17%
Has only reached matric	57	25%
Certificate or diploma	63	28%
Qualified tradesman	28	13%
Has a degree	39	17%
	224	100%



<b>Type of business registration</b>	<b>number of firms</b>	<b>%</b>
Sole Proprietor	27	12%
Close Corporation	160	71%
Private Company (Pty ltd)	33	15%
Partnership	3	1%
Other	1	0%
<b>Total</b>	<b>224</b>	<b>100%</b>

<b>Profitability and Liquidity</b>	<b>Number of firms</b>	<b>%</b>
profitable in last 6 & 3 months	124	55%
no profit in last 3 and 6 months	42	19%
mixed	49	22%
don't know	9	4%
enough cash in last 6 months	147	66%
not enough cash in last 6 months	77	34%
breach of overdraft	77	34%
no breach of overdraft	78	35%
no overdraft	69	31%
<b>total</b>	<b>224</b>	<b>100%</b>

<b>Mentorship experience</b>	<b>number of firms</b>	<b>%</b>
has not been mentored	178	79%
has been mentored	46	21%
	<b>224</b>	<b>100%</b>

### Annexure 4 – Profile of the balance sheet sample

SIC code	Primary sector of activity	number of firms	%
1	Agriculture, Hunting, Forestry and fishing	0	
2.	Mining and Quarrying	0	
<b>3.</b>	<b>Manufacturing</b>	<b>14</b>	<b>22%</b>
30	Food, beverages and tobacco products	2	
31	Textiles, clothing and leather goods	3	
32	Wood, straw, paper, printing, publishing	4	
33	Fuels, chemicals, rubber and plastic products	1	
34	Other non-metallic mineral products	1	
36	Electrical machinery and apparatus n.e.c.	1	
39	Furniture	2	
4.	Electricity, gas and water supply	0	
<b>5.</b>	<b>Construction</b>	<b>3</b>	<b>5%</b>
<b>6.</b>	<b>Trade; repairs; hotels and restaurants</b>	<b>32</b>	<b>50%</b>
61	Wholesale, except of vehicles	5	
62	Retail, except of vehicles; repairs	13	
63	Sale and repair of vehicles; trade in fuel	4	
64	Hotels and restaurants	10	
<b>7.</b>	<b>Transport, storage and communication</b>	<b>3</b>	<b>5%</b>
71-73	Land, water and air transport	2	
75	Post and telecommunications	1	
<b>8.</b>	<b>Financial intermediation, insurance, real estate and business services</b>	<b>9</b>	<b>14%</b>
85	Renting of machinery and of household goods	3	
86	Computer and related activities	2	
88	Other business activities	4	
<b>9.</b>	<b>Community, social and personal services</b>	<b>3</b>	<b>5%</b>
93	Health and social work	1	
96	Recreational, cultural and sporting activities	2	
10	other activities not adequately defined	0	0%
		64	100%

Type of registration	Number of firms	in % of sample
Pty Ltd	13	20%
CC	44	69%
Sole Proprietorship	6	9%
Unclear	1	2%
Total	64	100%

Franchise or independent	Number of firms	in % of sample
Franchise	12	19%
independent	52	81%
Total	64	100%

Size category	Number of firms	in % of sample
Micro	4	6%
Very Small	29	45%
Small	20	31%
Medium	11	17%
Total	64	100%

Average size	
Average turnover	R 3 188 241
Median turnover	R 1 717 508
Average number of employees	12
Median number of employees	7

Race of owner(s)	Number of firms	in % of sample
White	24	38%
Coloured	12	19%
Indian	16	25%
African	2	3%
Mixed	1	2%
n/a	9	14%
Total	64	100%

### **Annexure 5 – How business owners express (or do not express) their financial constraints**

<b>Business code name</b>	<b>Type of business</b>	<b>Financial constraint expressed</b>	<b>Statement about finance</b>
Wec01	Catering and cleaning (black)	yes	“we find it difficult to get finance because of the company which has been at loss for first two years”
Wec02	sport supplies (coloured)	Yes	“I have been struggling to get finance”.
Wec06	HVAC retail (coloured)	Yes	“That’s hard to get, man. It took me years to obtain finance for my manufacturing projects, and the increase of my overdraft has not happened yet”
Wec07	Printing (mixed team)	Mixed	“We had the usual problems with banks which are reluctant to finance emerging businesses, but we found one that was willing to take us on”. “Financial houses were interested but we had to sign our lives away”.
Wec09	Panelbeating (coloured)	Yes	“This is a very cash-tight business; I am losing quality staff because I have problems paying them. I am struggling because I have been blacklisted”.
Dir01	Catering (white)	Yes	“We are always worried at the end of the month”.
Dir02	printing (coloured)	No	“I was lucky, I have received start-up finance with a Khula guarantee, and later an equipment bond and an overdraft”
Dir03	Franchise restaurant (white)	No	“I had no serious financing problem. My partners started the business – I bought my share little by little”.
CS1	failed - furniture (white)	Yes	stated reason for the business’s failure: “working capital”
CS2	franchise restaurant (white)	No	“It is very easy to get finance”
CS3	safety wear (coloured)	No	“Generally we have no problems, we have a good standing with the bank”

<b>Business code name</b>	<b>Type of business</b>	<b>Financial constraint expressed</b>	<b>Statement about finance</b>
CS4 a+b	cleaning and other services (black)	Yes	"We've been to Khula, we've been to Khethani, Business Finance, even DTI you phone them asking for assistance, but they do not help you"
CS5	tourism (coloured)	Yes	Finance has been "an absolute problem", "in fact, I have given up about finance"
CS6	packaging (white)	Yes	"Finance is very difficult, we have to work with sub-standard equipment, our vehicles need repairing, but the only people who give you money are those who want it for themselves".
ACS d	Furniture (black)	Yes	"I have no money to buy equipment, but also, I do not want to borrow".
ACS e	Security services (white)	Mixed	"At present I am self sufficient but I can't grow without finance. This is going to be very difficult, because my value is my customer base, I have no assets"
ACS f	Leather manufacturing (coloured)	Mixed	"I started in the middle of last year; Sizanani approved my application, but it took more than 1 year for Standard Bank to give the money".
ACS g	Tourism (black)	Yes	"Yes, finance is a major problem; I need finance for my vehicles".
ACS h	Security services (white)	Yes	"Getting the finance is difficult. Working capital is an issue. The problem also is that I do not have enough turnover"

*Sources: short interviews (telephonic or face-to-face), written statements, press (Wec07), and in the case of CS1, Liquidator's report*

## Annexure 6 – Profile of businesses with cash shortages and firms without financial constraints (GEM)

Category	Sample size	cash-constrained	non-constrained
All businesses	224	34%	25%
Number of years operating			
• 2 or less	36	36%	17%
• 2,5 to 5	48	46%	40%
• 5,5 to 9,5	78	31%	23%
• 10 and more	59	31%	20%
Annual Turnover			
• < 500 000	78	41%	12%
• 0.5+ to 1.49 million	53	34%	19%
• 1,5 to 2.99	37	41%	22%
• >= 3 million	56	21%	50%
Industry			
• Manufacturing	72	46%	18%
• Construction	26	38%	27%
• Wholesale, retail, vehicle trade, hotels and restaurants	67	22%	31%
• Transport, IT, business services, financial services and engineering	48	23%	29%
• Community, social and personal services	11	73%	0%
Gender and Race of respondent			
• Male	185	35%	27%
• female	39	33%	13%
• Black	83	37%	17%
• Coloured	74	36%	30%
• Indian	65	29%	26%
• White	2	0%	100%
Experience being mentored			
• has been mentored	46	37%	13%
• has not been mentored	178	34%	28%

Source: GEM survey 2003

‘cash-constrained’ refers to the proportion who say they have not had ‘enough cash to pay costs in last 6 months’; ‘non-constrained’ refers to the proportion who do not know what would change if they were granted the finance that they desire (or who answered that the question was not applicable).

## **Annexure 7 – Analysis of owners’ remuneration patterns**

Based on GEM data and case studies, the remuneration of the owner-manager was studied under the viewpoint of its regularity, which arguably indicates discipline and contributes to accounting transparency.

Unfortunately, the case studies revealed issues with regard to data reliability, which were likely to also apply to the GEM survey. In particular, there were suspicions that CS1 might have overstated remuneration to prove his success, that CS2 may have omitted to mention some hidden remuneration, and that CS4 had understated their salary to complain about the harsh conditions. The problem was particularly sensitive in CS1 and CS3’s provisional financials.

To the extent that answers were correctly interpreted, the GEM data suggested that the number of businesses that pay their members a fixed salary every month (96 or 42.9% of the sample) is almost equal to those that don’t (it is not clear whether they do not pay member’s salaries at all, or whether they follow a more erratic remuneration pattern (91 or 40.6% of the sample). A small minority of firms (16.5%) responded by ‘sometimes’, possibly indicating different remuneration patterns for different members.

The case studies showed that members’ remuneration was no static issue, but rather evolved following three different patterns:

- There was strong evidence that owners of young businesses refrained from taking a salary altogether (notwithstanding possible hidden remuneration) in order to keep cash in the business. This corresponds to what Buchheim (1994) calls self-exploitation. Such evidence was found in CS1 (early years), CS2 and CS4. (For CS3 and CS6 data on the start-up phase were unavailable). A variation of this is the reinvestment of salaries as member’s loan to the business (found in CS5, and consistent with Howorth (2001)).
- The evolution of members’ salaries after these first few years followed one of the following three patterns:
  - Once the business started generating profits and cash flows, the members paid themselves a salary depending on the business’s performance (CS3, CS5 and CS6). For example, CS5 drew a fixed salary of R5 000 per month, complemented by a profit-linked bonus at year-end (resulting in a total remuneration of R102 500 in 2003). The monthly salaries for CS3 and CS6 appeared to be in the same region (safe for the very high total in CS3’s provisional 2004 statements, which appeared to be overstated in a context of loan application).
  - If the business failed to break even, the remuneration may remain inexistent (CS4, CS2), in which cases the durability of the

entrepreneurs' involvement in the business was questionable.

- Alternatively, moral hazard may cause the owner, after two years, to draw a high salary in spite of the firm's poor performance. This was the case for CS1, which after the first 22 months drew a monthly salary of R20 000 for over a year, leading the business to bankruptcy.

Next, GEM data were investigated to look for evidence of lower financial constraints among firms with more regular owner's remuneration. A possible interpretation of such correlation, as suggested in the introduction of this Annexure, was the hypothesis that regular owner's remuneration indicates discipline, hence better chances of being unconstrained. The results are shown in Table 7.1.

*Table 7.1 – Tendency of GEM respondents to pay a regular member's salary*

	<b>Sample size</b>	<b>Average financial constraint level</b>	<b>% not constrained</b>	<b>% debt-trapped</b>	<b>% liquidity constrained or severely</b>
No fixed salary	128	1.68	10.2%	3.9%	48.4%
Fixed salary	96	1.23	30.2%	4.2%	28.1%
Total sample	224	1.49	18.8%	4.0%	39.7%

The table makes it clear that firms which do not draw a fixed salary for their members are more likely to be financially constrained. They have a higher average financial constraint level, are less likely to be unconstrained, are more likely to be liquidity constrained.

However, in addition to already mentioned data ambiguity, the link between remuneration patterns and financial constraint is subject to interpretation problems. Secondly, the direction of causality in a correlation between regular salary patterns and financial constraints is difficult to interpret: in fact, the affordability hypothesis (whereby non-constrained firms pay their owners a regular salary because they can afford it) seems more likely than the accounting opacity hypothesis.



## **Annexure 8 – Findings on the accounting environment**

The conceptual framework proposed in Chapter III suggests that accounting quality depends in part on the constraints under which accounting takes place in South Africa's small businesses. Three investigations were undertaken to roughly explore this relationship: a review of the legal framework, a cost-related mini-survey, and semi-structured interviews with business owners and professionals.

### **1. Legal environment**

Legal obligations, especially the obligation to provide files to tax authorities and other administrations, can be expected to be the most compelling and most universal reason for small businesses to maintain financial information systems. It is therefore natural to start the investigation of the accounting environment there, to establish whether the mechanisms designed to ensure a sufficient information quality are practically valid.

Small businesses are, by law, required to produce various information:

- Partial financial information (turnover, wages/salaries), is required for almost all businesses if: they reach a turnover of R300 000 (VAT returns)<sup>2</sup> or if they employ permanent staff (PAYE tax on employees; Regional Services Council Levy<sup>3</sup>).
- Full annual financial statements are required for corporate tax (companies/CCs) or income tax (owners of non-incorporated businesses).

To protect the state's interest, the legislator has established different levels of safeguards ensuring the existence and reliability of financials in various classes of small businesses. For a CC, these are

- a) the obligation to appoint, prior to registration, a qualified accounting officer, who must be a member of a recognised professional organisation<sup>4</sup>;
- b) the threat of SARS penalties if the annual statements are not provided;
- c) and the accounting officer's duty of notifying the Registrar in case of omissions or incorrect indications by the CC.

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<sup>2</sup> VAT is optional for businesses with a turnover of R20 000 to R300 000.

<sup>3</sup> The RSC Levy in the City of Cape Town was abolished on 30 June 2006, but was still in force at the time of collection of data for the present research.

<sup>4</sup> §60.1 Close Corporation Act

For private companies, the rules are more constraining, with an obligation to have their financial statements audited. The literature has shown that auditors tend to play a significant role in preventing creative accounting and that their vigilance is especially rigorous in the case of companies in poor financial health (Stice 1991).

However, interview evidence suggests that there are limits to the usefulness of enforcement procedures, as follows:

- a) Although a CC cannot register without naming an accounting officer, the quality of the co-operation with such officer may vary (see next section);
- b) Interview evidence confirms that the South African Revenue Service (SARS) applies a rigorous schedule of reminders in case of delays in providing the statements. However, one accountant indicated that, when they were delayed, they could send draft statements to the SARS, and later finalise the audit. He confirmed that the SARS never required the auditor's or accounting officer's report. This fact potentially opens room for unscrupulous business owners to submit wrong drafts to the SARS without taking responsibility for it.
- c) As to the 'Registrar notification' procedure, interview evidence suggests that it usually does not take place. In problematic cases, the accounting officer tries to negotiate with the management and, if no compromise is found, rather than notifying the Registrar, the accounting officer declines his office. There is then no powerful enforcement mechanism to ensure that the firm appoints another accounting officer.

These examples suggest that the legislator's efforts to protect the State's and creditors' interest in good information standards are by no means a guarantee that financial statements are reliable and of good quality.

## **2. The work with accountants**

The legal framework assumes a good co-operation between the parties involved. Its effectiveness is therefore subject to the practicalities of the manager-accountant-auditor relationship. This raises the question of the ability of the skilled officer, which the corporations are obliged to appoint, to play a role in the corporation's financial information system.

Interview evidence with a business owners as well as accounting professionals suggests that the co-operation of entrepreneurs with their accountants and auditors is frequently difficult.

- In CCs, the role of the accounting officer is often limited to writing up the Financial Statements and submitting them to the Receiver of Revenue. The ordinary monthly accounting, end-of-year trial balances and detailed schedules of income and expenditure are more often provided by the bookkeeper, who is either employed by the business, or

external as well; the success of such task-sharing rests on good co-operation.

- Lack of skills of the bookkeeper, lack of understanding of the accounting officer for the realities of the business, lack of understanding of the business owner for the information needs of the accountant, as well as co-operation problems between both officers (especially when geographic distances are involved) and between them and the entrepreneur, may affect the quality of the outcome.
- Indeed, many business managers lamented the lack of understanding of both their external accounting partners. Statements like “he does not understand what my business is about”, “there are mistakes in the accounts, because my accountant is a young lady, she is new and she does not know what to do” (!), as well as “it is difficult to talk to my accountant, his office is so far away and I have no time to drive around”, illustrate the perceived difficulty in co-operation. One entrepreneur justified his inability to provide accounting figures by his accountant’s failure to pick up his documents in the past few months, causing him to appoint a new accountant, who would need some time to get the figures in good order. This example, although it may have been exaggerated as an excuse for the owner’s reluctance to provide statements, illustrates the extent of paralysis that may take place when motivation is low on all parts.

Another source of problems is the lack of resources allocated to the production and validation of financial statements. This issue was confirmed by interviews with professionals. One accountant cautioned that the cost issue was the most prohibitive, especially for enterprises close to breakeven, for which it would be unacceptable that a heavy accountant’s invoice results in a small profit turning into a loss.

To evaluate the likelihood of the problem, a snapshot survey was carried out among 18 enterprises from the sample, with average to low accounting quality. The results are presented in Table 8.1. The table shows that the fees paid to external accountants (and if applicable, to external bookkeepers) in 2001, ranged from R2 930 to R82 000, which corresponded to a range of 0,01% to 1,23% of the firms’ turnover. The 1,23% seems to be an outlier.

*Table 8.1 – Accounting costs*

Legal form		S/P	CC	Pty Ltd	Total
Sample Size		3	11	4	<b>18</b>
Average costs for accountants and bookkeepers (Rand/year)		5 044	9 596	34 325	<b>15 008</b>
Average ratio of (external) accounting costs to turnover	raw data	0,51%	0,46%	0,48%	<b>0,47%</b>
	after correction of outlier	0,51%	0,46%	0,24%	<b>0,43%</b>

*NB: S/P refers to Sole Proprietorships, CC to Close corporations and Pty Ltd to private companies.*

Although the sample is too small to assess significance of these differences, the share of turnover allocated to external accounting costs was higher for Sole proprietors, which tend to have the smallest enterprises, in spite of them benefiting from less constraining regulatory regimes. However, for private companies the figure supposedly shows only part of the costs, since they are likely to employ in-house accounting staff. Under this light, it is not surprising that the smallest of enterprises, which often operate at profit margins of less than 5% of turnover, find it difficult to afford such cost.

The three accountants interviewed confirmed that accounting opacity was a problem among small businesses. Two of them indicated that maintaining several sets of financial statements (for the bank, for the revenue service, and for themselves) was current practice, and that they could never be sure to detect all mistakes.

### **3. Do banks create incentives for good accounting?**

For businesses which apply for external finance, banks' information requirements may constitute an economic incentive for regular, timely and reliable accounting. This however depends on (1) how persistently banks collect financial information, (2) how they verify the reliability of figures, and (3) how they use the data provided. The interview of a bank professional and a review of files from the same bank were used to obtain insights in this area.

#### **3.1– Use of financial information by banks**

The effort of banks in collecting financial information was found to be reasonably high. This is consistent with mainstream credit theory, which suggests that financial institutions need accounting information for initial creditworthiness analysis as well as monitoring. Interview evidence with a senior representative of Nedenterprise (now Peoples Bank) confirmed that the bank

collects regular financial statements from their clients: new businesses must provide monthly management accounts, while existing businesses (with at least 2,5 years of history) are only asked to provide quarterly statements. Clients are reminded by ways of letter and telephone calls if they fail to provide the information. The review of bank files confirmed this, with numerous reminder-letters found in almost every client's file. It seems, thus, that banks exercise consistent and effective pressure on small business owners to produce and disclose their financials regularly – even though de facto, statements are more often provided on a half-year or yearly basis.

As to the banks' procedure to assess data quality, interview evidence confirmed that bank officers are aware of possible data quality problems. The main areas of concern mentioned were the reliability of turnover, inventory, and costs, the assumption being that clients asking for overdraft would be tempted to overvalue their stocks, overstate their turnover and understate their expenses.

In spite of this problem awareness, the study showed that the bank does not usually insist on an auditor's / accounting officer's report. The interview confirmed that analyses are normally based on monthly management accounts. The interviewed officer was rather evasive on the use of annual statements, indicating that they are "just verified from an auditing perspective" (sic). The review of bank files showed no traces of requests for the auditor's or accounting officer's report or for final versions of the annual statements. In many instances the files contained only draft statements.

The bank officer mentioned some procedures helping to estimate the reliability of accounting figures. In particular, banks can verify turnover, wages/salaries, and the cash balance, by reviewing the movements recorded on the business's current accounts (assuming that all these transactions are channelled through the bank). Banks may also ask for additional sources, such as VAT returns and the salary book. However, it is not clear whether these procedures are indeed implemented regularly, or whether their mention was simply induced by the structure of the interview questionnaire. The files did not yield any such documents.

The bank officer interviewed was asked to give details on the uses of financial statement information. He did not mention extensive financial analysis, possibly because such financial analysis takes place at the head office in Pretoria, rather than in Cape Town. His answers centered on the use of SMEs' accounting data for ongoing monitoring. Monitoring is based on key ratios, which are calculated on monthly management accounts: monthly ratios are compared with past values and to budget. Such focus enables the bank to rapidly identify possible deteriorations of the key business figures (especially anticipate cash shortages). The financial structure itself is not analysed. This is likely to give the banks a rather short-sighted view of creditworthiness.

### **3.2 – Effect of these requirements on accounting quality**

Such frequent but superficial use of financial statements has a twofold consequence on small business accounting:

- There is no strong incentive on SMMEs to maintain high accounting quality. It seems possible for a business to disclose other figures to the bank, than those officially validated by the accounting officer / auditor – which puts the creditworthiness assessments at risk.
- Nevertheless, the fact that banks require extensive and frequent accounting reports represents an important burden for businesses. The production of full balance sheets and income statements, as required by credit officers, rests on a more sophisticated accounting than the disclosure of key monthly figures, like turnover, operating costs, cash balance and total fixed assets (Friedlob & Plewa 1992:92).

As a result, small businesses, whose accounting budget is small, have to arbitrate between the need to produce one exhaustive yearly statement for tax and other official purposes, and the request of the bank for frequent information. They often respond to this dilemma by lengthening the intervals between their statements (e.g. 4-6 months), and/or by preparing their accounts with less care than they should.

Two examples found in the files of the bank will illustrate those two sides of the medal.

#### **Example: the erratic closures of accounts (Ned01)**

An illustration of the effect of too frequent financial statements is found in a client of NedEnterprise, operating as a sole proprietor. Constantly requested to send his accounts to the bank, this client did provide relatively frequent financial statements, all of them relatively formal, with a report from the accounting officer. Six such statements were collected for this research, with the following closing dates: 30 June 1998, 28 February 1999, 31 August 1999, 30 April 2000, 30 September 2000, and 30 April 2001.

Not only is this irregular, but closer scrutiny revealed that each statement does not actually cover the period since the previous statement. For example, adding both accounts closed in 1999, one would cover the 14 months up to August 1999, but the statements dated 30 September 2000 covered the 12 months since 1 October 1999, so that the month of September 1999 was not actually covered, except in the accounts closed on 30 April 2000, which however covered only 8 months. On the other hand, the report on the 12 months up to 30 April 2001 would have a 5 months overlap with the statements dated 30 September 2000, etc. This is represented in Table 8.2.

Table 8.2 – Accounts provided by Mr. S., t/a School Buses (Ned01)

Date of closure	30 Jun 1998	28 Feb 1999	31 Aug 1999	30 Apr 2000	30 Sep 2000	30 Apr 2001
Period covered	Sep 97 - Jun 98	Jul 98 - Feb 99	Mar - Aug 99	Sep 99 - Apr 00	Oct 99 - Sep 00	May 00 - Apr 01
Number of months	10	8	6	8	12	12
overlapping						

Whether the bank was actually able to use this information for the monitoring of the business's performance and its comparison with budget is highly questionable.

### Example: management accounts versus “official” statements

#### (Ned04)

One client sent, in 2001, “management accounts” for the year 2000, which were neither signed by the owner nor accompanied by a report from the accounting officer. It is likely that the bank based its analysis on these management accounts. For the following year, the same client submitted formally validated annual financial statements, accompanied by the accounting officer's unqualified report. These 2001 annual statements contain a 2000 column.

By comparing this 2000 column of the official statements (2000 AFS) to the 2000 management accounts (2000 MA), the following deviations were noticed:

*Table 8.3 – Deviations between management accounts and annual financial statements – Supermarket CC (Ned04)*

<i>in Rand</i>	<b>2000 MA</b>	<b>2000 AFS</b>	<b>difference</b>	<b>contribution</b>
<b><u>Income statement</u></b>				
<b>Net profit after tax</b>	<b>68 669</b>	<b>464 858</b>	<b>396189</b> <b>(+577%)</b>	
<i>influenced in particular by:</i>				
cost of sales	3 494 168	3 569 241	75 073	-19%
other income	37 873	33 624	-4 249	-1%
depreciation	117 819	136 755	18 936	-5%
amortisation of goodwill and franchise fee	21 713	49 213	27 500	-7%
rent, cleaning, electricity and general expenses	349 026	393 189	44 163	-11%
members emolument	120 000	84 000	-36 000	9%
interest expenses	136 463	84 564	-51 899	13%
profit on sale of asset		478 211	478 211	121%
<b><u>Balance Sheet</u></b>				
<b>Reserves</b>	<b>126 989</b>	<b>359 877</b>	<b>232 888</b> <b>(+183%)</b>	
Retained Income	126 989	-118 334	-245 323	
Capital reserve	0	478 211	478 211	
<b>Fixed assets</b>	<b>2 459 475</b>	<b>2 395 790</b>	<b>-63 685</b> <b>(-3%)</b>	
<b>Net current assets</b>	<b>-112 427</b>	<b>-345 964</b>	<b>-233 537</b> <b>(+208%)</b>	
<i>influenced in particular by:</i>				
Stock	351 180	258 098	-93 082	40%
Accounts receivable	62 925	60 446	-2 479	1%
Accounts payable	578 026	716 002	137 976	59%

The most significant change is visibly the sale of an asset, which generated a substantial profit of R478 thousand. The management accounts do not give details on the fixed assets, so that the said asset cannot be identified. The profit on this sale was booked as capital reserve, since it did not bear tax (it took place before the introduction of the Capital Gains Tax).



As for the other deviations, it is not clear what caused them, but they are numerous rather than individually significant, and affect the income statement as well as the balance sheet. One wonders whether the management accounts have been prepared with far too little care, or whether much effort has been put into “tuning” one or both of the statements to convey a particular impression. Although this is only speculation, it could be, for example, that the statements initially presented to the bank were “arranged” to give the appearance of a business that is generally profitable and pays a reasonable income to its owner. In the version validated by the accounting officer, on the other hand, if it were not for the extraordinary profit on sale of asset, the business would make a loss in spite of a more modest member’s remuneration. It is possible that a number of cost items have then been revised upwards with the consent of the accounting officer, for tax saving purposes. Overall, the net profit in the official accounts was 577% higher than in the management accounts.

No document could be found in the bank file regarding the differences between the statements, it is even doubtful whether the bank officers actually noticed the deviations. The considerable variations prove that key ratio monitoring based on unaudited accounts can be strongly distorted. Operating income, member’s remuneration and working capital situation were painted more favourably to the bank, than what the accounting officer validated.

To conclude, the interviews and review of credit files show that, just as the SARS, banks put much effort into collecting the small business accounts, but seem to be satisfied with irregular, draft statements, although those do not always serve their interests (irregularity, lack of care, and risk of fraud or opportunistic accounting).

A change in this practice, to the effect that the short-term information collected be more rudimentary but the annual statements be formally validated, would arguably better serve the needs of both credit officers and businesses.

### **A further example from the case studies (CS1)**

CS1 provides another example of poor financial communication between the bank and its client. The firm, a franchise furniture business, was granted long-term start-up finance in 1996.

- The file shows no exchange of financial information during the first two years of operation - hence, the bank apparently had no means to know how the business was performing.
- At the end of April 1998, the owner applied for an overdraft facility and submitted draft accounts, as well as cash flow forecasts. Both were optimistic, suggesting: substantial turnover growth, good gross margins, a positive profit from year 1, and sufficient petty cash to make up for the

negative bank balance. The bank approved an overdraft facility of R25 000.

- 8 months later, on 17 December 1998 (that is, at the beginning of the summer holiday period), CS1 delivered the first official financial statements, dated February 1997. These were significantly less favourable than the management accounts (turnover 33% lower, profit turned into a loss, debtors inexistent, but many creditors). Our data show no sign that the bank formally asked for clarity on these deviations.
- From December 1998 to July 1999, no further financial communication took place between the parties. The bank hence does not hold any accounting record of the financial year closed 28 February 1999. Reconstitution suggests that during that year, the owner paid himself a member's salary as high as R240 000 and realised a loss of over R700 000. Meanwhile, the cash levels had plummeted to an average overdraft of -R80 000.
- By July 1999, the bank, alerted by permanent breaches of overdraft limits and delays in loan repayments, insisted on regular reporting. The owner complied by supplying monthly balance sheets and income statements (however still omitting to provide reports at the actual financial year-end, in February 2000!). The lack of turnover and high losses caused the bank to initiate, with other creditors, a liquidation procedure during the course of 2000.

Altogether, it seems that CS1 has skilfully filtered and timed the information sent to the bank as a means to keep its favour as long as possible. The bank's controls have not been sufficient to react has not been able to force its client to a more regular reporting schedule, and that it has not paid sufficient attention to the official financial statements.

To conclude, it appears that, just as the SARS, banks put much effort into collecting the small business accounts, but seem to be satisfied with irregular, draft statements. These do not always serve their interests (irregularity, lack of care, and risk of fraud or opportunistic accounting).

## Annexure 9 – Financial management practices depending on the type of business (GEM data)

*Table 9.1- Financial practices of the smallest and largest enterprises*

		Number of employees		Annual turnover		average
		<3	>25	≤ R 100 000	> R 5 million	
accounts	separate	61%	91%	60%	97%	86%
	common	39%	9%	40%	3%	14%
cash not channeled through bank	0	65%	67%	42%	70%	58%
	0.5-25%	17%	14%	21%	20%	28%
	>25%	18%	19%	37%	10%	14%
fixed salary paid to owner	yes	28%	54%	35%	70%	43%
	sometimes	11%	23%	20%	10%	16%
	no	61%	23%	45%	20%	41%
<b>Records of</b>						
Cash in and out	yes	22%	64%	50%	90%	58%
	no	78%	36%	50%	10%	42%
Cash-flow	yes	44%	64%	30%	73%	42%
	no	56%	36%	70%	27%	58%
Overdue accounts	yes	22%	55%	30%	87%	51%
	no	78%	45%	70%	13%	49%
Accounts payable	yes	53%	100%	68%	100%	76%
	no	47%	0%	32%	0%	24%
Inventory	yes	44%	94%	43%	83%	65%
	no	56%	6%	57%	17%	35%
Sample size		18	22	20	30	224

*NB: The statistics for accounts payable and inventory are based only on the firms which do get supplier credit (218 enterprises) or keep stock (162 firms).*

Table 9.2- Financial practices of the youngest and oldest enterprises

		Number of years operating			average
		≤ 2	2.5 to 10	> 10	
accounts	separate	78%	91%	75%	86%
	common	22%	9%	25%	14%
cash not channeled through bank	0	46%	61%	56%	58%
	0.5-25%	40%	27%	20%	28%
	>25%	14%	11%	24%	14%
Sample size		35	135	45	215
fixed salary paid to owner	yes	33%	43%	56%	43%
	sometimes	19%	18%	20%	16%
	no	47%	40%	38%	41%
Record of cash in and out	yes	56%	60%	53%	58%
	no	44%	40%	45%	42%
Record of cash flow	yes	50%	42%	38%	42%
	no	50%	58%	62%	58%
Record of overdue accounts	yes	56%	52%	45%	51%
	no	44%	48%	55%	49%
Monthly record of AP	yes	86%	76%	67%	76%
	no	14%	24%	33%	24%
Monthly records of inventory	yes	70%	70%	46%	65%
	no	30%	30%	54%	35%
sample size		36	141	47	224

Table 9.3 – Financial practices according to type of registration

		Form of registration			average
		Sole Proprietors	Close Corporations	Pty Ltd	
accounts	separate	44%	92%	100%	86%
	common	56%	8%	0%	14%
cash not channeled through bank	0	30%	56%	93%	58%
	0.5-25%	33%	31%	7%	28%
	>25%	37%	14%	0%	14%
sample size		35	135	45	215
fixed salary paid to owner	yes	26%	43%	64%	43%
	sometimes	19%	17%	12%	16%
	no	56%	41%	24%	41%
Record of cash in and out	yes	52%	52%	91%	58%
	no	44%	47%	9%	42%
	blank	4%	1%	0%	0%

		Form of registration			average
		Sole Proprietors	Close Corporations	Pty Ltd	
Record of cash flow	yes	41%	38%	70%	42%
	no	59%	61%	30%	58%
Record of overdue accounts	yes	30%	47%	85%	51%
	no	70%	52%	15%	49%
Monthly record of AP	yes	61%	75%	97%	76%
	no	39%	25%	3%	24%
Monthly record of inventory	yes	62%	64%	77%	65%
	no	38%	36%	23%	35%
sample size		27	160	33	224

Table 9.4 – Financial practices according to sector

		SIC (Standard Industrial Classification) <sup>5</sup>					average
		III	V	VI-3	VI	VII-VIII	
accounts	separate	88%	92%	85%	84%	84%	86%
	common	13%	8%	15%	16%	16%	14%
cash not channeled through bank	0	57%	58%	33%	51%	74%	58%
	0.5-25%	26%	35%	50%	29%	20%	28%
	>25%	16%	8%	17%	20%	7%	14%
sample size		68	26	13	65	46	215
fixed salary paid to owner	yes	43%	35%	38%	45%	46%	43%
	sometimes	16%	15%	31%	15%	19%	16%
	no	40%	50%	31%	40%	35%	41%
sample size		72	26	13	67	48	224

<sup>5</sup> SIC III: Manufacturing; SIC V: Construction and civil engineering; SIC VI: Wholesale, retail and repairs, auto services, hotels and restaurants – with VI-3: Trade and service of motor vehicles; SIC VII: Transport, tourism and communication; SIC VIII: IT, business services, financial services and engineering

*Table 9.5 – Financial practices of manufacturing enterprises*

		<b>Manufacturing</b>	
		<b>textile &amp; leather</b>	<b>other manufacturing</b>
accounts	separate	100%	84%
	common	0%	16%
cash not	0	38%	63%
channeled	0.5-25%	31%	25%
through bank	>25%	31%	12%
		16	52
fixed salary paid to owner	yes	31%	46%
	sometimes	25%	14%
	no	44%	39%
sample size		16	56

*Table 9.6 – Financial practices according to profitability and liquidity*

		<b>profitable in last 6 &amp; 3 months</b>	<b>no profit in last 3 and 6 months</b>	<b>enough cash in last 6 months</b>	<b>not enough cash in last 6 months</b>	<b>average</b>
fixed salary paid to owner	yes	48%	26%	51%	27%	43%
	sometimes	15%	19%	13%	23%	16%
	no	38%	55%	36%	49%	41%
sample size		124	42	147	77	224

*Table 9.7 – Financial practices of firms presenting signs of distress, compared with total sample*

		<b>Distressed firms</b>	<b>Overdraft</b>	<b>Term finance</b>	<b>Total sample</b>
accounts	separate	82%	89%	89%	86%
	common	18%	11%	11%	14%
cash not channeled through bank	0	64%	59%	58%	58%
	0.5-25%	11%	30%	32%	28%
	>25%	25%	11%	11%	14%
fixed salary paid to owner	yes	21%	44%	49%	43%
	sometimes	0%	40%	27%	16%
	no	79%	16%	23%	41%
Does keep records of:	sales	93%	99%	97%	96%
	purchases	86%	96%	96%	94%
	cash in and out	50%	61%	64%	58%
	overdue accounts	46%	58%	56%	51%
	accounts payable	67%	77%	75%	76%
	inventory	55%	63%	63%	65%
	cash flow	54%	44%	38%	42%
sample size		28	142	73	224

*NB: For accounts payable and inventory, the statistics are based only on the firms for which this is applicable*

Table 9.8 – Financial practices according to race and education of owner

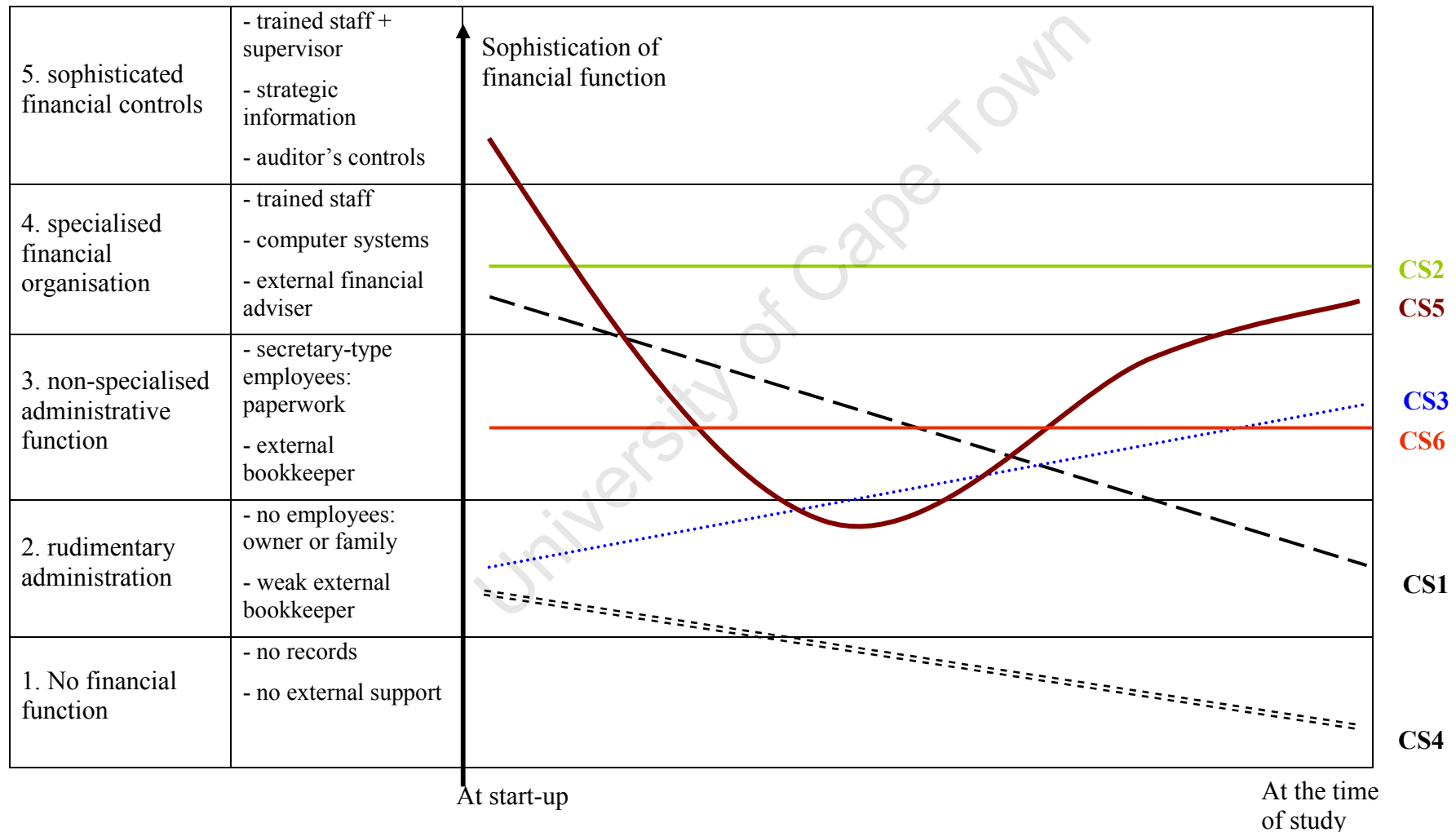
		Owner's race			Owner's education		average
		African	Indian	Coloured	Has not completed school	Has a degree	
Accounts	separate	83%	88%	86%	80%	84%	86%
	common	17%	12%	14%	20%	16%	14%
Record of cash in and out	yes	54%	57%	61%	54%	68%	58%
	no	46%	43%	38%	43%	32%	42%
	blank	0%	0%	1%	3%	0%	0%
Record of cash flow	yes	46%	42%	38%	38%	55%	42%
	no	54%	58%	62%	62%	45%	58%
Record of overdue accounts	yes	43%	58%	51%	54%	63%	51%
	no	57%	42%	49%	46%	37%	49%
Record of accounts payable	yes	75%	82%	71%	73%	76%	76%
	no	25%	18%	29%	27%	24%	24%
Monthly record of inventory	yes	75%	59%	60%	61%	73%	61%
	no	25%	41%	40%	39%	27%	39%
Sample size		83	65	74	40	38	224



*Table 9.9 – Financial practices according to the participation in mentoring programmes*

		<b>Mentored</b>	<b>Not mentored</b>
accounts	separate	87%	85%
	common	13%	15%
cash not channeled through bank	0	52%	56%
	0.5-25%	35%	30%
	>25%	13%	14%
fixed salary paid to owner	yes	48%	42%
	sometimes	15%	17%
	no	37%	42%
keep records of sales	purchases	96%	96%
	cash in and out	93%	94%
	cash in and out	61%	57%
	sales forecasts	54%	61%
	cash flow	43%	42%
	overdue accounts	50%	51%
	inventory	61%	66%
	accounts payable	80%	74%
Total		46	178

### Annexure 10 – The trajectory of case study firms on the accounting sophistication scale



Comments on the graph:

- the progress of financial sophistication as a firm matures, which is expected and would support Berger & Udell's (1998) prediction, applies only to some businesses;
- franchise firms (CS1, CS2) generally start up with a specialised to sophisticated financial function, which they may reduce later as resources get tight (CS1);
- A decline in sophistication may be required due to the need to refocus to operations (CS5).
- Similar declines in sophistication may happen in a context of budgetary constraints (CS1, CS4)

## Annexure 11 – Accounting transparency scoring model

### Quantity of information

1	Number of B/S (a summarised or interim BS counts for 0.5)	one	1.5	two	3	three	4	four or +	4.5	
2	Number of P&L (a summarised P&L with less than 12 items counts for 0.5; an interim P&L as well)	one	1.5	two	3	three	4	four or +	4.5	
3	Are the dates of BS and P&L congruent?	no	0					yes	2	
4	Number of CF statements	none	0	one	1	two	2	three or +	3	
5	Number of sets of notes	none	0	one	2	two	4	three or +	6	
6	Are any elements missing from the note: depreciation rates, gross values of assets, intangibles, nature and characteristics of LT liabilities, inventory? related party transactions? Cost of sales? Tax?									
		number of items missing						(minus 1 per item)		
									20	

**Formal Quality of Information**

Serious issues

7	Internal validation	draft	0	final	2	signed	4	
8	External validation (from auditor / accounting officer)	missing	0			provided	3	
9	Details on possible qualifications (for Ptys – CC count as 2)	serious qualification	0	minor qualification	2	unqualified	4	
10	Period of reference of the accounts (12 months?)	not recognisable	0	irregular	2	constant 12 m	4	

Minor presentation issues

11	Comparative column	missing	0			provided	2	
12	Legibility (e.g. handwriting, “plus minus” confusion, alignment, “Laundry-list syndrome”)	bad	0	intermediate	1	good	2	
13	Classification: short-term / long-term, cost of sales	mistakes	0	possible mistakes	1	correct (NAD)	2	
14	Sums in the Balance Sheet or Income Statement	mistakes	0			correct (NAD)	2	
15	Correct classification of lease debt (if applicable)	mistakes	0	possible mistakes	1	correct (NAD)	2	

Critical issues of Structural correctness (=> penalties)

16	Asset-liability distinction	mistakes	-6	not clear	-3	correct (NAD)	0	
17	Asset-expense distinction	mistakes	-3	not clear	-1.5	correct (NAD)	0	
18	Asset-liability sums	unequal	-6	not clear	-3	equal	0	
19	Consistency between BS, IS, Notes (Depreciation rates, stock, retained earnings)	mistakes	-3	not clear	-1.5	correct (NAD)	0	

20	<i>General judgement: accounts clean and prepared with care</i>	no	0	not sure	1	yes	2	0
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**Intrinsic Quality of Information**

**Testing of obligatory items**

Fixed assets

21 B/S Value, in relation to notes, CF statement, depreciations, previous years

22 Depreciation, in relation to notes, gross value, practice note

Member's investment

23 Members equity

24 member's salary

Current assets and liabilities

25 accounts receivable, in relation to turnover and previous years

26 accounts payable, in relation to turnover and previous years

Cash position

27 cash bal compared with reconstituted CF statement & to interest earned/paid

28 interest earned or paid compared with Cash balance

Income Statement

29 Turnover to cost of sales and compared with previous years

30 Operating expenses (compared with previous years)

clear inconsistency (0) pattern not clear or data missing (1.5) test fine (3)

Year	<u>Possible Margin of error</u>	Impact on	
		net profit	Equity Cash



**Less usual, non-testable items (=> penalties)**

Property and intangible assets

- 37 BS value of Property
- 38 BS value of intangibles
- 39 Amortisation

Related parties transactions

- 40 Loan granted to or by related parties, other than members loan
- 41 Other interest-free or preferential long-term loans
- 42 Interest or other payment to/from related parties
- 43 Fees, commissions, discounts granted

Miscellaneous

- 44 deferred charges
- 45 unexplained extraordinary items
- 46 provisions for future expenses

47 *General judgement: The accounts seem to make sense considering the business's stated activity*

questionable (-1)    probably reasonable (-0.5)    none (0)

Year	<u>Amount</u>	Impact on		
		net profit	Equity	Cash
		Number of material issues (-2 per issue) <input type="text"/>		
		#DIV/0! <input type="text"/>		
		0 <input type="text"/>		

#DIV/0!

0



Dysfunctional market or insufficient creditworthiness?

Submitted by: Magali von Blottnitz

Annexure 11

**Suspicion of manipulation**

Strong suspicion #    light suspicion \*    cannot say

--

If yes, give reasons

**Synthesis**

Quantitative score	<table border="1"><tr><td> </td></tr></table>		/ 20
Formal Quality Score	<table border="1"><tr><td> </td></tr></table>		/ 25
Transparency Score	<table border="1"><tr><td> </td></tr></table>		/ 55
Suspicion of manipulation	<table border="1"><tr><td> </td></tr></table>		

Total score    

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 / 100

Main issues:

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University of Cape Town

## **Annexure 12 – Accounting transparency scoring of Ned02, Wec07 and PWC01**

This Annexure proposes a narrative of the accounting transparency evaluation of two polarised examples: Ned2, a very small white-owned printing business, which had a poor score of 14.5\*, and Wec7, a medium-sized mixed-race publishing business, which achieved a good score of 77.

### **1. Ned2: a young, very small printing business**

Ned2 data were accessed anonymously through its bank. The accounting information found in the bank file was relatively slim, consisting of a balance sheet and income statement at 28 February 2001 (representing the first 9 months of the business), as well as an interim statement for the period between 1 March and 31 October 2001 and a statement of net assets referring to the business owner. These statements represented a total of five pages, written in a mix of Afrikaans and English, and were provided to the bank to accompany an application for funding, as the owner was busy setting up a second operation to complement his first business.

Ned2's quantitative score was 6/20, to reflect the presence of one final and one interim balance sheet, as well as one final and one interim income statements. Cash flow statements or notes were not available.

The formal-qualitative score for Ned2 was affected by the unprofessional presentation of the accounts. Even the accounts closed on 28 February 2001, at the end of the first financial year-end, appeared to be drafts rather than final accounts; they were neither signed by the owner nor accompanied by a statement of the accounting officer. Readability was affected by a number of factors: (i) heterogeneous periods (nine and eight months respectively); (ii) absence of a comparative column in the October accounts; (iii) mix of languages; (iv) use of negative signs in the balance sheet (instead of moving a negative liability to the assets). The lease debt appeared to be correctly classified, but the corresponding assets were not clearly recognisable. There was also an inconsistency regarding the treatment of the inventory: while the income statement for March to October 2001 indicated a change in stock of R222, the stock in the balance sheet dropped from R56 000 in February 2001 to 0 in October (more precisely, stock was not mentioned in the later balance sheet – probably due to an omission on the part of the accountant).

More critically, the October 2001 balance sheet appeared to entail a serious mistake in the treatment of liabilities, most of which appeared as negative amounts, while the equity was positive. The member's loan ('aandeelhouders / direkteurs / lede lening') and long-term liabilities ('langtermyn verpligtinge') were hence subtracted from, instead of added to, the member's capital

(‘aandeelhouders kapitaal’). Similarly, the current tax liability (‘BTW / Belasting Controle Rekening’) was added to rather than subtracted from the current assets. If these liabilities were in fact assets (i.e. the member and other agents had borrowed funds from, rather than lent funds to, the business), it is not clear why they should have been labelled as liabilities. It seems more plausible that the person who prepared the balance sheet had a serious accounting skills shortage and assumed that liabilities had to be preceded by a minus. To technically balance the capital employed with the employment of capital, substantial amounts were added and labelled as long-term charges (‘Ander langtermyn laste’), which are suspected to have no substance.

This critical mistake in the compilation of the accounts means that the October 2001 balance sheet is almost unusable, although the fixed and current assets (with the exception of the stock, which was omitted) did not appear to be affected. It was reflected in the scoring through the strongest possible penalty on asset-liability distinction as well as a poor score on the general judgment on formal quality. (The judgment was not 0, though, since this mistake appeared only on one of the four accounts).

The assessment of intrinsic quality responded to a series of tests and verifications:

- The plausibility of fixed assets value was scored with a middle score since, in the absence of a schedule of assets, it could not be ascertained. However, the depreciation of fixed assets was omitted in the second year, leading to a 0 score. The impact of this omission, estimated at R85 000, exceeded 25% of the profit figure and was therefore deemed very material.
- The member’s salaries received a neutral score, being not disclosed separately;
- The accounts payable were scored at 1,5 due to the negative tax liability, which seemed to be a mistake. However, the amount (R3 000) was not material.
- The cash balance was rated as improbable, as it was strictly 0 in both balance sheets, which seems implausible in a business engaged in day-to-day operations. In addition, a loan apparently granted to a sister business should have had some repercussions on the cash.
- The plausibility of turnover figures was uncertain, therefore rated with a medium score. Indeed, the ratio of cost of sales to turnover was unstable (2000: 45%, 2001: 61%) and higher than comparative firms in the printing industry (30% and 32.5%). However there were no serious reasons to suspect understatement of turnover.
- The operating expenses were surprisingly low in the second year, although the turnover was stable: salaries dropped from 11% to 2% of

turnover; rent, water and electricity were nearly halved without any visible reason. The total impact of these costs, at roughly R100 000, was very material compared with the profit. It was not unlikely that the owner had understated these costs to display a substantial profit, in order to obtain the bank's favour.

- As indicated, the inventory seems to have been omitted in the second balance sheet, triggering a score of 0. This omission, reducing the carrying value of assets by approximately R56 000, was very material for the value of equity.
- The accounting for long-term liabilities in October was, as discussed, highly questionable. However, the amount of this particular item itself (R24 000) was only slightly material. The member's loan on the other hand (R227 000) was a very material (negative) amount, as was the corresponding other debt (labelled 'charge').
- Financial expenses also seemed to have been understated in the second period. Compared with the first year, the lease costs were missing and the other high financial costs did not appear. The amount, which was app. R26 000 in the previous year, would be slightly material for the profit of the second period.
- In spite of the R286 000 profit announced for the second period, no pro forma tax calculation is included: the pre-tax profit is entirely ascribed to equity. While this is not unusual in interim statements, it conveys a distorted view of the firm's financial situation.
- Finally, two unexplained unusual items generated penalties: the sister company loan worth R19 000, a slightly material amount; and some unexplained extraordinary items ("eienaars uitgaves") amounting to R108 000, a potentially very material amount, possibly corresponding to start-up costs.

All these scores cumulated with the penalties for materiality triggered an intrinsic quality score of only 6,4 (out of 55), a combined result of the lack of data for cross-verifications, lack of plausibility of the profit in the second period and the considerable lack of clarity on financing schemes.

As to the manipulation score, it was set at \* (slight suspicion) to reflect the possibility that the owner has understated costs in the second period to appear profitable to his bank. The suspicion was only slight as an alternative explanation would have been the lack of competence or care in preparing this statement which was of interim nature.

Figure 11 illustrates the score calculation for Ned2.

Figure 12.1 – Score calculation for Ned2

		Ned02						Actual score		
<b>Quantity of information</b>										
1	Number of B/S (a summarised or interim B/S counts for 0.5)	one	1.5	two	3	three	4	four or more	4.5	2
2	Number of P&L (a summarised P&L with less than 12 items counts for 0.5; an interim P&L as well)	one	1.5	two	3	three	4	four or more	4.5	2
3	Are the dates of BS and P&L congruent?	no	0					yes	2	2
4	Number of CF statements	none	0	one	1	two	2	three or more	3	2
5	Number of sets of notes	none	0	one	2	two	4	three or more	6	0
6	Are any elements missing from the note: depreciation rates, gross values of assets, intangibles, nature and characteristics of LT liabilities inventory? related party transactions? Cost of sales? Tax calculation?	number of items missing						(minus 1 per item)		0
									<b>6</b>	out of 20
<b>Formal Quality of Information</b>										
<b>Serious issues</b>										
7	Internal validation	draft	0	final	2	signed	4			1
8	External validation (report from auditor or accounting officer)	missing	0			provided	2			0
9	Details	accounting officer	auditor, serious	0	auditor, minor	1	ditto, unqualif	3		0
10	Period of reference	not recognised	0	irregular	2	consistent 12 mo	4			2
<b>Minor, presentation issues</b>										
11	Comparative column	missing	0			provided	2			0
12	Legibility (e.g. handwriting, "plus minus" confusion, alignment, "Laundry-list syndrome")	bad	0	intermediate	1	good	2			0
13	Classification: short-term / long-term, cost of sales	mistakes	0	possible mist	1	correct (NAD)	2			0
14	Sums in the Balance Sheet or Income Statement	mistakes	0			correct (NAD)	2			2
15	Correct classification of lease debt (if applicable)	mistakes	0	possible mist	1	correct (NAD)	2			1
<b>Critical issues of Structural correctness (=&gt; penalties)</b>										
16	Asset-liability distinction	mistakes	-4	not clear	-3	correct (NAD)	0			-3
17	Asset-expense distinction	mistakes	-3	not clear	-1.5	correct (NAD)	0			0
18	Asset-liability sums	unequal	-4	not clear	-3	equal	0			0
19	Consistency between BS, IS, Notes (Depreciation rates, stock, retained earnings)	mistakes	-3	not clear	-1.5	correct (NAD)	0			-2.0
20	General judgement: The accounts seem to be clean and prepared with care	no	0	not sure	1	yes	2			0.5
									<b>-1.5</b>	out of 34

**Ned02**

**Transparency of Information**

*Testing of obligatory items*

<b>Fixed assets</b>									
21	B/S Value, in relation to notes, CF statement, depreciations, previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5				
22	Depreciation, in relation to notes, gross value, practice note	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	0	2001	85K	1	
<b>Member's investment</b>									
23	Members equity	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	3				
24	member's salary	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5				
<b>Current assets and liabilities</b>									
25	accounts receivable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	3				
26	accounts payable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5	2001	3K		
<b>Cash position</b>									
27	cash bal compared to reconstructed CF statement & to interest earned/paid	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	0	2001	15K		1
28	interest earned or paid compared to Cash balance	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	3				
<b>Income Statement</b>									
29	Turnover to cost of sales and compared to previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5				
30	Operating expenses (compared to previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5	2001	100K	1	
<i>Testing of frequent items</i>									
31	Inventory, in relation to cost of sales, turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	0	2001	56K	1	1
32	Long-term liabilities, in relation to investments/CF & previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	0.5	2001	20K		0.3
33	Members' loan	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	0.5	2001	210K	1	
34	Financial expenses (compared to LT liabilities and previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5	2001	26K	0.5	
35	Tax calculation	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5				
36	Tax liability	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (7)	1.5				

Preliminary score	22
Based on how many points	48
=> pro-rata to 51	23.4

**Ned02**

*Less usual, non-testable items (=> penalties)*

	questionable (-1)	probably reasonable (-0.5)	none (0)		Amount	Net Profit 200K	Impact on Equity 200K	Cash 0
<b>Property and intangible assets</b>								
37 BS value of Property	questionable (-1)	probably reasonable (-0.5)	none (0)					
38 BS value of intangibles	questionable (-1)	probably reasonable (-0.5)	none (0)					
39 Amortisation	questionable (-1)	probably reasonable (-0.5)	none (0)					
<b>Related parties transactions</b>								
40 Loans granted to or by related parties, other than members loan	questionable (-1)	probably reasonable (-0.5)	none (0)	-1.0	2001	19K	0.5	0.5
41 Other interest-free or preferential long-term loans	questionable (-1)	probably reasonable (-0.5)	none (0)					
42 Interest or other payment to/from related parties	questionable (-1)	probably reasonable (-0.5)	none (0)					
43 Fees, commissions, discounts granted	questionable (-1)	probably reasonable (-0.5)	none (0)					
<b>Miscellaneous</b>								
44 deferred charges	questionable (-1)	probably reasonable (-0.5)	none (0)					
45 unexplained extraordinary items	questionable (-1)	probably reasonable (-0.5)	none (0)	-1.8	2001	108K	1	
46 provisions for future expenses	questionable (-1)	probably reasonable (-0.5)	none (0)					
47 General judgement: The accounts seem to make sense considering the business's stated activity		no (0)    not sure (2)	yes (4)	0.0				

Year	Amount	Net Profit 200K	Impact on Equity 200K	Cash 0
2001	19K		0.5	0.5
2001	108K		1	

Number of material issues (-2 per issue)

**Suspicion of manipulation**      Strong suspicion \*      slight suspicion \*      cannot say

The statement provided to the bank displays a high profit while many costs were omitted.  
(It seems that the owner was applying for some banking facility, possibly for the sister business)

## **2. Wec7, a medium-sized desktop publishing business**

Wec7 data were mediated through Webof, and led to direct contact: the managing director personally handed out the documents to me, consisting of the brief questionnaire, a 7 pages financial report including balance sheets, income statements and extensive notes for the periods ended 29 February 2000 (the first four months of operation), 28 February 2001 and 30 September 2001, as well as two press clippings and several pages presenting various aspects of the corporation (ownership, employees, suppliers, equipment, value drivers, social responsibility). At the date of the release of the financial statements, the business had already secured substantial long-term funding and there was no indication that it may be in need of additional finance.

The quantitative score of Wec7 was 15, to reflect the balance sheets and income statements for the two completed financial years (ended in February 2000 and 2001 respectively) as well as the interim statements (September 2001) and the extensive notes. The difference between the quantity score of Wec7 and that of Ned2 shows that very young firms are not condemned to low quantitative scores.

The formal qualitative score was good, to reflect the excellent structure and presentation of the accounts, only affected by one anomaly: the amount of the instalment sale liability was presented net of deferred financial charges, a practice which was observed frequently among small businesses but is not GAAP-compliant. This results in a formal score of 20.5 out of 25.

The intrinsic quality score was slightly affected by the following observations:

- the depreciation amounts are difficult to cross-check since business has been investing continuously and assets seem to have been depreciated on periods shorter than the financial year. However it would seem that at least the September 2001 depreciation is too low, with an estimated gap in the region of R80 000. In comparison to a profit of R689 000, however, this amount was not material.
- The accounts payable and receivable were scored at 2.5 out of 3 to reflect the unusually high value of AR (with average payment terms exceeding three months) and the steep decrease of AP from 36 to 19 days between February and September 2001. These surprising values may be triggered by short-term fluctuations and therefore did not trigger substantial penalties.
- The turnover was growing, but operating costs were not entirely



stable, especially with salaries representing an increasing part of the turnover. This probably represents the firm's actual evolution of growing by increasing staff and realising inverse economies of scale. Similarly, the inventory was fluctuating but does not seem improbable.

- The marks for long-term liabilities and finance charges were slightly affected by the incorrect practice of deducting deferred finance charges.
- The tax figures were supported by our calculations, except for September 2001 but the difference of R50 000 was not material.
- The other items were generally confirmed by our cross-calculations and simulations. (Our simulated cash flow statement resulted in almost exactly the actual cash balance for September 2001).

All these led to a solid intrinsic quality score of 41.5 out of 55.

The manipulation score was blank, as there was no suspicion of conscious misrepresentations by the owners.

Figure 12.2 summarises the scoring of Wec7.

### **3. PWC01, a medium-sized supplier of DIY and sports products**

The financial statements of PWC01 were provided by its new auditor PriceWaterhouse Coopers (PWC), in the absence of any direct contact. The company was described by PWC as a manufacturer of DIY and sports products, started in 1982 and supplying app. 350 retail stores in the country.

The quantity score of PWC01 was quite high at 14,5/20, reflecting the access to a four-year accounting history. However, notes and cash flow statements were only available for the last two years and, as the following shows, notes were considered insufficient on a number of areas.

The formal quality score was only 13 out of 25, reflecting the absence of external validation (auditor's report), the inconsistencies in classification (short-term provisions turning into long-term liabilities, change in definition of cost of sales) and the contradictions between balance sheets, income statements and notes (e.g. on the issue of salaries, depreciation or interest paid, with the IS amount differing from the amount in the notes).

Figure 12.2 – Accounting opacity scoring sheet for Wec07

**Quantity of information**

1 Number of BS (a summarised or interim BS counts for 0.5)	one	1.5	two	3	three	4	four or more	4.5	3.5	
2 Number of P&L (a summarised P&L with less than 12 items counts for 0.5; an interim P&L as well)	one	1.5	two	3	three	4	four or more	4.5	3.5	
3 Are the dates of BS and P&L congruent?	no	0	yes	2	yes	2	three or more	3	2	
4 Number of CF statements	none	0	one	1	two	2	three or more	3	0	
5 Number of sets of notes	none	0	one	2	two	4	three or more	6	0	
6 Are any elements missing from the note: depreciation rates, gross values of assets, intangibles, nature and characteristics of LT liabilities inventory? related party transactions? Cost of sales? Tax calculation?	number of items missing	<input type="text" value=""/>						(minus 1 per item)	0	0
									20 <input type="text" value="15"/>	

**Formal Quality of Information**

<b>Series issues</b>										
7 Internal validation	draft	0	final	2	signed	4	provided	2	4	
8 External validation (report from auditor or accounting officer)	missing	0	auditor, minor	1	auditor, minor	1	director, unusable	1	2	
9 Details	not recognised	0	irregular	2	constant 12 mo	4	constant 12 mo	4	2	
10 Period of reference	missing	0	provided	2	provided	2	provided	2	2	
<b>Minor presentation issues</b>										
11 Comparative column	bad	0	intermediate	1	good	2	good	2	2	
12 Legibility (e.g. handwriting, "plus minus" confusion, alignment, "Laundry-list syndrome")	mistakes	0	possible mist	1	correct (NAD)	2	correct (NAD)	2	2	
13 Classification: short-term / long-term, cost of sales	mistakes	0	possible mist	1	correct (NAD)	2	correct (NAD)	2	2	
14 Sums in the Balance Sheet or Income Statement	mistakes	0	possible mist	1	correct (NAD)	2	correct (NAD)	2	2	
15 Correct classification of lease debt (if applicable)	mistakes	-0.5	not clear	-1	correct (NAD)	0	correct (NAD)	0	-1.5	
<b>Critical issues of Structural correctness (= &gt; penalties)</b>										
16 Asset-liability distinction	mistakes	-3	not clear	-1.5	correct (NAD)	0	correct (NAD)	0	0	
17 Asset-expense distinction	unequal	-0.5	not clear	-1	equal	0	equal	0	0	
18 Asset-liability name	mistakes	-1	not clear	-1.5	correct (NAD)	0	correct (NAD)	0	0	
19 Consistency between BS, IS, Notes (Depreciation rates, stock, retained earnings)	no	0	not sure	1	yes	2	yes	2	2	
20 General judgement: The accounts seem to be clean and prepared with care.										25 <input type="text" value="20.5"/>

Dysfunctional market or insufficient creditworthiness?

Submitted by: Magali von Blottnitz

Annexure 12

**Transparency of Information**

**Testing of obligatory items**

**Fixed assets**

21 B/S Value, in relation to notes, CF statement, depreciations, previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2
22 Depreciation, in relation to notes, gross value, practice note	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2

**Member's investment**

23 Members equity	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3
24 member's salary	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3

**Current assets and liabilities**

25 accounts receivable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5
26 accounts payable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5

**Cash position**

27 cash bal compared to reconstituted CF statement & to interest earned/paid	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3
28 interest earned or paid compared to Cash balance	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3

**Income Statement**

29 Turnover to cost of sales and compared to previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3
30 Operating expenses (compared to previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5

**Testing of frequent items**

31 Inventory, in relation to cost of sales, turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2
32 Long-term liabilities, in relation to investments/CF & previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2
33 Members' loan	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3
34 Financial expenses (compared to LT liabilities and previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5
35 Tax calculation	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2
36 Tax liability	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5

Preliminary score	40.5
Based on how many points	48
=> pro rata to 51	43.0

Year	Possible Margin of error	Impact on		
		Net Profit €89K	Equity 1803K	Cash 1294K
Sep-01	80K			
Sep-01	80K			
Sep-01	165K	0.5		
2001	50K			

**Less usual, non-taxable items (no penalties)**

Property and intangible assets

37 BS value of Property	questionable (-1)	probably reasonable (-0.5)	none (0)
38 BS value of intangibles	questionable (-1)	probably reasonable (-0.5)	none (0)
39 Advertising	questionable (-1)	probably reasonable (-0.5)	none (0)

Related parties transactions

40 Loan granted to or by related parties, other than members loan	questionable (-1)	probably reasonable (-0.5)	none (0)
41 Other interest-free or preferential long-term loans	questionable (-1)	probably reasonable (-0.5)	none (0)
42 Interest or other payment to/from related parties	questionable (-1)	probably reasonable (-0.5)	none (0)
43 Fees, commissions, discounts granted	questionable (-1)	probably reasonable (-0.5)	none (0)

Miscellaneous

44 deferred charges	questionable (-1)	probably reasonable (-0.5)	none (0)
45 unexplained extraordinary items	questionable (-1)	probably reasonable (-0.5)	none (0)
46 provisions for future expenses	questionable (-1)	probably reasonable (-0.5)	none (0)

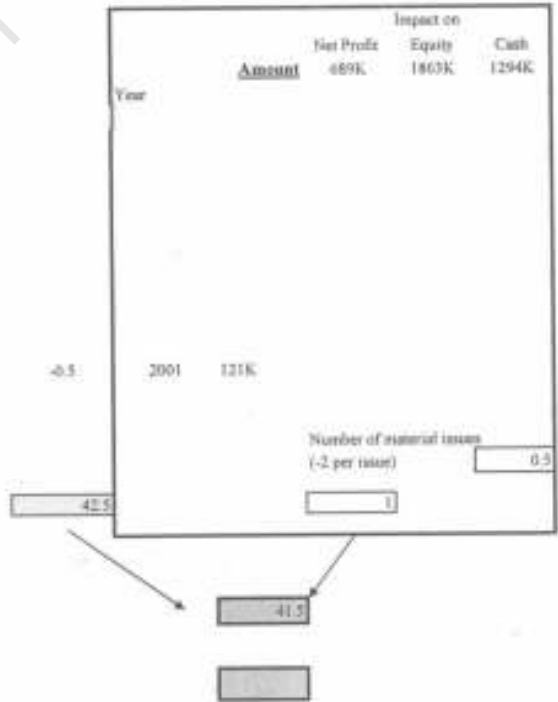
47 General judgement: The accounts seem to make sense considering the business's stated activity

no (0)	not sure (2)	yes (4)
--------	--------------	---------

Suspicion of manipulation

If yes, give reasons

Strong suspicion \*      light suspicion \*      cannot say



The intrinsic quality score was affected by a large number of perturbing observations or inconsistencies, especially the following:

- The carrying value of fixed assets and their depreciation pattern were unclear; in particular, the Income Statement operates an unconvincing distinction between administrative assets and operating assets: the carrying value of moulds or stands is too high to be either admin or operating;
- The member's salary appeared unusually high, reaching R461 063 in 1998 or 185% of the pre-tax profit.
- The accounts receivable and payable were far lower in 2000 than in previous years. That may reflect a seasonal effect, due to the change of balance sheet date; however, the difference amounts, R900 000 for AR and R700 000 for AP, are highly material and raise a 2-point penalty each. In addition, until 1997 the AP presumably include provisions and a R100 000 liability which is later rebooked as a long-term loan. On the opposite, the inventory value is far higher in June 2000 than in December 1998, similarly raising a 2-points penalty.
- The interest earned seems low compared with the year-end cash balances;
- Operating expenses are perturbing, especially the change in the definition of cost of sales, which notes do not comment on. Analysing comparative values reveals that for December 1998, the change of method had the effects of reducing the cost of sales by 27%. Similarly, other cost items present diverging values: there are three different figures for the salaries paid in 1998, ranging from R497 000 (in the 2000 income statement's comparative column) to R958 000 (in the 1998 income statement). The same applies to debt and finance charges. This classification-related issue creates opacity as it becomes almost impossible to follow trends in costs, debt or financial charges across the period, or to track where the difference comes from.
- There are inconsistencies on the amounts and cost of long-term liabilities: for example, the "other loan" is supposedly earning 15% but the calculation yields an interest rate of only 5% in 2000. Hire-purchase charges, which amount to R80 000 p.a., seem a bit high compared with the principal, and do not appear in the income statement.
- The business did not pay tax or build a tax liability on several years, in spite of its profit ; while this seems correct for 2000, it appears to be a mistake in previous years;
- There is a risk of error in the valuation of the property, which in 2000 represents 36% of total assets. Due to the materiality of the amount and the absence of documents backing the valuation, a penalty was raised.

Figure 12.3 – Accounting opacity scoring sheet for PWC01

PWC01										
<b>Quantity of information</b>										
1	Number of B/S (a summarized or interim B/S counts for 0.5)	one	1.5	two	3	three	4	four or more	4.5	4.5
2	Number of P&L (a summarized P&L, with less than 12 items counts for 0.5; an interim P&L as well)	one	1.5	two	3	three	4	four or more	4.5	4.5
3	Are the dates of BS and P&L assigned?	no	0	yes	1	no	2	yes	2	2
4	Number of CF statements	none	0	one	1	two	2	three or more	3	2
5	Number of sets of notes	none	0	one	2	two	4	three or more	0	4
6	Are any elements missing from the note: depreciation rates, gross values of assets, intangibles, nature and characteristics of LT liabilities inventory? related party transactions? Cost of sales? Tax calculation?	number of items missing			3			(minus 1 per item)		-3
20										
<b>Formal Quality of Information</b>										
<b>Serious issues</b>										
7	Internal validation	draft	0	final	2	signed	4			2
8	External validation (report from auditor or accounting officer)	missing	0	provided	2	provided	2			0
9	Details	accounting officer	2	auditor, serious	0	auditor, minor	1	minor, unqualified	3	0
10	Period of reference	not recognized	0	irregular	2	irregular 12 mo	4			2
<b>Minor presentation issues</b>										
11	Comparative column	missing	0	provided	2	provided	2			2
12	Legibility (e.g. handwriting, "plus minus" confusion, alignment, "Laundry-list syndrome")	bad	0	intermediate	1	good	2			2
13	Classification: short-term / long-term, cost of sales	mistakes	0	possible mist	1	correct (NAD)	2			0.5
14	Sum in the Balance Sheet or Income Statement	mistakes	0	possible mist	1	correct (NAD)	2			1
15	Correct classification of lease debt (if applicable)	mistakes	0	possible mist	1	correct (NAD)	2			1
<b>Critical issues of Structural correctness (= penalties)</b>										
16	Asset-liability distinction	mistakes	-6	not clear	-3	correct (NAD)	0			
17	Asset-expense distinction	mistakes	-3	not clear	-1.5	correct (NAD)	0			
18	Asset-liability sums	unequal	-6	not clear	-3	equal	0			
19	Consistency between BS, IS, Notes (Depreciation rates, stock, retained earnings)	mistakes	-3	not clear	-1.5	correct (NAD)	0			-1.5
20	General judgment: The accounts seem to be clear and prepared with care	no	0	not sure	1	yes	2			2
25										

PWC01

Intrinsic Quality of Information

Testing of obligatory items

<b>Fixed assets</b>									
21	BUS Value, in relation to notes, CF statement, depreciations, previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2				
22	Depreciation, in relation to notes, gross value, practice note	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2	2000			
<b>Member's investment</b>									
23	Members equity	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3				
24	member's salary	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5				
<b>Current assets and liabilities</b>									
25	accounts receivable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2	2000	900K		1
26	accounts payable, in relation to turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2	2000	700K		1
<b>Cash position</b>									
27	cash bal compared to reconstituted CF statement & to interest earned/paid	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3				
28	interest earned or paid compared to Cash balance	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5				
<b>Income Statement</b>									
29	Turnover to cost of sales and compared to previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	3				
30	Operating expenses (compared to previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	1.5				
<b>Testing of frequent items</b>									
31	Inventory, in relation to cost of sales, turnover and previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	1.5	2000	578K		1
32	Long-term liabilities, in relation to investments/CF & previous years	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2				
33	Members' loan	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	2.5		212K		
34	Financial expenses (compared to LT liabilities and previous years)	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	1.5				
35	Tax calculation	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	1		50K	1	
36	Tax liability	clear inconsistency (0)	pattern not clear or data missing (1.5)	test fine (3)	1				-

Year	Possible Margin of error	Impact on	
		Net Profit 7K	Equity 548K
			Cash 1.7K
2000			
2000	900K		1
2000	700K		1
2000	578K		1
	212K		
	50K	1	
			-
Preliminary score		33	
Based on how many points		48	
=> pro rata to 51		33.1	

PWC01

Less usual, non-testable items (=> penalties)

Property and intangible assets

37 BS value of Property	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
38 BS value of intangibles	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
39 Amortisation	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5

Related parties transactions

40 Loans granted to or by related parties, other than members loan	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
41 Other interest-free or preferential long-term loans	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
42 Interest or other payment to/from related parties	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
43 Fees, commissions, discounts granted	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5

Miscellaneous

44 deferred charges	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
45 unexplained extraordinary items	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
46 provisions for future expenses	questionable (-1)	probably reasonable (-0.5)	none (0)	-0.5
47 General judgement: The accounts seem to make sense considering the business's stated activity	no (0)	not sure (2)	yes (4)	1.8

Year	Amount	Impact on		
		Net Profit	Equity	Cash
2000	1601K	7225	588000	1700
	8K			
2000	841K			
	20K			
		Number of material issues (-2 per issue)		
				5
				10
				25.6

Suspicion of manipulation

Strong suspicion: #      light suspicion: \*      cannot say

In 2000 the firm has undertaken major investments in land and building, partly covered by new debt, partly by cash => The cash balance is suddenly very tight  
 The change of accountant comes with minor changes which may be motivated by opportunistic accounting (e.g. changing the date of closure, or policies in the classification of "cost of sales", "Admin costs" and of debt)  
 \* The change of date of closure, with slower sales in winter, triggers lower AP and AR (not affect 60% of cash balance), but higher stock (190% of cash balance)  
 \* An AP is rebooked as LT debt, etc  
 Also shows positive cash balance but with short-term borrowing which happens to be O/D  
 But it may also be that the new accountants advised this way to treat items regardless of any opportunism, e.g. December may be a very impractical time for accounting since it is "high season" in the sports industry



### Annexure 13 – Results of accounting transparency scoring: Balance sheet sample

Company ID	Quantity Score (/ 20)	Formal Quality Score (/ 25)	Intrinsic Quality Score (/ 55)	Manipulation	Total score (/100)
Ned01	14.5	11.5	28.5	*	54.5*
Ned02	6.0	1.5	6.4	*	13.9*
Ned03	17.0	15.0	29.0		61.0
Ned04	14.0	20.0	18.1	*	52.1*
Ned05	20.0	25.0	33.0		78.0
Ned06	13.0	7.0	3.6	#	23.6#
Ned08	11.0	18.5	29.1		58.6
Ned10	11.0	23.0	45.4		79.4
Ned11	5.0	17.0	25.7		47.7
Ned12	9.0	15.5	38.5	*	63.0*
Ned13	16.0	17.5	37.9		71.4
Ned14	6.0	13.5	44.9		64.4
Ned15	19.5	22.0	39.5		81.0
Ned16	8.0	11.5	31.9	*	51.4*
Ned18	9.4	17.5	45.1		72.0
PWC 001	14.0	13.0	28.6	*	55.6*
WECB01	8.5	14.5	33.2	*	56.2*
WECB02	10.0	5.5	21.2	#	36.7#
WECB03	5.0	7.0	10.2	*	22.2*
WECB04	11.4	21.0	42.5		74.9
WECB05	9.0	17.5	5.6	*	32.1*
WECB06	12.0	10.5	22.8		45.3
WECB07	15.0	20.5	41.5		77.0
WEC08	14.0	11.0	15.0	#	40.0#
WEC09	10.0	5.0	16.9		31.9
DIR 001	19.5	23.0	36.1		78.6
DIR 002	17.5	19.5	49.6		86.6
DIR 003	15.0	22.5	35.1		72.6
CS1	10.5	-0.5	-3.5	#	6.5#
CS2	12.0	17.5	36.0	*	66.0*
CS3	13.5	16.0	17.0	*	46.5*
CS5	14.0	21.5	38.9		74.4
CS6	13.0	20.5	37.4	#	70.9#

## Annexure 14 – Main issues of accounting opacity

### 1. Among case study firms

Table 14.1 – Main opacity issues among case study firms

	Quantitative issues	Formal quality	Turnover	Costs & Profit	LT Financing structure	Current net assets & Cash	Related Parties Transactions	Comments
CS1	X							Accounts are very irregular, with gaps and overlappings
CS1		X						no comparative column, many negative liabilities
CS1			X					Turnover figures seem to be falsified
CS1				X				no depreciations, no tax, inappropriate treatment of finance charges: all these tend to “inflate” the profits
CS1					X			apparent falsification of members' loans and retained income to hide negative equity
CS1						X		no stock adjustments in IS; contradictions on Accounts Receivable
CS1							X	Lack of clarity on member’s loan and member’s remuneration
CS2				(x)			X	The performance figures contradict interview data (probably correct though); owner may have drawn hidden remuneration
CS3				X				2004 accounts are clearly done to convey the bank an impression of high profit
CS3						X		Accounts receivable and payable, stock and cash balance contradict interview data
CS5			X					In the absence of sales records, the turnover figure is uncertain, especially given the high growth
CS5						(x)		Accounts do not give a clear idea of working capital and cash (seasonal)
CS6				X			(x)	In 2004 some costs related to brother's new venture were booked under this business, reducing taxable income.
Total	1	1	1	4	1	3	3	

## 2. Among balance sheet sample

Quantity and formal quality of data could only be assessed for the thirty businesses for which copies of accounts were available. Among those thirty, problems occurred with the frequency as described in Table 14.2.

Intrinsic quality was assessed for all 64 businesses in the sample. For each group of items, problems were listed and classified as negligible, material or highly material, as visible on Table 14.3.

*Table 14.2 – Frequency of problems w.r.t. quantity and formal quality*

	Item #	Area	Criteria	Number of occurrences (/ 30)	Further comments
Quantity	4	CF Statements	Score of 0 or 1	22	often no cash flow statements
	5-6	Notes	Score in #5: 0 or score in #6 < -0,5	22	(explanations were often missed on: gross asset values and depreciation rates; long-term loans, including loans to/from members or related parties; goodwill; general expenses, interest paid; tax calculation)
Formal quality	7	Internal validation	Score < 3	17	Accounts not signed or drafts
	8-9	External validation	Sum of scores < 4	17	no report of accounting officer or auditor, or qualified audit opinion
	19	Inconsistencies BS/IS/Notes	Score < 0	11	(e.g. the book value of assets in BS is reduced by an amount different from the depreciation booked in the IS)

Table 14.3 – Frequency and materiality of problems w.r.t. intrinsic quality

Issues regarding intrinsic quality	Negligible (<5% of profit or equity)	Material (5-25% of profit or equity)	Highly material (>25% of profit or equity)	
<b>1) long-term assets and liabilities</b>				
Fixed assets / depreciation	Ned1,12,13, BD2, Gob1, BB10	6 Ned3, 6mini, 16, Wec1, 3,5,6,7, CS2,3, BD9, Gob3, Gob13	13 Ned2,4,5,6max,8,13, Wec2,8,9, CS1, BD5, Gob1,2,6, BB1	15
intangibles / amortisation	Ned6, Wec1, BB3,5	4 Ned3,10,16,Dir3, CS1, Gob8, BB6	7 Ned5,4,13, Gob7	4
equity / retained income	BD9, Gob1, BB10	3 Ned16,Wec5,6	3 Ned1,3,6max,13, Wec1 (tax liab), Wec9, CS1,3, BD2	9
bank debt		Dir3,CS5,BB10	3 CS1,CS5,Gob13	3
non-bank loans, including related party loans	CS5	1 Ned3,10,15	3 Ned4,13,PWC1, Wec2 (AR), Wec4,5, BD6, Gob13, BB8	9
<b>2) short-term assets and liabilities</b>				
stock	none: BB1	1 Ned6mini	1 Ned2,15,PWC1, Wec5	4
AR / AP		Wec7,8,BB8	3 Ned3,4,13,15, PWC1, Wec3,5,8,9, Dir1, CS1, CS3(bad debts) BS5, BD2,9	15
cash	Ned1	1 CS2	1 Ned2,4,6max,CS5, BD2, Wec6,8	7
<b>3) Costs and revenues</b>				
Turnover / costs	Ned4	1 Ned2, Wec5, CS1	3 Ned4, Wec2,6,8,CS2,5, BD9, Gob8	8
financial charges & interest paid & received	Ned8,16, CS1(interest), BD5(Fin Chg)	4 Ned2,15, Wec2,6, BB1,BB10	6 Ned18,Wec9, CS1(FC), BD5(int received), Gob14,BB2,4,5,9	9
member's salary	none: BD5,BB1	2	Ned8,1,12,3	4
tax	CS1	1 Ned2,16,Wec3,5, BB2,7	6 Ned6,8,3, Pwc1, Wec6, Dir3, CS1,3, BB1,8,10	11

Table 14.3 calls for following remarks:

### **a) Fixed and intangible assets**

Fixed assets led to a numerous penalties in the scoring process, with 23% of all sets of financials believed to be misleading due to improper accounting for fixed assets. Generally this came from non-existent or insufficient depreciation. Intangible assets were also an area of concern, especially for franchise firms whose initial capitalised franchise fee frequently represented a large portion of the balance sheet total. In most cases it was possible to restore an adequate picture of the carrying value of the firm's assets through homogenous depreciation and amortisation rates.

### **b) Financing structure**

23% of firms were affected by a non-transparent equity, often due to inconsistencies between the profit history in income statements and retained income in the balance sheets. Most members' loans were fluctuating and often difficult to follow, as even the owners did not always keep track of the transactions between themselves and their business. In some cases (notably CS1 and possibly CS3-2004), the member's loan seemed to be calculated as the amount balancing total assets and total liabilities and equity – hence bearing all the contradictions, errors and omissions from the balance sheet and income statements.

While bank debt was usually accounted for in a transparent manner, non-bank loans often raised questions (actual conditions of the loan; terms of repayment). Financial charges often did not match the existing debt patterns (30% of firms).

### **c) Current assets and current liabilities; cash**

It was more difficult to ascertain the reliability of figures on debtors and creditors, which may fluctuate strongly from year to year. In some cases the impression emerged that accounts receivable and payable acted as a buffer in which all accounting contradictions were hidden.

- In some cases, the balance sheet values on stock, accounts receivable (AR) and payable (AP) were significantly lower than suggested by other evidence (e.g. CS3, AP CS1 Feb-97, AR CS1 Jan-98). These contradictions seemed to be linked to improper accounting, possibly caused by a lack of records on invoice payment and/or a cost-related omission of procedures like stock valuation.
- The opposite applied in other cases, such as CS6, where the balance sheets suggested far higher credit periods than indicated by the owners in the interviews. Considering CS6's apparently sound accounting procedures, the contradiction probably resulted from the owner's lack of awareness on the credit collection problem. In other cases from the balance sheet sample, supplier and creditor control accounts seemed to

have been used to make up for gross structural mistakes, as in Wec03.

- An additional complication came from short-term fluctuations. In addition to the monthly oscillation of cash levels (accounting figures always refer to month-end, when cash is generally tight), the cash position was difficult to assess in seasonal businesses (CS5 and CS6) and in the occurrence of investments and disinvestments (CS5-2003 and CS6-2004).

#### **d) Performance and profit**

The profit figures written in the financial statements were generally difficult to interpret. Indeed, since profit is technically the balance of all income and expense items, any error or anomaly in the income statement will affect it. Furthermore, there may be contradictory interests in reporting either a low, or a high profit figure. The case studies came to the finding that:

- In most cases (CS2, CS3, CS6), profit figures found in the financial statements appeared more credible than statements made by the owners in their interviews (for example, CS2's insinuation that the operating margins were high, or CS6's suggestion that the business had always been profitable, were invalidated by accounting data). Even the very rudimentary simulation of income statement undertaken for CS4a, based on interview evidence, was more informative than the members' statement that "we never do any profit".
- Opportunistic accounting often led to omissions or underestimation of non-operating costs (financial charges; depreciation; extraordinary losses; tax; notably in CS1 and CS3). These could easily be detected and corrected.
- The truth of operating income and expenses was often more difficult to establish, especially when turnover figures themselves were questionable (CS1), but manipulations could occasionally be traced through data inconsistencies (e.g. overstated cost of sales in CS6).
- The bottom line could also be strongly affected by the members' salaries, which was often problematic: some businesses were suspected to overstate salaries in order to convey the impression of success (CS1, CS3 2004), while financial statements showed no compensation, raising suspicions about possible hidden remunerations (CS2).

### Annexure 15 – Suspicions of manipulation

	strength of suspicion	(financing) Context	Item affected					Detailed comments	Apparent Impact	
			Assets	Profit	Member's remuneration	Financing scheme	Other		Distortion for unsuspecting user	Adjustable by scrupulous researcher
Ned1	*	Applying for overdraft in 2001	X	X	X			Possible understatement of depreciation in 1999? => profit smoothed (Incomplete disclosure of drawings)	1999 omitted depreciation is highly material on profit (26%)	Yes
Ned2	*	Applying for finance for new business		X				Profit raised, many costs omitted	very material (depreciation alone > 25% of profit)	Yes
Ned4	*	Applying for ISA in 2001		X	X			Profit raised in 2000 (profit on sale of asset), but some costs possibly inflated Member's remuneration raised	Material (overall without XO-profit, +18% of profit)	Difficult
Ned6	#	Asking for short-term finance in August 2001	X	X			X	Assets valued high and profit raised through insufficient depreciation Equity or LT debt raised ?	Picture is blurred	Difficult

	strength of suspicion	(financing) Context	Item affected					Detailed comments	Apparent Impact	
			Assets	Profit	Member's remuneration	Financing scheme	Other		Distortion for unsuspecting user	Adjustable by scrupulous researcher
Ned12	*	Probably applying for finance		X				Profit possibly raised in Sept. 01 through lower operating costs	Material (profit instead of loss)	Yes but not sure (lower costs could be efficiency gains / economies of scale)
Ned16	*	Unknown		X				Profit raised in 2000 through lower depreciation	Material (9% of profit)	Yes
Ned19/ CS3	*	applying for major LT loan		X				Profit raised in 2004 through lower depreciation and omission of bad debts	Highly material (42% of profit)	Yes
Ned20 / CS1	#	Struggling to repay debt		X			X	Profit consistently raised through falsified turnover and costs Equity and member's loan raised	Picture is blurred; turnover is falsified by 61%; costs are absolutely unclear	Difficult
Wec1	*	Start-up, in need of funds		X			X	Profit possibly raised by insufficient depreciation (14%) Equity raised (45%) by double calculation of tax liability; cash balance possibly also (91%)	Very Material	Yes



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	strength of suspicion	(financing) Context	Item affected					Detailed comments	Apparent Impact	
			Assets	Profit	Member's remuneration	Financing scheme	Other		Distortion for unsuspecting user	Adjustable by scrupulous researcher
Wec2	*	Start-up, in need of funds		X			X	Profit raised by 32% (no depreciation), equity similarly Turnover possibly lowered	Picture somewhat blurred	Partly
Wec3	*	Unknown					X	Turnover possibly understated?	Blurred	Difficult
Wec5	*	Unknown	X	X			X	Depreciation too low, raising profit Sales to related parties ?	Blurred	Difficult
Wec8	#	Acquired new property in 2000, financing unknown				X	X	Very high LT loan, AP and cash, linked to some related party business - unexplained	Very material	Partly
CS2	*	Holds major private loan			X			Possibly hidden member's remuneration	Not material	Yes
CS6	#	In breach of overdraft		X				Profit decreased (for tax purposes)	Not material	Yes
Total	4 # 12 *			12		5			NM:3, M:9, PB: 4	Yes:8, Partly:2, Diff: 6

## Annexure 16 – Adjustment of financial statements

This Annexure discusses the principles adopted for adjusting data, lists all adjustments undertaken, and presents a specific case to show in detail how items were adjusted.

As Chapter IV has discussed, the adjustment process was guided by the principles of relevance, transparency, consistency and balance. More specifically, the following situations were encountered:

- when an entry has obviously been omitted (e.g. assets have not been depreciated), an adjustment is required [subject to materiality thresholds];
- when there is a clear mistake in the balance sheet (e.g. the tax liability appears twice, once in retained income and once again in liabilities), an adjustment is required [subject to materiality thresholds];
- when a depreciation rate is acceptable in isolation but significantly lower than the default rates applied for adjustments (usually, 33% for computers, 20% for vehicles, 16,7% for machinery, equipment and furniture), an adjustment is performed to ensure comparability [subject to materiality thresholds];
- when a balance sheet item is (temporarily) abnormally high and the balancing item is clearly visible (e.g. very high accounts payable and cash): no adjustment, but the year-end figures must be interpreted with caution.
- When several adjusting options are available, the method which interferes least with other balance sheet items was preferred (e.g. when retained income was lower than the sum of profits, it was preferred to assume an unrecorded distribution of a part of profit, rather than to revise profit downwards or retained income upwards).

The following adjustments were performed as a routine operation:

- adjustments of **depreciation** (if depreciation was either omitted, or seemed to follow insufficient depreciation rates)
- amortisation of **intangibles** (a linear amortisation rate of 6.7% p.a. was applied uniformly, except for cases below the materiality threshold)
- adjustment of **tax**, if it was either omitted or insufficient (tax would be calculated with the tax rate for the relevant year with due consideration of small business rebates, tax losses carried forward, and non-deductible expenses). *(some firms, like Dir03 and PWC01, have applied personal income tax thresholds although they do not apply to company tax).*

The following items were also corrected when omitted or unexplainably low:

- **Financial charges** on term debt would be estimated based on the amount of outstanding debt and the conditions (in the absence of more detailed information, the default interest rate applied would be Prime + 2 basis points).
- **Interest** charges on overdraft would only be adjusted if there were strong reasons to believe that the average value of overdraft during the year was close to the year-end value and that the interest charge proposed in the income statement was insufficient;
- (interest earned, by contrast, was not normally adjusted as some businesses were assumed to keep large portion of their cash balances away from the bank).
- **Member's salary and/or drawings/dividends** were added when there was a clear pattern of members' remuneration in previous years, which had not yet been booked for the last year.

Adjustments to **retained income** followed the following logic:

- Where retained income in a year was *lower* than the sum of previous year's retained income and current year's profit, it was necessary to assess the likelihood of the previous year's retained income.
  - If the profit history / business profile cast doubts on the previous year's retained income, the latter was adjusted downwards (Ned3, Wec9, CS1);
  - If the profits seemed high indeed, and if there was a history of distribution of profits to the members, the excess profit was deemed to have been distributed (Ned16, BD2);
- Where retained income in a year was *higher* than the sum of previous year's retained income and current year's profit, the retained income was usually lowered and booked against a control account (Ned13, BB4);
- Where retained income for several consecutive years was out of touch with the profit history, it would be entirely re-accrued from year to year, with control accounts and possibly dividends acting to balance the adjusting entries (Wec6, Ned6).

Other balance sheet or income statement items were only corrected in specific cases where this appeared necessary, for example:

- Turnover was revised for Wec8 to deduct discounts granted from the sales;

- Bad debts, as indicated in interviews, were added to costs for CS3;
- For Gob7 and Gob8, franchise fees were rebooked in a way similar to other franchise firms, i.e. initial franchise fee as an intangible asset and annual royalties as a cost item; etc.

For illustration purposes, Table 16.1 presents the adjustments done for Ned3.

Assessment of success: all the highly material issues have been addressed. Among the issues that remain, half seem to be valuation errors (values of assets and stock), which are difficult to adjust from the outside, and half seem to be more unusual / unexplained issues (non-bank loans, deposits).

Overall the adjustments are regarded as relatively successful.

The following exhibit shows summarised accounts pre- and post-adjustment (Ned3, 28 Feb. 2001):

<p><b>Balance Sheet pre-adjustment</b></p> <p>Fix.Assets: 56K</p> <p>Intang.Asst: 375K</p> <p>Cash: 166K</p> <p>Equity: 226K</p> <p>Term debt: 185K</p> <p>Tax liab: 29K</p> <p>Net currnt liab: 158K</p>	<p><b>Balance Sheet post-adjustment</b></p> <p>Fix.Assets: 56K</p> <p>Intang.Asst: 333K</p> <p>Cash: 166K</p> <p>Equity: 158K</p> <p>Term debt: 185K</p> <p>Tax liab: 55K</p> <p>Net currnt liab: 158K</p>
<p><b>Income Statement pre-adjustment</b></p> <p>Turnover: 15 945K</p> <p>Costs: 15 824K</p> <p>Tax: 0K</p> <p>Net Profit: 121K</p>	<p><b>Income Statement post-adjustment</b></p> <p>Turnover: 15 945K</p> <p>Costs: 15 886K</p> <p>Tax: 26K</p> <p>Net profit: 33K</p>

Table 16.1 - Adjustments for Ned3– Cape Petroleum CC

(Accounting Transparency Score: 63/100

Intrinsic Quality Score: 29/55)

Item	Details of problem	Potential error	in % of equity or profit	materiality		adjustment?	methodology
				m	hm		
carrying value of assets	mismatch in 2000 (new bicycle racks seem to have been depreciated by 87,5% in first year, but this does not appear in the income statement...?)	30K	16% of equity	x		no, for difficult – may be that gross value is too high?	
goodwill	value high and not amortised, except in 2001	6.7% * 400K = 26K	22% of profit	x		yes	add linear amortisation of goodwill 6.7% * 400000 = 26680
members' equity	mismatch 1999-00 (profit in draft 99 statement turns to a loss carried forward in 2000 statement)	55K	30% of equity		x	yes	change profit to loss: add 28K to "increase of provision for costs" (difference between 55K and 27K of amortisation)
loan accounts	unexplained	43K	23% of equity	x		no	

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Item	Details of problem	Potential error	in % of equity or profit	materiality		adjustment?	methodology
				m	hm		
member's salary	not recorded in 2001 (was over R100K in previous year, and was regularly 62% of pre-salary profit)	75K	62% of profit		x	yes	assume salary still at 62% of profit book against member's loan and tax liability
accounts receivable	petrol deposits: 170K in 2001- very significant amount; cannot be verified	difficult to quantify				no	
inventory	inventory end of 1999: 89K inventory beginning of 2000: 112K	23K	10% of equity	x		no: don't know which value is wrong	
tax liability	missing in 2001, would be 48K (as per notes)	48K	40% of profit		x	yes	Add tax liability (book against retained income)

m: material; hm: highly material

Table 16.2 - List of adjustments undertaken

Firm code name	AT Score	IQ Score	Items adjusted	Success
Ned01	53	29	Depreciation Drawings	Successful
Ned02	12	6	Depreciation Financial expenses Tax	Successful on IS
Ned03	63	29	retained income member's salary tax liability goodwill amortisation	successful
Ned04	53	18	interest paid	Unsuccessful
Ned05	81	37	depreciation amortisation	successful
Ned06 mini Ned06 maxi	21	4	depreciation & amortisation depreciation Equity: retained income tax	Unsuccessful
Ned08	59	29	Depreciation Financial expenses Tax	successful
Ned 10	79	45	goodwill amortisation	neutral (was good anyway)
Ned11	48	26	none	n/a
Ned12	63	39	director's remuneration member's loan	Successful
Ned13	64	38	Retained income amortisation franchise fee	mostly successful

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Firm code name	AT Score	IQ Score	Items adjusted	Success
Ned14	65	45	none	n/a
Ned15	79	38	none	n/a
Ned16	52	32	depreciation retained income / cash tax	successful
Ned18	65	38	financial expenses franchise fee	relatively successful (good anyway)
PWC01	56	29	tax calculation	UNsuccessful
Wec01	56	33	depreciation rates retained income	successful
Wec02	37	21	fixed assets / depreciation current liabilities (rebook)	partly successful > T30
Wec03	17	9	Fixed assets / depreciation Equity & member's loan AP tax calculation	partly successful > T30
Wec04	75	43	none	n/a
Wec05	26	0	Depreciation	Unsuccessful
Wec06	45	23	Depreciation retained income LT liabilities  Finance charges / deferred charges tax	partly successful > T30
Wec07	78	38	depreciation L T liabilities (booking)	successful



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Firm code name	AT Score	IQ Score	Items adjusted	Success
Wec08	40	15	Depreciations Discounts granted	partly successful (IS but not BS)
Wec09	34	17	Fixed assets / depreciation Members' equity Interest paid on O/D and Financial charges on ISA	partly successful > T30
Dir01	79	36	none	n/a
Dir02	87	50	none	n/a
Dir03	73	35	goodwill amortisation	neutral (good anyway)
CS1	7	-4	depreciation finance charges tax goodwill amortisation	Unsuccessful
CS2	66	36	depreciations	neutral (was good anyway)
CS3	49	20	depreciations Retained income / Operating expenses tax bad debts AR / AP / stock cash balance	successful on IS  successful
CS3b CS3b				
CS5	74	39	none	n/a
CS6	71	37	none	n/a
BD2			Retained income / dividend	successful
BD5			Fixed assets / depreciation	successful
BD6			none	n/a

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Firm code name	AT Score	IQ Score	Items adjusted	Success
BD9			Fixed assets ISA (rebook)	successful
Gob1			Depreciation	successful
Gob2			Depreciation	successful
Gob3			Depreciation	successful
Gob5			none	n/a
Gob6 Gob6			Depreciation Interest / finance charges	successful
Gob7			franchise fee	successful
Gob8 Gob8			goodwill amortisation franchise royalties	successful
Gob9 & 10			none	n/a
Gob11			none	n/a
Gob12			none	n/a
Gob13			ISAs	partly successful > T30
Gob14			none	n/a
Gob15			none	n/a
Gob16			none	n/a
Gob18			none	n/a
Gob19			none	n/a
BB1			depreciation finance charges tax	partly successful (IS)
BB2			equity tax	successful
BB3			none	n/a
BB4			retained profit	relatively successful

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<b>Firm code name</b>	<b>AT Score</b>	<b>IQ Score</b>	<b>Items adjusted</b>	<b>Success</b>
BB5			none	n/a
BB6			amortisation patents	successful
BB7			inventory, AR (add estimates)	successful
BB8			tax	relatively successful
BB9			cash / interest	relatively (T30)
BB10			ISA / interest paid tax	Unsuccessful

## Annexure 17 – Layering the balance sheet sample

Prior to adjustments, the sample was layered as follows:

Tier	Businesses (code names)	Accounting transparency	Intrinsic quality	Comments (non- scored)
<b>A) “robust”</b> (IQ>30/55 and AT>60) 32 businesses	CS2	66.0	36.0	
	CS5	74.4	38.9	
	CS6	70.9	37.4	
	Dir1	78.6	36.1	
	Dir2	86.6	49.6	
	Dir3	72.6	35.1	
	Ned5	78.0	33.0	
	Ned10	79.4	45.4	
	Ned12	63.0	38.5	
	Ned13	64.0	32.5	
	Ned14	64.4	44.9	
	Ned15	81.0	39.5	
	Ned18	72.0	45.1	
	Wec4	74.9	42.5	
	Wec7	77.0	41.5	
Accountant’s data	BD2			no major problems
	Gob1-3, 5- 6, 9-12, 14- 16, 18-19			no major problems
	BD9			accounts are draft, but no problems
other	BB7			3 yrs, no major problems
<b>B) “workable”</b> (IQ: 20-29.5) or IQ>30 but AT<60 or IQ<20 but rich additional data 15 businesses	CS3	46.5	17.0	
	Wec1	56.2	33.2	
	PWC01	55.6	28.6	
	Ned1	54.5	28.5	
	Ned3	61.0	29.0	
	Ned8	58.6	29.1	
	Ned11	47.7	25.7	
	Ned16	51.4	31.9	
	Wec2	36.7	21.2	

Tier	Businesses (code names)	Accounting transparency	Intrinsic quality	Comments (non-scored)
Accountants	BD5			qualified audit opinion (going concern? Fire destroyed records)
	BD6			start-up (only 1 yr + 2 months)
	Gob13			qualified audit opinion in 1998 and 1999 (bec. litigation with Islamic Bank?)
Other	BB2			2 yrs
	BB5			1 yr, AFS with AO's statement
	BB6			2 years but summarised
<b>C) Larger</b> (IQ: <20/55) 17 businesses	CS1	6.5	-3.5	
	Ned 2	13.9	6.4	
	Ned 4	52.1	18.1	
	Ned 6	23.6	3.6	
	Wec3	22.2	10.2	
	Wec5	32.1	5.6	
	Wec6	40.8	18.3	
	Wec8	40.0	15.0	
	Wec9	31.9	16.9	
	BB1			1 yr
	BB3			1 yr (start-up)
	BB4			3 yrs IS but only summarised BS
	BB8			2 years but only summarised IS in F00
	BB9			2 yrs
	BB10			only 1 year
Gob7-8			little info (Gob7: 1 yr, Gob8: 2 months)	
<b>Excluded</b>	Ned7, 9	very poor		
	BD1,			
	Ned17,	large		
	Gob4, 17			
	CS4	no accounting		

After adjustments, the businesses could be reclassified as follows:

<b>Tier A) Robust or successfully adjusted</b>	<b>Tier B) Workable or Adjustments partly successful</b>	<b>Tier C) Serious doubts or only partly usable</b>	
1. CS2 2. CS5 3. CS6 4. Dir1 5. Dir2 6. Dir3 7. Ned1 8. Ned3 9. Ned5 10. Ned8 11. Ned10 12. Ned12 13. Ned13 14. Ned14 15. Ned15 16. Ned16 17. Ned18 18. Wec1 19. Wec4 20. Wec7 21. BD2 22. BD9 23. Gob1 24. Gob2 25. Gob3 26. Gob5 27. Gob6 28. Gob9 29. Gob10 30. Gob11 31. Gob12 32. Gob14 33. Gob15 34. Gob16 35. Gob18 36. Gob19 37. BB2 38. BB5 39. BB6 40. BB7	41. PWC01 42. Wec6 43. Wec9 44. Ned 4 45. Ned11 46. Wec2 47. BD5 48. BD6 49. Gob7 50. Gob8 51. Gob13 52. BB3 53. BB4 54. BB8 55. BB9 56. CS3	57. Ned 2 58. Ned 6 59. Wec3 60. Wec5 61. Wec8 62. BB1 63. BB10 64. CS1 65. CS4 66. Ned6mini 67. CS3b	Oct BS not usable 2 sets (mini/maxi) bold adjustments on BS remains very unstable AP, LT loans and cash? BS not usable BS not usable BS not usable (exc cash)

**Tier A) Robust or successfully adjusted**

(T&gt;30/55 and AO&gt;60): 40 businesses

Business code name	Accounting Transparency	Intrinsic quality	Adjustments			
			stan	spe	details	Result
1. CS2	66.0	36.0	x		depreciation	N
2. CS5	74.4	38.9				
3. CS6	70.9	37.4				
4. Dir1	78.6	36.1				
5. Dir2	86.6	49.6				
6. Dir3	72.6	35.1	x		amortisation	S
7. Ned1	54.5	28.5	x	x	depr, tax, drawings	S
8. Ned3	61.0	29.0	x	x	tax, amort, provision for costs (99), mb salary	S
9. Ned5	78.0	33.0	x		depreciation, amortisation	S
10. Ned8	58.6	29.1	x		depr, fin charg, tax	S
11. Ned10	79.4	45.4	x		amortisation	S
12. Ned12	63.0	38.5			(Sept.01 not usable)	MS
13. Ned13	64.0	32.5	x	x	deprec, amortisation, retained income	MS
14. Ned14	64.4	44.9				
15. Ned15	81.0	39.5				
16. Ned16	51.4	31.9	x	x	depr, tax, dividend	S
17. Ned18	72.0	45.1	x		amortisation, fin charges	MS
18. Wec1	56.2	33.2	x		depr, amortisation, tax, retained income	S
19. Wec4	74.9	42.5				
20. Wec7	77.0	41.5	x	x	deprec, DFC	S
21. BD2				x	add dividend	S
22. BD9	draft			x	fixed assets	S

Business code name	Accounting Transparency	Intrinsic quality	Adjustments			
			stan	spe	details	Result
23. Gob1			x		depreciation	S
24. Gob2			x		depreciation	S
25. Gob3			x		depreciation	S
26. Gob5						
27. Gob6			x		depreciation	S
28. Gob9						
29. Gob10						
30. Gob11						
31. Gob12						
32. Gob14						
33. Gob15						
34. Gob16						
35. Gob18						
36. Gob19						
37. BB2	2 yrs		x	x	tax, mb contribution	S
38. BB5	1 yr, AFS				none	S
39. BB6	2 years				amortisation	S
40. BB7	3 yrs			x	add estimate of inventory and AR for F'99	S

*Stan = standard adjustments; spe = specific adjustments*

*Result of adjustments: S: successful; MS: mostly successful*



**Tier B) Workable or Adjustments partly successful**

Business code name	Accounting Transparency	Intrinsic quality	Adjustments			
			stan	spe	details	Result
41. PWC01	55.6	28.6	x		tax	U
42. Wec6	40.8	18.3	x	x	tax, deprec, retained income, negative liab, fin charges, tax liab	IQU
43. Wec9	31.9	16.9	x	x	depr, retained income (loss), interest	IQU
44. Ned 4	52.1	18.1	x		financial charges	U
45. Ned11	47.7	25.7				I
46. Wec2	36.7	21.2	x		tax, deprec, ctrl account	IQU
47. BD5	qualified audit opinion			x	net carrying value of assets	S
48. BD6	start-up					
49. Gob7	start-up			x	franchise fee	IQU
50. Gob8	start-up			x	franchise fee	IQU
51. Gob13	qualified audit opinion			x	add ISA	IQU
52. BB3	1 yr				none (but start-up)	
53. BB4	only summarised BS			x	retained income	IQU
54. BB8	IS in F00 is summarised		x		tax	IQU
55. BB9	2 yrs		x		financial charges	IQU
56. CS3	46.5	17.0	x	x	depr., costs Dec00, tax, bad debts, --- AP/AR/cash	PS

*Stan = standard adjustments; spe = specific adjustments*

*Result of adjustments: S: successful; U: unsuccessful; IQU: sufficient to enable an upgrade of intrinsic quality score; PS: partly successful*

**Tier C) Serious doubts or only partly usable**

Business code name	AT score	Intrinsic quality score	Adjustments				Comments / parts usable
			stan	spe	details	Res	
57.Ned 2	13.9	6.4	x		depreciation, amortisation	PS	Oct BS not usable
58.Ned 6	23.6	3.6	x	x	deprec, tax, retained income	U	2 sets (mini/maxi)
59.Wec3	22.2	10.2	x	x	depr., tax, AP, equity	PS	bold adjustments on BS (AP / negative equity)
60.Wec5	32.1	5.6	x		depreciation	U	remains very unstable / non-transparent with lots of group transactions
61.Wec8	40.0	15.0	x	x	depr, fin charg, tax, TO (discounts)	PS	not clear why AP, LT loans and cash are so high
62.BB1	1 yr		x		depr, fin charges, tax	PS	BS not usable (negative liab, carrying values of assets)
63.BB10	only 1 year			x	negative ISA	U	BS not usable (negative liab)
64.CS1	6.5	-3.5	x		depr, fin charges, tax, amortisation	U	BS not usable (exc cash)

*Stan = standard adjustments; spe = specific adjustments*

*Res = Result of adjustments: S: successful; U: unsuccessful; IQU: sufficient to enable an upgrade of intrinsic quality score; PS: partly successful*

## Annexure 18 – Detailed ratio methodology

This Annexure presents, for each topic of the sequence, the way that ratios were defined and refined throughout the iterative model-shaping process, the rationale behind the choice of ratio formulas, the selection of thresholds, as well as the way that the data difficulties were handled in a case by case manner. The results of the ratio analysis are presented in Annexure 19.

### 1. Market and Pricing

The first fundamental requirement for a business to be worthy of finance is a sufficient market, either presently (last annual turnover), or in terms of growth potential, coupled with a selling price that covers the operating costs.

Initially it was attempted to assess market and pricing separately, with the first one relating to the quantity of sales while the second one referred to the profitability, i.e. the ability of turnover to cover the costs. This would have enabled to identify mispricing caused by management mistakes, as opposed to deficient market potential.

However, a separate assessment was not practical, firstly because the turnover figures found in financial statements are not usually broken down between quantity and unit price, and secondly because the only benchmark for turnover that would apply across the types of SMMEs assessed was the breakeven point – which conceptually included the profitability of operations. Therefore, it was decided to assess these two issues jointly, based on the following ratios.

#### i) MARGIN OVER BREAKEVEN

The estimated breakeven point is derived from the firm's cost structure – the rationale being that a firm which has heavy fixed costs needs a higher turnover than a firm whose costs are usually variable. The normal formula for a breakeven calculation is as follows:

$$\text{Breakeven} = \frac{\text{Fixed Costs}}{1 - \frac{\text{Variable Costs}}{\text{Turnover}}}$$

Applying this formula to the data from the case studies and balance sheet sample, it was found that the breakeven point was, in some cases, stable over time, but in other cases, prone to fluctuations. To avoid distortion, it was decided to use an average value of breakeven over the relevant period, which is explained below.

The margin over beakeven (later MBE) is therefore calculated as follows:

$$\text{Margin over breakeven} = \frac{\text{Latest Turnover}}{\text{Estimated Breakeven}} - 1$$

$$\text{Estimated breakeven} = \text{Average} \left[ \frac{\text{Corrected Fixed Costs}}{1 - \frac{\text{Variable Costs}}{\text{Turnover}}} \right]_{\text{period}}$$

Period = the last years during which the fixed costs have been relatively stable in real terms (from -10% to +25% p.a. nominal growth), or, if fixed costs have fluctuated more strongly, the last year only

Variable costs =  $\Sigma$  (Cost of sales + Salaries and related costs + Franchise costs + Electricity, gas and water + Transport and vehicle expenses)

Adjusted fixed costs =  $\Sigma$  [Rent, Depreciation & amortisation, Other operating costs, Interest and finance charges] (as adjusted) but prior to extraordinary costs, member's salary and tax

## ii) TURNOVER GROWTH

To assess the potential of market growth, the current turnover growth was observed (where data were available). It was calculated as:

$$G = \frac{\text{Latest Turnover}}{\text{Previous Turnover}} - 1$$

The following technical decisions were made to solve dilemmas in implementation:

1. Owing to evidence that members' remuneration is usually determined according to expected profits (see Annexure 7), the members' salaries are kept out of consideration in the breakeven calculation.
2. The level of detail of cost data was not always sufficient to operate a correct distinction between fixed and variable costs (electricity and water are sometimes included in the rent; motor vehicle expenses sometimes include repairs on vehicles). The impact on the result is expected to be minor. In the case of BB08, the analysis could not be undertaken at all for lack of distinction in the cost items.

3. The cost and turnover data referring to reporting periods different from 12 months had to be manually corrected. In one case the reporting period was officially 12 months but the accountant explained that the business owner had been absent for approximately 6 months on pilgrimage, causing a drop in turnover and costs; this year was therefore treated as a 6 months period, but marked with a \* to signal possible distortions.
4. In some rare cases from the “larger” sample (Ned06, Wec02 and Wec03, Wec08), there was uncertainty on the reliability of turnover figures. In these cases the ratios were nevertheless calculated on the basis of reported figures, but a \* was used to mark the result as possibly biased. Except for Ned6, all these cases were cases of a turnover deficit.
5. The ratios were distorted each time a firm’s variable costs exceeded 100% of the same year’s turnover. In most cases, this happened in the start-up year, when the turnover is too low to show significant results (occasionally even on two consecutive years). To avoid negative breakeven values, it was proceeded as follows:
  - For the same year’s calculation purposes, the rate of variable costs to turnover was brought back to 99%, resulting in very high, but positive breakeven values.
  - For the purpose of calculating an average breakeven point to be compared with the latest turnover, outliers were ignored whenever possible. The average was therefore built on other years’ values, to the effect that they were possibly too optimistic. In that case the distortion on the margin was again marked with a \*
  - When there was no other value to compare turnover to, the very high value resulting from a 99% cost rate was used, but the result was similarly marked with a \*.
6. Fixed costs and the ratio of variable costs to turnover were not always stable, affecting the breakeven calculation. This deserves more extensive comments, below.

## THE APPLICABILITY OF FIXED AND VARIABLE COSTS

The breakeven calculation is based on the premise that a firm’s costs are either fixed (i.e. independent of the volume of activity that takes place), or variable. In mathematical terms, the costs are either constant on each period, or proportional to small changes in sales, so that profit becomes a linear function of sales, with breakeven being the critical turnover at which profit is exactly zero.

This representation of costs is built on the assumption of a static enterprise structure, whereas many SMMEs, especially when young and growing, are effectively in a dynamic process, building themselves up through gradual investments – so that turnover growth is often accompanied by an increase in

fixed costs. Even a phased breakeven model is not practical in those SMMEs where the frequency of investments is higher than that of accounting reports.

Indeed, the cost analysis of the businesses from the case studies and balance sheet sample showed that, among the 64 firms, only half could be described as having proper fixed costs. Although these fixed costs were generally increasing, it was found possible to identify a period of two or more years during which fixed costs had been, in real terms, relatively stable.

The applicability of the fixed costs assumption to the other half of the sample was found problematic for the following reasons:

- In 11 cases data were insufficient, either because the lack of breakdown made a tentative cost classification impossible (BB8) or because they had provided only one period report (10 cases);
- 21 had strongly fluctuating fixed costs, with 4 (all in the 'larger sample') experiencing a significant decrease (by more than 10% p.a. in nominal terms) and 17 facing significant increases of fixed costs throughout the period (over 25% p.a. in nominal terms).

Also, in 9 cases, the standard deviation of the 'variable costs to turnover' ratio was higher than 10%.

This explains why, to make the most sense out of the breakeven analysis, an average breakeven point was estimated based on a period with stable fixed costs. Even then, the breakeven point was sometimes very unstable. In most cases, it was growing, possibly due to a tightening in variable costs (as for Ned3). In other cases, it was decreasing, reflecting either an improper reporting of costs in the latest period (suspected for Ned6 and Ned2), or an improvement in the margin on variable costs, possibly due to improved sourcing (especially BD2). In these cases for more conservative results the earlier (higher) values of breakeven were included in the average calculation.

## THRESHOLDS

The model-testing based on the balance sheet sample showed that it is important to distinguish between young and older firms. For firms that had been in existence for less than 24 months at the time of their last balance sheet, turnover growth either cannot be calculated or is unlikely to be predictive of future growth. However, there is a hope that the young firm will grow its turnover significantly and neutralise its deficit against breakeven – unless the deficit is large (see below).

For older businesses, a negative margin over breakeven is a problem, since it means that the business has not achieved sufficient turnover to cover its fixed

costs. However, such problem is only not necessarily serious.

To determine the threshold considered ‘serious’, it was argued that a firm which is *more than 2 years away* from breakeven is at serious risk. Indeed, businesses in the sample are already at least 18 months old and, as the literature has shown, their equity basis is likely to be slim. In a period of two years beyond their current age (bringing them to, at least, the age of 3,5 years), losses can erode their equity and their financial structure to such a point, that financial costs inflate and make it impossible for the firm to ever reach profitability.

However, rather than using a complex algorithm, which which would not be justified in the data context, the ‘seriousness’ of the turnover problem, for businesses older than 2 years, was operationalised as follows:

- Firms with a negative MBE and a negative (past) turnover growth were deemed as having a serious turnover insufficiency; indeed it is likely that their failure to grow will remain in future, so that they will not reach their breakeven point;
- This applies also to firms whose (nominal) turnover growth is below inflation, as it means that the business is declining in real terms – while the fixed costs are likely to follow the inflation.
- Firms with a (past) turnover growth higher than inflation, were deemed as having a serious turnover insufficiency if their MBE was under -40%, which corresponds to the sample’s median growth rate compounded over a period of 2,5 years. (All businesses of the sample achieved, over their life or over the period covered by the data, a median growth of 14% p.a.;  $1.14^{2.5} - 1 = 40\%$ ).

## 2. Working capital

Even a firm which has a sufficient market and profitable operations may experience difficulties if its operations require much working capital, or if its debtor quality is poor. Unfortunately, the data accuracy proved insufficient for a sample-wide evaluation of bad debts, so that the issue of working capital is only studied through ratios representing the turnover of current assets and current liability items.

### i) NEED FOR WORKING CAPITAL

The need for working capital corresponds to the time that elapses between payments made and payments received for a product or service. Contributing factors are the need to keep stock (raw materials, work in progress and finished products) and the credit granted to customers; on the other hand the need for working capital is reduced by the credit granted by suppliers as well as deposits paid by customers.

The need for working capital hence is very dependent on the nature of the business, with some businesses requiring high levels of stock (especially in specialised retail and manufacturing) and/or credit to customers (especially in 'business to business'), which cannot always be matched by supplier credits. For a clear and comprehensive picture of the working capital situation, the rotation of each item is considered, in days of turnover:

Need for Working Capital = Inventory Turnover + Customer credit  
- Supplier credit – Customer advances

(In days of turnover)

With: Inventory Turnover =  $\frac{\text{Inventory}}{\text{Turnover}} \times 360$  (if applicable)

Customer credit =  $\frac{\text{TradeReceivable}}{\text{Turnover}} \times 360$  (if applicable)

Supplier credit =  $\frac{\text{TradePayable}}{\text{Turnover}} \times 360$  (if applicable)

Customer advances =  $\frac{\text{Deposits}}{\text{Turnover}} \times 360$  (if applicable)

Note: For the purpose of summing, all ratios are calculated with the annual sales as denominator – although correctly trade payables and the stock turnover for raw materials should be related to the cost of sales.

A positive need for working capital is not a problem: it is frequent in certain industries. Assuming that SMMEs' cash cycle tends to follow a monthly cycle (which is the case when salaries are paid at the end of each month and represent a significant portion of cash outflows), the need for working capital can become a problem when it exceeds 30 days of turnover. Indeed, it means that if a firm experiences a cash shortage at the end of a month, it may not be able to recover before the end of the following month. The problem is likely to be serious if the need for working capital exceeds 60 days.

These thresholds apply across industries, even though they are more likely to be reached in some sectors than in others. For example, restaurants do not normally grant credits to their customers and most food stocks cannot be kept for more than a few days; therefore a restaurant with a need for working capital of 20 days can be regarded as performing badly, but such a ratio does not per se constitute a financial risk, so the ratio value would not trigger a poor creditworthiness score. Conversely, although it is probably inevitable for a jewellery business to have a very high need for working capital because of the high value of stock that it must keep, this high ratio will be entered in the creditworthiness score, since it does



represent a genuine vulnerability of all firms in this sector.

The case studies (specifically case study 6) further shed light on the need to consider the duration of supplier credit in addition to the overall working capital cycle. Indeed, firms like CS6 which make up for their slow collection of accounts receivable and/or slow inventory turnover by considerably delaying the settlement of their trade debts, may have a reasonably balanced working capital cycle, but are dependent on their suppliers' goodwill. A deterioration in the debtors collection or in the rotation of stock can be critical as the supplier credit may not stretch any further.

Therefore, the final framework opted for the following combination of thresholds:

benign problem	serious problem
a) $30 < NWC < 60$ days  Or b) { $SC > 60$ $0 < NWC < 30$  Or c) { $SC > 75$ $NWC > -15$	d) $NWC > 60$ days  Or e) { $SC > 60$ $30 < NWC < 60$

In compiling the ratios, a few data reliability aspects may have affected the the results:

- The working capital may have seasonal or cyclical character, and studying it on the basis of an annual balance sheet may not reflect the average situation throughout the year;
- Some accounts in the larger sample may not reflect debtors and creditors properly, possibly because businesses do not keep proper records. Especially there is a suspicion that firms with very rudimentary accounting systems do not account for their debtors and creditors at all (this problem had been suspected in case study CS3 as well).  
For 23 of the 59 businesses (39%), the accounts receivable are either zero or less than 4 days of turnover, which in some cases is justified by the activity (restaurants, supermarkets), but in other times looks suspicious. For example, the balance sheets of Wec01, a catering and cleaning business, show no accounts receivable, although it would be surprising if the firm were always paid in cash by its corporate clients. On the other hand the opposite effect may happen, as in the case of Wec9 which, when

handing over his accounts to me, warned that “there is a mistake in these accounts, I told my accountant that I don’t have debtors, they have all paid me, but she wrote this figure in the accounts” (R 274 000, almost 25% of annual turnover).

- An additional problem is that the accounts receivable and payable may not distinguish between trade and other accounts. In particular, accounts payable may include tax, city, telephone or other creditors, possibly even the short-term portion of term loans. (Among accounts receivable the distinction between trade and other receivables was more frequent, although not systematic.) This could cause an over-estimation of supplier credit, and accordingly an under-estimation of the need for working capital.

### 3. Equity

When assessing the creditworthiness of a business, it is essential to consider the capital structure, especially the level of equity – which measures the commitment of the owner as well as the firm’s buffer in case of losses. This enables identifying whether the business can sustain additional debt.

For small and very small firms which start with a very thin equity base, profits or losses can cause great fluctuations of the equity ratio from one year to the next. Therefore, since the purpose of this ratio is to assess the quality of the long-term capital base, the assessment shall be based on (a) the mean equity ratio over the period, (b) the last equity ratio and (c) the evolution of equity over time. The emphasis is on the evolution of equity itself and not the evolution of the equity ratio, since investments in a particular year can cause the equity ratio to temporarily plunge, even if the equity itself follows a steady growth pattern which is likely to be sustained in future.

#### i) EQUITY RATIO

The equity ratio is calculated as follows:

$$\left\{ \begin{array}{l} \text{Equity ratio} = \frac{\text{Adjusted Equity} + \text{Members' loans}}{\text{Adjusted Total Assets}} \\ \text{Mean equity ratio} = \text{Average (ER (t), ER (t-1), etc)} \\ \text{Adjusted Equity} = \text{Equity as adjusted} \\ \text{Adjusted Total Assets} = \text{Total assets as adjusted} \end{array} \right.$$

The members’ loans were included in the equity ratio as they are used in SMEs as quasi-equity.

## ii) EQUITY GROWTH

Since the aim is mainly to identify the existence of a growth pattern, the focus is not so much on the rate of compound equity growth from the first to the last year available, as the direction of equity change from year to year throughout the period. Thereby the following firms would be considered as having a clear equity growth pattern:

- a firm whose (corrected) equity was initially negative, then becomes and stays positive,
- a firm which has had uninterrupted growth of equity over the period – with interruption of growth being understood as a decline by more than 2% in a single year;
- a firm which has had more years of growth than of decline, and whose compound equity growth over the period exceeds 15% p.a.

In firms for which less than 3 years of data were available, this test could not be undertaken.

## THRESHOLDS

A negative equity ratio, which would result from accumulated losses and the member's inability to cover them, is doubtless a serious problem, since the firm is technically insolvent. Financial institutions will probably be reluctant to support an SME with a negative equity, unless the owners provide sufficient collateral.

A 'benign problem' with regard to equity could be defined as the risk that a loss erodes the capital base – that is, the absence of a clear equity growth pattern, combined with a low equity ratio.

To determine an appropriate value for a "low" equity ratio, international comparisons were sought. Wagenvoort (2003b p. 26-28) shows that in a European sample of small manufacturing and construction businesses, shareholder funds represent 34% of total assets on average. Hommel & Schneider (2003 p. 59; p. 84) show that German firms with a turnover of less than EUR 1 million have an average equity ratio of 13.5% in 2001, with more than 50% of them having a negative equity (typically secured by personal assets of company owners). Dietsch (2003 p. 97) suggests that 25% of French SMEs with a turnover below EUR 2,5 million have an equity ratio below 20%, while the median equity ratio in that size category is 32%. Guiso (2003:124) indicates that Italian [manufacturing] firms employing less than 30 employees have an average equity ratio of 19.8% (median of 23.9%).

From these sources it would seem that average SMMEs have an equity ratio in the range of 20% to 35%, while ratios under 20% can be regarded as low.

The equity base was therefore deemed problematic when the mean equity ratio was below 20% and the equity was either decreasing, stable, followed an erratic pattern, or if the data were insufficient to recognise a pattern.

## PRACTICAL CALCULATION ISSUES

As in the case studies, the equity ratios incorporate the members' loans, even when they are interest-bearing.

- The equity of sole proprietors is not very meaningful since they have no separate existence from their members (Ned13, Gob15, Gob18, Ned1, Ned11, Wec8, Ned2)
- Among firms with a weak accounting, the member's loan figure is subject to uncertainty: it is suspected that member's loan is determined "by difference" rather than positively established from transactions with member...
- Also included were loans from directors (PWC01; Ned12) or other individuals or groups for whom a direct link to the members was recognisable (e.g. Ned5: wives of members, Gob13: owner's family trust; Ned4: same surname as the member).
- Loans whose provider was unknown (other loan in PWC1-99, Gob16, Ned3, Wec5, Dir01, BD6, Wec04) and loans from affiliated companies (for Gob10 it is the major source of LT finance!; for Wec5 and Gob13 it is less significant), were not considered as quasi-equity.
- The calculation of the equity ratio was waived in BB1, Wec3 and Ned2, where equity was presented as positive and all liabilities are negative – these balance sheets had obviously been balanced in an artificial way which made any calculations highly hypothetical.

Equity is compared with total assets, which may be distorted

- if the carrying value of assets is wrong (e.g. fixed assets are not depreciated)
- if the accounts receivable are not properly recorded.
- If there are high loans receivable, e.g. to owner or affiliated companies (Ned10, 15, 1, Gob1, 6, Wec3, WEC05)
- If there are high intangible assets (setup costs in BB3),
- If there are high deferred charges (Wec6, Wec5, also BB10 in "other receivables")

## 4. Debt maturity structure

In addition to the equity ratios, the debt maturity structure deserves attention, since an excessive reliance on short-term debt, especially when combined with a high proportion of long-term assets, causes vulnerability.

The literature frequently uses the current ratio (short-term assets divided by short-term liabilities), which gives a view of a business' ability to meet short-term commitments without having to rely on operating income or outside financing. However, the current ratio can take any value from 0 to infinite, and is highly sensitive to errors in accounting of the current position. In addition, the ratio is difficult to interpret: indeed, a low current ratio does not necessarily indicate an over-reliance on short-debt; it may also stem from a low value of inventory or accounts receivable.

Therefore, we rather opted for a combination of two easy-to-interpret ratios whose values remain in a limited range: the current debt ratio and the net current debt ratio. The latter is the most decisive, since it indicates maturity mismatches between assets and liabilities. The current debt ratio is used to place the mismatch into its context and judge about its seriousness.

### CURRENT DEBT RATIOS

$$\text{Net current debt ratio} = \frac{(\text{Short term debt} - \text{Short term assets})}{\text{Total assets}}$$

$$\text{Current Debt Ratio} = \frac{\text{Short term debt}}{\text{Total assets}}$$

Short term debt = Trade and other accounts payable, Tax payable, Bank overdraft, and Other current liabilities (except current portion of long-term debt or provisions for costs)

Short term assets = Inventory, Trade and other accounts payable (but exclude cash and cash equivalents)

### THRESHOLDS

Again, to define a threshold for a "high" current debt ratio, international benchmarks were sought. Hommel & Schneider (2003 p. 85) suggest that in Germany, firms with a turnover lower than EUR 2.5 million have a ratio of short-term bank loan to total assets of between 11% (East German manufacturing) and 23% (West German retail). This does not include trade debt and other short-term debt. Wagenvoort (2003b, p. 28) shows that trade debt represents app. 22% of balance sheet total among European small businesses – consistent with the findings of Dietsch (2003:96) and Guisi (2003:124) who report trade credit ratios of 25% and 19.8% respectively for French and Italian

small firms. Hence, assuming average levels of 17% for short-term bank debt, 22% for trade credit and 6% for other short-term debt (various accounts payable, including tax), the benchmark for a 'normal' average short-term debt would be 45% of total assets. 50% and 75% can then be accepted as high and very high ratios.

The framework therefore selected the levels of 50% and 75% of total assets as thresholds for benign or serious over-reliance on short-term debt. However, the current debt ratio is widely dependent on the industry, and a high current debt ratio may not be a problem if the maturity structure of liabilities should match the structure of assets.

The net current debt ratio is unlikely to be industry-specific, because the asset maturity structure should vary in the same way as the debt structure. Therefore, there is no problem as long as the Net current debt ratio is negative or reasonably balanced (<10%). A ratio higher than 10% may be a problem if the current debt ratio is also high.

Therefore, the thresholds are set at a current debt ratio over 50% and 75% respectively, combined with a net current debt ratio over 10%.

## 5. Liquidity reserves

While it should not be the focus of an SME to maintain large liquidity surpluses, their presence does constitute a buffer against odds and hence should contribute to a better creditworthiness assessment. On the other hand, continuous cash deficits may be a sign of vulnerability, especially if they seem unlikely to be covered by future cash flows.

Unlike the previous analysis of the working capital cycle, which purported to review the effect of operations on the firm's liquidity situation, this ratio aims to recognise firms which structurally have low liquidity reserves. Therefore the emphasis is on the mean ratio over the period.

There are several caveats in basing a creditworthiness assessment on the liquidity figure found on a balance sheet:

- The liquidity figure can be affected by short-term variations (e.g. investment or major sale) and not be representative of the firm's usual liquidity situation.
- Seasonal fluctuations are not reflected in the accounts.
- Ideally, a study of liquidity reserves should be based on slack, i.e. the sum of cash and unused line of credit (Kaplan & Zingales, 1997:188) rather than cash and equivalents. Indeed, a negative liquidity situation may correspond to an authorised overdraft (which may be sustained over a long period) or to a crisis situation. Unfortunately, quantitative data on overdraft limits were often unavailable.

- These problems apply to static as well as dynamic liquidity reviews: year-end liquidity figures from the balance sheet are unlikely to follow a meaningful pattern, as each figure is prone to short-term fluctuations.

For these reasons, the judgment on liquidity was based on the following approach:

$$\text{Mean liquidity ratio} = \text{mean [ LR(year t); LR (year t-1); etc]}$$

$$\text{Liquidity ratio} = \frac{\text{Cash} + \text{Cash equivalents} - \text{Bank Overdraft}}{\text{Total assets}}$$

and for firms with structural cash deficits:

$$\text{Cash flow to Overdraft} = \frac{\text{Last operating cash flow}}{\text{Mean net overdraft}} \quad (\text{if applicable})$$

Where Operating cash flow = Net Profit after tax + Depreciation + Amortisation + Change in provisions

$$\text{Mean net overdraft}^6 = \text{Mean (Bank overdraft} - \text{Cash and equivalents)} \\ (\text{if positive})$$

## THRESHOLDS

SMMEs sometimes voluntarily keep their liquidity ratio low, for various reasons. Some businesses have invisible cash reserves for emergencies, such as an overdraft facility or the ability of the owner to inject additional funds as required. In addition, productive investment opportunities may be more promising than keeping liquid assets in the bank, which do not usually earn a good return. Therefore, for the purpose of this scheme, the mean liquidity ratio will only be presumed problematic if negative.

The lack of liquidity will be deemed a serious problem if the cash deficit is significant and unlikely to be covered by cash flow. Since the liquidity figures, for the reasons exposed above, are affected by short-term fluctuations which may be in the range of +/- 5% of total assets, a significant cash deficit is understood as a mean liquidity ratio below -5% of total assets. Assuming future cash flows equal to past values, the overdraft is deemed unlikely to be covered by cash flow

<sup>6</sup> It may seem illogical to relate the “last” cash flow to the “mean” overdraft. The preference for the mean overdraft was motivated by the short-term variability of overdraft figures. To control for distortions the same analysis was repeated, using the last overdraft instead of the mean overdraft figure. The results are only marginally different, with Dir3, Gob15 and Ned15 being then classified as having a serious problem instead of a benign problem, and Ned13 being classified as having a benign instead of serious problem. Wec6’s problem becomes insignificant but Gob6 joins the list of firms with a benign problem.

when the cash flow to overdraft ratio is below 1 (including a negative cash flow to overdraft, which would stem from a negative cash flow).

## 6. Financial costs

The model has, so far, devised ratios to assess the quality of operations and the soundness of the firm's financial structure. It remains to link the two areas in order to identify possible problems resulting from a combination of mediocre scores in both areas.

Indeed, some firms classified as borderline both with regard to the success of their operations and the soundness of their financial structure, may experience significant difficulties if their financing costs consume most of the operating profits. This is measured by the interest coverage, which indicates the number of times that operating earnings cover the total interest costs. From the two interest coverage measures available (using either operating profit or operating cash flows as a numerator), the first one was preferred, since a firm with high fixed assets are likely to have substantial depreciation charges, which would neutralise the positive cash flow interest coverage. On the other hand, the member's salary was excluded from the coverage calculation as it was found to be frequently used as profit distribution, rather than being a fixed cost.

We therefore calculate interest coverage as follows:

$$\left\{ \begin{array}{l} \text{Interest coverage} = \frac{\text{Operating Profit}}{\text{Interest}} \\ \text{Operating Profit} = \text{Profit before interest, tax, exceptional items and} \\ \quad \text{members' salaries} \\ \text{Adjusted Interest} = \text{Interest and Financial Charges Paid (incl. lease)} \\ \quad \text{after adjustments} \end{array} \right.$$

### THRESHOLDS

Undoubtedly, SMMEs have a serious problem if their coverage ratio is lower than 1. The threshold for the mild problem is more difficult to define as the operating profit, as defined, must cover financial costs and the member's salary – which are not related in terms of proportions. Therefore the threshold is arbitrarily set at 2,5. This value is higher than the threshold of financial vulnerability used by Guiso (2003), viz. 1,4.

The pilot testing of the framework revealed that interest coverage ratios are very unstable; therefore they are best reviewed according to lowest, highest and mean value for the period.



## TECHNICAL ISSUES

Again, a few technical issues arose when compiling the ratios:

- Adjustments to financial charges may have affected some ratios.
- Some businesses do not indicate their members' salary separately from other salaries; in those cases the profit calculation was post members' salaries, but this is not necessarily a problem, as the firms which are concerned are more likely to be those for which members' salaries are a fixed cost rather than a profit distribution;
- As in the case studies, the interest ratio was sometimes very volatile from year to year, justifying the use of a mean value for assessment purposes. However, the number of years available to build an average varied from one to four, so that "the values are unequally smoothed".
- A few firms had no interest charges, either throughout the period, or only on specific years. In this latter case (four firms), it was feared that excluding the error values from the average calculations might cause an under-estimation of the overall coverage. To control for this risk, an alternative mean value was calculated by adding the operating profits from all years and dividing this value by the sum of finance charges for the period. There was only one case in which this alternative calculation method resulted in re-allocating the firm to the higher category (Ned12), while in another case, surprisingly, the result was to downrate the firm to the lower category (Gob16)<sup>7</sup>.
- Similarly, there was a frequent occurrence of negative operating profits, which might distort the average calculations. Again, to control for this risk, alternative mean values were estimated as above, leading to three cases of reclassification (Dir02, Wec04 and BD9).

## 7. Owner's commitment

This area was not initially part of the framework, but was added after the pilot test, for it was found to strongly improve the predictive value of the ratio framework, when applied to CS1's 1999 financials. (In 1998, CS1's ratio values were as mediocre as for other young firms, which recovered as they grew – whereas CS1 had to be liquidated two years later, in 2000. Closer scrutiny of that particular case suggested that the absence of recovery might have been anticipated in light of the owner's lack of commitment, visible in particular from his remuneration pattern).

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<sup>7</sup> This reclassification was caused not by the single occurrence of a zero-interest, but the occurrence of another year with very low interest, leading to a coverage ratio above 300% for that year, which was smoothed out by the new mean calculation procedure.

As discussed in Chapter 3, members' reward is not always easily detected from the financial statements, as different businesses choose different ways of remunerating their owners. Apart from fringe benefits (use of company car, etc), most SMME owners are rewarded primarily by means of a salary, which acts as both a retribution for the work done and a return on the capital invested. In most cases the member's salary is explicitly indicated in income statements, but in some cases it may be comprised under general salaries. The members' salary is often determined at year-end according to the profit, in similarity to a dividend. Some entrepreneurs choose to reinvest their salary in the business by increasing their members' loans, while others de facto increase their cash pay by reducing their member's loans. Sole Proprietors, meanwhile, tend to use drawings rather than salaries, while the larger companies are more likely to combine salaries and dividends.

Under these circumstances, the most consistent approach is to consider the total amount of cash that flow from the business to the member, as the sum of salaries, dividends and drawings minus the variation in member's loan, as the best proxy for the owner's cash reward.

A high member's salary under a poor business performance suggests poor commitment, contrary to a low salary in a context of good performance. But since even the owners of poorly performing firms have a right to a decent living, the ratio must be assessed in conjunction with the *absolute* salary per month and per owner. Both values must be read in light of the phase of the firm in its lifecycle, as young or growing businesses are likely to need substantial additional resources in future.

As Case study 1 shows, the owner's commitment can fluctuate significantly from one year to the next, and a single year of moral hazard can draw a firm into difficulties. Therefore, unlike the previous criteria, the attention is not on average values but on the year with the highest remuneration.

This leads to the following indicators:

#### MEMBERS' CASH REWARD

$$\left\{ \begin{array}{l} \text{Monthly member's cash reward} = \frac{\text{Members' cash reward}}{\text{number of members} \times \text{number of months}} \\ \text{Reward to Cash Flow (RCF)} = \frac{\text{Members' reward}}{\text{Adjusted Cash Flow}} \\ \text{Where} \quad \text{Adjusted Cash Flow} = \text{Pre-tax Profit} + \text{Amortisation and Depreciation} + \text{Members' salaries} \\ \text{and} \quad \text{Members' cash reward} = \text{Members' salaries} + \text{Dividends} \\ \quad \quad \quad \text{\& drawings} - \Delta \text{ member's loan} \end{array} \right.$$

## THRESHOLDS

Two cases can be interpreted as a lack of commitment of the owner to his business: (1) the situation where the salaries deplete the firm's value by significantly exceeding the operating profits and (2) the situation where a business is in a growth phase, hence is likely to need substantial additional resources in future, but is precluded from accumulating such resources by high salaries, both in the absolute and in proportion of the profits. Since "squandering a firm's current resources away", as it were, is more damaging than hindering its growth, the former situation is deemed to represent a serious, the latter a more benign problem.

Acknowledging that the operating profit must cover not only the member's remuneration, but also financial and other costs, a (highest) ROP ratio (Remuneration on operating profit) of 100% suggests that the firm is distributing part of its value to the owner. However, if such high ratio comes from a very low operating profit while the salary is very modest in the absolute, it should not be interpreted as a lack of commitment. Only when the monthly salary exceeds R 7000 per member (32% above Stats SA average) does it represent a (serious) problem.

In addition, a mild threshold was defined for growing businesses. To simplify, any firm aged less than 3 years, or a firm for which there is other (qualitative) evidence that it is in a growth phase, were regarded as growing. The thresholds were set at an absolute monthly salary per member of R7000 coupled with a salary-to-performance ratio of at least 75%.

## TECHNICAL / DATA RELATED PROBLEMS

Again, the implementation of this assessment is not without problems, as members' salaries are one of the area identified as most affected by accounting opacity. More specifically, the following issues are worth noting:

- The operating profit may be affected by improper reporting of costs, as discussed above, and is therefore subjected to some corrections; When the operating profit is very low, the ratio of remuneration to operating profit will automatically be high. Similarly, when operating profits are negative, the ratio becomes meaningless, as it would be inadequate to blame the problems on a lack of commitment by the owner when the most visible issue is a lack of profitability. In such a case, only the absolute salaries can give further clues.
- The number of members receiving remuneration is not always known, so that the absolute monthly salary per member could not always be calculated. This concerns 23 of the 64 SMMs. The analysis is therefore based on the 41 remaining firms.

- Some draft statements either do not show any remuneration, or show a high salary which is then revised down. Another possibility is that members' remuneration be included in "salaries" (i.e. with the remuneration of employees) instead of being disclosed separately. Because of these effects, a number of zero-values may hint at incomplete disclosure rather than absence of remuneration;
- Some components of members' remuneration are difficult to capture systematically, such as interest payments or "drawings by loan provider" (Gob19) – not always properly recorded (in CS it was not included anyway, cf CS2)
- While the evolution of member's loan is relevant to the concept of member's cash reward, it can introduce distortions as the year-end members' loan may be subject to short-term fluctuations.
- It may be relevant to distinguish between SPs (remunerated mainly through drawings, except Gob19 who uses both salary and drawings), CCs (members' salaries), and Ptys (where there is a directors' remuneration and possibly a remuneration of shareholders through dividends). In such a case, members' salaries and dividends were added to show the total remuneration of related parties in relation to the operating profit –See BD2.

## 8. Variability

NB: This analysis was performed on all firms which had provided at least two sets of financials.

In accordance with literature, the instability of a business was identified as a factor affecting creditworthiness, as it makes predictions hazardous – but it is the most difficult to operationalise, since instability can materialise in a considerable diversity of ways.

The most straightforward method was to consider the standard deviation of all the ratios calculated, over the period covered by the data. The volatility analysis however was limited to the static annual ratios, ignoring all growth rates as well as the margin over breakeven (since breakeven was calculated as an average across the period). The standard deviations considered therefore referred to: the need for working capital, the equity ratio, the current debt ratio, the liquidity ratio and the interest coverage. In addition, to replace the margin over breakeven which could not be calculated each year, and obtain an estimation of the stability of operations, the operating margin was calculated for each year and its standard deviation was added to the ones cited above. The operating margin was calculated as follows:

$$\left\{ \begin{array}{l} \text{Operating Margin} = \frac{\text{Operating Profit}}{\text{Turnover}} \\ \text{Operating Profit} = \text{Sales} - (\text{Cost of sales} + \text{Staff costs} + \text{Rent and charges} + \text{Transport and vehicle expenses} + \text{Repairs \& maintenance} + \text{Advertising} + \text{Franchise costs} + \text{Other operating expenses}) \end{array} \right.$$

Although the period varied from one business to the next, this did not seem to distort the results, as there was no consistent correlation between the number of years provided and the standard deviation of the various ratios.

Defining thresholds or comparing the businesses was difficult, though, as there were six standard deviations, corresponding to ratios which were technically very different (some confined within boundaries, e.g. between 0 and 100%, others where any positive or negative value was possible) – so that from one ratio to the next, the range of possible standard deviations was greatly variable.

Therefore, for this particular dimension of creditworthiness, the methodology adopted a comparative judgement rather than absolute thresholds. Standard deviations were compared between firms and the values that were relatively higher were identified as indicators of instability – the lower values conversely were identified as indicators of stability. The firms that presented a high number of high volatility ratios and a low number of low volatility ratios were regarded as at risk.

Specifically, the procedure was as follows: out of the 37 firms (including case studies) for which a volatility analysis was possible, the 5 with the lowest standard deviations and the 5 with the highest were isolated. This analysis was repeated for each ratio.

Then each firm was reviewed to establish how often they had been identified as one of the most or least stable. Firms which had never been classified among the most stable, but had been 3 or more times among the least stable, were regarded as having a serious volatility problem. Firms which had been 3 or more times among the least stable, but 1 or 2 times among the most stable, were considered as having a potential volatility problem.

## TECHNICAL PROBLEMS

In studying the firms' volatility the following problems were encountered:

First, the varying number of years available distorts volatility calculations; while for case studies this problem could be mitigated by further knowledge of the single cases, it becomes more difficult to undertake case-by-case controls in a larger sample. Therefore, the analysis of volatility was restricted to firms which have provided at least 3 consecutive annual statements.

Volatility is a concept which can be applied to different measures and for a

single entity it may be found that some ratios are volatile while others are not. Any “compound measure of volatility” would seem artificial and inappropriate.

The purely statistical nature of the measure of standard deviation makes it difficult to define benchmarks to determine what is high, medium, or low volatility.

For these reasons, it was proceeded as follow:

1. Two profile indicators were computed for all 32 firms which had provided at least three sets of financial statements: the compound turnover growth rate p.a. and the ratio of investment in fixed assets to turnover over the period. This was done because the case studies had led to the expectation that a high turnover growth combined with high investments tended to destabilise firms, whereas low growth combined with low investments seemed to cause very stable firms;
2. The standard deviation was calculated on each of the 7 relevant ratios. In each case the 5 highest and the 5 lowest values were singled out by means of colour marking. (If the 6<sup>th</sup> or 7<sup>th</sup> values were very close to the 5<sup>th</sup> value, they were included in the special analysis).
3. The 32 businesses were reviewed one by one to establish which one had the highest number of “highest” or “lowest volatility values”. This enabled to identify extreme firms which appeared as
  - “very volatile” (having scored at least 3 times among the highest and never among the lowest, or 4 times among the highest and once among the lowest)
  - “volatile with contradictions” (having scored at least 3 times among the highest, but 1 or 2 times among the lowest)
  - “very stable” (having scored at least 3 times among the lowest and never among the highest)
  - “stable” (having scored twice among the lowest and never among the highest)
  - “stable with contradictions” (having scored at least twice among the highest, but once among the lowest)

The firms thus classified were then compared with the initially established growth- and investment profile to verify the applicability of the hypotheses from the cases studies.

(Then the firms which had provided only 2 sets of financials were also reviewed: if they scored at least 4 times among the 13 highest [out of 49] they were considered as highly volatile, or volatile if 3 times).

## Annexure 19 – Detailed results of ratio analysis

This annexure presents detailed results of the ratio calculations and an analysis of the values obtained. In its last section, the annexure includes a synthetic list of ratios for all 64 businesses analysed.

NB: In general, the ratio methodology was applied to 64 businesses, which had provided usable financial statements. In addition, four tentative ratios were estimated for case study micro enterprise CS4, although it did not have financial statements: the breakeven calculation, the working capital cycle, the interest coverage and the remuneration to cash flow were estimated using precise interview data. This is why these tables refer to 65 instead of 64 businesses.

### 1. Turnover sufficiency

Turnover deficiencies were encountered in fourteen out of 65 firms; nine were in the lower tiers of accounting transparency.

*Table 19.1 – Distribution of Margin over Breakeven (MBE)*

	<b>Severe lack of sales (MBE &lt; - 40%)</b>	<b>Mild lack of sales (-40% &lt; MBE &lt; 0)</b>	<b>Sufficient sales MBE &gt; 0</b>	<b>Total</b>
Tier A	2	3	34	40
Tier B	3	3	9	16
Tier C	2	1	8	11
Total	7	7	51	65

Firms with turnover deficiencies can be further classified into three categories, depending on their real growth and the size of their deficits.

Table 19.2 – Firms whose turnover is below breakeven

	<b>serious deficit (MBE &lt; - 40% or no real growth)</b>	<b>mild deficit (-40% &lt; MBE &lt; 0, growth &gt; inflation)</b>	<b>problematic growth pattern (BE growth &gt; TO growth)</b>
Start-ups and Very young firms	BB6; BB3 (start- ups), BD6 (young), BB5 (recently bought)	Gob8: start-up (growth expected)	
Older firms	<u>MBE&lt;-40%:</u> Gob16* <sup>8</sup> , CS4, Wec3, BB9 <u>No real growth:</u> CS1, CS2		<u>MBE&lt;0:</u> Dir01, BD5, Wec2 <u>0&lt;MBE&lt;15%:</u> Gob5, Wec8, PWC1

## 2. Need for working capital

The working capital cycle was studied for a sample of 65 sets of financials. This includes interview evidence for CS4 (Tier C) as well as two contradictory sets of data for case study firm CS3 (Tier B) and sandal manufacturer Ned6 (Tier C). BB1 and BB10 (both Tier C) were excluded from the analysis due to unreliable data.

The results of the working capital analyses are subject to accounting accuracy, as cash-based accounting may cause an underestimation of current assets and debts, while the excessive use of control accounts and the lack of distinction between trade and other debt may artificially inflate them, as in Wec3 (see more extensive discussion in Annexure 18).

Table 19.3 summarises the situations with regard to working capital problems.

<sup>8</sup> Gob16 was a special case as the owner had spent half of the last year on a pilgrimage, leaving the business dormant.



Table 19.3 – Reasons for working capital problems

	serious need for working capital (>60 days)		mild need for working capital (>30 days)			excessive use of supplier credit (>30 days with 0<NWC<30)	
	long customer credit (>60)	slow stock rotation (>60)	long customer credit (>45)	slow stock rotation (>45)	low supplier credit or else		
Tier A	Wec7, Gob16	BB7	CS6, Ned10, Ned13, Ned15, BD9	Ned15, Gob2	Ned1	BD2, Gob1, Gob6	13/40 (33%)
Tier B	BD6	BD6, BB9	Wec6, Wec9, PWC1		Gob13		6/17 (35%)
Tier C	Ned6mini				Ned2, Ned6max	Wec5	4/7 (57%)

### 3. Equity

The equity ratio was studied for a sample of 63 sets of financials. This includes two contradictory sets of data for case study firm CS3 (Tier B) and sandal manufacturer Ned6 (Tier C). Interview evidence for CS4 was insufficient. BB1, BB10 and CS1 (all Tier C) were excluded from the analysis due to unreliable data.

A specific review of the 19 firms with low mean equity ratios (below 20%) reveals that, surprisingly, young and black SMMEs are not more likely to be undercapitalised than white and older businesses. Although many black owners had restricted personal funds to invest, several of them have devised strategies to balance the capital equation, either by starting small against initial ambitions (Wec6, for example, operated for several years as a specialised retailer instead of directly starting manufacturing operations), or by pooling resources (as in Wec7, a partnership between 6 members). This relatively good capitalisation of black businesses may be a result of the sample's bias, as a large number of black businesses were excluded from the sample for lack of proper accounts.

Table 19.4 shows, however, that capital intensive firms (i.e. manufacturing, construction or transport firms), are more likely than service or trade firms to have a low equity ratio, as they tend to contract more debt to fund their assets.

*Table 19.4 – Lack of equity, race, age of the business and type of activity*

	<b>Serious lack of equity (MER&lt;0)</b>	<b>Lack of equity (MER&lt;20%)</b>	<b>Sample size and %</b>
Black	4 (Dir2, Wec4, Gob18, Wec3)	4 (Gob3, Wec5, CS3b, CS5)	8 / 31 (25%)
Young	4 (Dir2, Wec4, Gob18, BB2)	4 (Ned14, Ned8, BB3, BB4)	8 / 31 (25%)
White >3 yrs	2 (BD9, BD5)	3 (Gob1, PWC1, Ned6)	5 / 14 (36%)
trade & services	3 (Gob18, BD5, Wec3)	7 (Ned14, Gob1, Gob3, BB4, Ned8, BB3, BB8)	10 / 43 (23%)
capital intensive	4 (Dir2, Wec4, BD9, BB2)	5 (PWC1, Ned6, Wec5, CS3b, CS5)	9 / 20 (45%)
Overall	7	12	19 / 63 (30%)

*Figures do not add up to totals as the owner of BB8 has not indicated his race. Black and young categories may overlap.*

The way that these firms coped with a low equity ranged from sister company loans to bank debt; almost all had important non-financial debt, especially trade credit.

#### **4. Dependence on short-term debt**

The current debt and net current debt ratios were studied for a sample of 63 sets of financials. This includes two contradictory sets of data for case study firm CS3 (Tier B) and sandal manufacturer Ned6 (Tier C). Interview evidence for CS4 was insufficient. BB1, BB10 and CS1 (all Tier C) were excluded from the analysis due to unreliable data.

*Table 19.5 – Current debt ratio (CDR) of firms with a high NCDR*

	<b>NCDR &gt;10% CDR ≤ 50%</b>	<b>NCDR &gt;10% 50% &lt; CDR ≤ 75% (mild problem)</b>	<b>NCDR &gt;10% CDR &gt; 75% (severe problem)</b>
Tier A	8	6 (Ned8, BD2, Gob1, Gob11, Gob19, BB2)	3 (Wec4, BD9, Gob18)
Tier B	3	2 (BB4, BB8)	1 (BD5)
Tier C	1	0	1 (Wec3)
Total	12	8	5

The sample analysis revealed that:

- High current debt ratios often occurred in firms with a negative equity, especially when operating in the trade and services sector. Table 19.6 shows that firms in capital-intensive industries were less likely to depend on short-term debt, possibly as a result of their easier access to asset finance as well as scale effects (see Annexure 24).
- Again, the data showed no clear evidence of the relevance of firm age or owner's race for firms' dependence on short-term debt.

*Table 19.6 – Excessive reliance on short-term debt, by industry*

	<b>50% &lt; CDR ≤ 75%</b>	<b>CDR &gt; 75%</b>	<b>Problem firms</b>
trade & services	7 (Ned8, BD2, Gob1, Gob11, Gob19, BB4, BB8)	3 (Gob18, BD5, Wec3)	10 / 43 (23%)
capital intensive	1 (BB2)	2 (Wec4, BD9)	3 / 20 (15%)
Overall	8	5	13 / 63 (21%)

## 5. Lack of liquidity reserves

The liquidity ratio was studied for a sample of 64 sets of financials. This includes two contradictory sets of data for case study firm CS3 (Tier B) and sandal manufacturer Ned6 (Tier C). Interview evidence for CS4 was insufficient. BB1 and BB10 (both Tier C) were excluded from the analysis due to unreliable data.

The 23 firms whose mean net overdraft exceeds 5% of total assets are diverse in terms of age but, as Table 19.7 shows, tend to be over-represented in the 'very small' size category: 55% of very small firms had liquidity problems, compared with 29% of small and medium-sized firms.

*Table 19.7 – Firms lacking liquidity reserves*

	mild problem		severe problem
	MLR < 0 CFOD < 1	MLR < 5% CFOD > 1	MLR < -5% CFOD < 1
micro (n=4)	0	0	0
very small (n=31)	2 (6%) (Wec6, CS1)	6 (19%) Dir1, Ned10, Gob9, Gob10, Gob15, Ned6	9 (29%) (Ned13, BD5, BD6, , Gob12, Gob14, BB5, BB7, BB9, Wec9)
small (n=18)	0	4 (22%) CS6, Dir3, Ned15, BB2	2 (11%) (Gob1, Gob13)
medium (n=11)	1 (9%) (Ned8)	0	2 (18%) (Gob3, BD9)
Total sample (n=64)	3 (5%)	10 (16%)	13 (20%)

## 6. Interest coverage

The interest coverage was studied for a sample of 67 sets of financials. This includes two contradictory sets of data for case study firm CS3 (Tier B) and sandal manufacturer Ned6 (Tier C), as well as interview evidence for CS4

Coverage problems typically occur among SMMEs which combine high debt and low profit, approximately 30% of the sample. However, Table 19.8 shows that less than 55% of low-profit firms have an interest coverage problem; the remaining 45% are not endangered, because they carry little debt. Similarly, high-debt firms do not have a coverage problem when their profits are sufficient.

Very young firms are also slightly more likely to have coverage problems, indicating either a transitional stage until they reach profitability and repay their debt, or better survival rates among firms with a high coverage.

*Table 19.8 – Propensity for low interest coverage among some types of firms*

	<b>Mean interest coverage &lt; 1 (serious problem)</b>	<b>1 &lt; Mean interest coverage &lt; 2,5 (mild problem)</b>	<b>Mean interest coverage &gt; 2,5</b>	<b>Proportion with low interest coverage</b>
very young firms (less than 3 years)	9 (CS2, BB5, Wec2, BD6, Gob8, BB3, BB9, Wec3, CS4)	4 (Ned14, Wec9, Ned4, Ned11)	20	39.4%
high debt firms (mean ER <20%)*	2 [4] (BB3, Wec3) [CS1, CS4]	5 [6] (Ned14, Gob1, Gob3, BD5, Wec5) [BB1]	11 [12] [BB10]	38.9% [45.5%]
low profitability firms (mean OM < 10%)	8 (CS2, CS1, BB6, Gob8, BB3, BB9, Wec2, Wec3)	7 (Ned14, BD5, Gob1, Gob3, Ned4, Ned11, Wec5)	13	53.6%
Full sample	11	11	45	31.3%

*OM: Operating Margin, calculated as operating profit to turnover*

\* *The statistics in [square brackets] on high debt firms include those whose balance sheet figures were considered too unreliable for an equity ratio calculation, yet appeared likely to have a low equity.*

## 7. Owner's remuneration

The owners' remuneration could only be studied for a sample of 43 sets of financials. 21 firms were excluded because of insufficient data either on the amount paid to members or on the number of members.

The cases identified in Table 19.9 suggest a problem of over-remuneration of the member(s), which can be interpreted as a lack of commitment of the members to their business. In three cases, additional information corroborated this interpretation (exceptionally low equity in construction business BD9; sale of Wec09's panelbeating business in the months following the review; resignation of two members of marketing firm Ned8 during the last year of the study).

Table 19.9 – Firms with high members' remuneration

	young or growing; maxRCF>75% and R>7000 (mild problem)		maxRCF>100% and R>7000 (serious problem)		
	one year	several years	one year	several years	<i>possible member loan effect<sup>9</sup></i>
Tier A	2 (Ned3, Ned8)	3 (BD9, Gob3, Gob11)	4 (Gob6, Gob18, Ned1, BB7)	0	3 (Ned5, Ned13, Gob12)
Tier B	3 (BB8, BD6, Wec2)	1 (Wec9)	0	0	
Tier C	0	0	0	1 (CS1)	
Total	5	4	4	1	3

## 8. Volatility

The volatility analysis could only be performed on firms which had provided at least two sets of balance sheets and income statements: this applied to 37 enterprises.

Detailed results of the volatility analysis are presented in the following tables. For illustration purposes, Table 19.12 presents exemplary standard deviations of a cross sample of SMMEs, as well as their growth rate and investment pattern.

<sup>9</sup> These are firms whose RCF exceeds 100% and monthly pay exceeds R7000 at one point in their history when including the decrease in members' loan; but the values go back below thresholds when the variation in members' loan is ignored. Their classification as problem firms is conditional on the assumption that the decrease in members' loan represents a trend and not a short-term fluctuation.

*Table 19.10 – Most volatile and most stable firms among those with at least 3 annual accounts*

“very volatile” (having scored at least 3 times among the highest and never among the lowest, or 4 times among the highest and once among the lowest)	4: Dir1, BD9, Gob9 BD6
“volatile with contradictions” (having scored at least 3 times among the highest, but 1 or 2 times among the lowest)	7: Wec8, Ned15, Gob18 (Wec4, Gob16, Ned2, BB4)
average or no dominant pattern emerging	18: 18 other firms
“very stable” (having scored at least 3 times among the lowest and never among the highest)	1: Gob1
“stable” (having scored twice among the lowest and never among the highest)	4: Dir3, Ned13, Ned1, PWC1
“stable with contradictions” (having scored at least 2 times among the lowest, but once among the highest)	3: Gob3, BB7, Gob19

*NB: Firms in (brackets) are those which have provided only 2 sets of financials.*

*Table 19.11 – Volatility and turnover growth*

<b>Growth category</b>	<b>number of firms</b>	<b>very stable, stable or stable with contradictions</b>	<b>very volatile or volatile with contradictions</b>
no real growth (nominal growth rate < 3% p.a.)	8 (Ned1, BD2, Gob2, Gob13, Gob19, Ned5, Gob15, Gob18)	2 (25%) (Ned1: stable, Gob19: stable with contradictions)	1 (12.5%) (Gob15: volatile)
low growth (nominal growth rate < 13% p.a.)	11 (Dir3, Gob9, PWC1, Gob1, CS2, Ned13, Gob3, Gob6, Gob12, Gob14, BD5)	5 (45%) (Ned1: stable, Gob19: stable with contradictions)	1 (9%) (Gob9: very volatile)
relatively high growth (>25%)	5 (Wec5, Ned4, CS3, CS1, CS6)	0 (0%)	0 (0%)
very high growth (>40% p.a.)	7 (Wec7, Wec6, Dir1, Ned15, CS5, Wec2, Wec8)	0 (0%)	3 (43%) (Dir1: very volatile Ned15, Wec8: volatile)
full sample	37	8 (22%)	11 (30%)

Table 19.12 – Volatility and investment pattern

<b>Investment to turnover category</b>	<b>number of firms</b>	<b>very stable, stable or stable with contradictions</b>	<b>very volatile or volatile with contradictions</b>
no or negative investments (I/TO < 0)	7 (Gob6, BD5, Ned10, Gob14, Gob15, Gob18, Gob19)	1 (14%) (Gob19: stable with contradictions)	1 (14%) (Gob18: volatile)
low investments (I/TO < 0.5%)	9 (Ned3, Gob2, CS2, CS3, Wec5, Ned13, Ned1, BD2, Gob3)	3 (33%) (Ned1, Ned13: stable, Gob3: stable with contradictions)	0 (0%)
relatively high investments (3-15%)	7 (Ned5, Gob12, Wec6, BB7, Gob13, CS6, PWC1)	2 (29%) (BB7: stable with contradictions, PWC1: stable)	0 (0%)
very high investments (>15% of TO)	7 (Ned4, CS5, Wec8, Wec7, Dir1, Gob9, Gob10)	0 (0%)	3 (43%) (Dir1, Gob9: very volatile; Wec8: volatile)
full sample	37	8 (22%)	11 (30%)



Table 19.13 –Growth rate, investment rate and standard deviation of key ratios for selected firms

	Very volatile		Volatile with contradictions		Relatively volatile case studies			Stable		Very stable	
	Dir1	BD9	Wec8	Gob18	CS1	CS5	CS6	Dir3	Ned13	Gob1	CS2
<i>Number of years included</i>	4	3	3	3	4	4	4	4	3	4	2
<u>Growth-Investment profile:</u>											
• Turnover growth p.a.	65%	17%	42%	2%	4.4%	57.5%	37.2%	6%	11%	10%	10.4%
• Investment to turnover	20%	1%	16%	0%	2%	16%	9%	1%	0%	3%	0%
<u>Standard deviation of:</u>											
• Operating margin	13.0%	8.6%	2.6%	1.3%	7%	5%	4%	2.0%	0.6%	0.5%	1%
• Equity ratio	31.0%	55.8%	3.5%	86.9%	21%	18%	19%	10.2%	13.8%	4.3%	7%
• Current Debt Ratio	27.5%	55.7%	3.5%	86.9%	19%	13%	6%	10.0%	13.8%	6.7%	7%
• Liquidity Ratio	11.9%	39.2%	14.3%	44.0%	8%	16%	18%	10.7%	11.7%	15.3%	4%
• Owner's remuneration in % of operating margin	21.5%	125.1%	105.3%	55.8%	34%	6%	9%	15.4%	7.5%	4.4%	0%
• Interest coverage	72.6	3.0	124.4	0.0	2.39	2.54	5.88	0.37	0.2	0.1	0.50
• Need for working capital	23.8	19.6	37.3	14.9	15.73	15.49	24.55	1.6	12.9	9.5	2.32

## 9. Full List of Ratios for the Balance Sheet Sample (post adjustment)

Business code name	Margin or deficit over breakeven	Need for working capital (in days of TO)	Supplier credit (in days of TO)	Mean equity ratio	Mean current debt ratio	Mean net current debt ratio	Mean liquidity ratio	Last cash flow to overdraft ratio	Mean interest coverage ratio	Max remuneration to cash flow	Max monthly remuneration per member
<b><u>Tier A) Robust or successfully adjusted</u></b>											
CS2	-8.8%	3.0	2.2	92.7%	7.3%	0%	-4.1%	5.1	0.2	128.1%	R 6,063
CS5	111.6%	-28.7	39.7	10.1%	30.9%	23%	15%		32.2	88.8%	R 15,000
CS6	216.9%	44.1	22.4	30.2%	55.5%	-11%	-40.2%	1.7	5.0	87.0%	R 4,196
DIR 001	73.3%	-16.8	31.9	55.6%	40.9%	31%	-16.1%	1.7	5.8	75.6%	R 5,571
DIR 002	-6.3%	20.1	29.8	-8.8%	39.4%	-18%	12.1%		0.2	109.6%	R 15,000
DIR 003	-54.7%	-3.3	7.0	51.2%	34.6%	24%	-7.3%	2.7	0.8	0%	n/a
Ned01	-6.0%	32.7	11.9	77.2%	5.0%	-15%	2.3%		-0.4	43.1%	R 667
Ned03	105.1%	3.0	6.2	21.0%	42.9%	7%	11.1%		5.0	94.1%	R 1,417
Ned05	14.9%	-5.9	10.7	71.3%	19.7%	13%	-3.0%	2.9	2.7	114.3%	R 3,989
Ned08	67.4%	-26.3	85.4	11.0%	71.7%	22%	-0.3%	-5.6	3.0	139.7%	R 21,852
Ned10	28.2%	37.4	18.5	58.5%	41.5%	-14%	-10.1%	4.0	6.3	102.5%	R 12,248
Ned12	169.8%	14.8	18.6	72.8%	19.0%	-15%	64.2%		4.6	36.3%	R 7,661
Ned13	46.1%	37.0	16.9	29.3%	35.8%	-38%	-12.5%	0.6	406.7	68.8%	R 4,388
Ned14	87.7%	-6.7	16.1	15.2%	18.9%	8%	7.8%		5.3	104.7%	R 10,276
Ned15	0.0%	46.4	71.7	37.0%	63.0%	-18%	-8.8%	1.06	1.0	0.0%	R 0
Ned16	51.8%	-16.9	20.5	28.4%	29.6%	21%	62.9%		9.5	220.5%	R 5,277
Ned18	1.7%	-8.9	13.1	51.6%	9.3%	6%	14.6%		3.1	33.7%	R 2,301
WEC01	66.6%	-1.6	10.6	75.8%	14.9%	3%	43.9%		3.9	402.1%	R 4,380
WEC04	186.9%	-32.6	115.1	-5.8%	98.5%	26%	15.4%		9.8	30.7%	R 14,286
WEC07	77.0%	123.3	30.1	53.5%	17.7%	-17%	26.0%		66.3	112.0%	R 62,742
BD2	-10.7%	10.1	30.1	31.8%	60.6%	17%	40.6%		1.6	34.6%	R 153
BD9	-54.3%	31.6	37.3	-53.6%	144.3%	55%	-85.2%	0.1	-33.8	-10.8%	R 7,500
GOB 01	61.6%	3.2	53.8	16.3%	67.6%	18%	-20.2%	0.3	3.4	98.4%	R 10,677

Dysfunctional market or insufficient creditworthiness?

Submitted by: Magali von Blottnitz

Annexure 19

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Business code name	Margin or deficit over breakeven	Need for working capital (in days of TO)	Supplier credit (in days of TO)	Mean equity ratio	Mean current debt ratio	Mean net current debt ratio	Mean liquidity ratio	Last cash flow to overdraft ratio	Mean interest coverage ratio	Max remuneration to cash flow	Max monthly remuneration per member
GOB 02	-7.7%	45.4	61.3	47.4%	52.6%	-39%	5.1%		1.0	77.0%	n/a
GOB 03	41.4%	14.5	23.7	18.2%	73.2%	-12%	-20.2%	0.5	216.7	97.8%	n/a
GOB 05	22.6%	-5.2	38.0	27.0%	48.3%	-3%	2.9%		2.3	94.7%	n/a
GOB 06	10.7%	12.2	36.4	38.9%	59.7%	-15%	11.0%		2.9	66.7%	n/a
GOB 09	53.0%	-0.5	0.5	77.2%	22.8%	23%	-18.5%	3.8	68.7	160.0%	n/a
GOB 10	111.1%	-2.1	2.1	85.5%	14.5%	14%	-10.3%	19.3	#DIV/0!	3.7%	n/a
GOB 11	-8.5%	-2.0	16.9	30.2%	69.8%	17%	8.3%		-3309.3	-94.0%	n/a
GOB 12	9.3%	29.4	29.3	33.6%	66.4%	4%	-31.3%	0.4	1.8	47.6%	n/a
GOB 14	28.2%	29.1	30.0	36.1%	49.9%	-29%	-9.6%	0.4	7.5	6.6%	n/a
GOB 15	178.5%	16.3	20.0	34.7%	65.3%	-33%	-9.4%	11.3	13436.2	94.7%	n/a
GOB 16	39.8%	74.7	27.7	39.0%	13.0%	-32%	0.7%		5.7	161.8%	n/a
GOB 18	16.9%	-11.6	16.9	-163.1%	263.1%	206%	24.5%		1.7	23.5%	n/a
GOB 19	89.9%	-1.6	5.8	43.7%	56.3%	18%	14.6%		16.1	98.2%	n/a
BB 02	59.5%	0.1	10.1	-25.4%	50.2%	30%	-16.9%	5.9	1485.7	148.2%	R 2,165
BB 05	-63.7%	27.4	1.0	58.7%	16.9%	12%	-14.5%	-0.3	365.8	183.7%	R 2,571
BB 06	51.4%	24.3	22.4	90.2%	9.8%	-10%	13.9%		7148.4	109.5%	R 8,479
BB 07	14.8%	119.1	76.9	31.1%	68.9%	-25%	-31.7%	0.1	2980.4	124.5%	n/a
<b><u>Tier B: Workable or Adjustments partly successful</u></b>											
PWC01	12.0%	55.1	58.4	14.4%	46.5%	-29%	-0.9%	6.3	3.8	76.0%	R 31,551
WEC06	53.2%	47.9	9.9	52.1%	29.0%	-39%	-2.9%	-8.4	5.5	107.5%	R 35,058
WEC09	11.4%	32.7	33.2	20.2%	48.7%	2%	-15.0%	0.1	2.1	38.6%	R 10,000
Ned04	140.3%	-15.4	33.7	29.8%	21.0%	9%	18.3%		16.2	99.4%	R 7,126
Ned11	0.9%	-7.5	7.5	75.1%	18.3%	17%	-0.5%	57.0	1.5	0.0%	R 0
WEC02	98.5%	14.0	0.0	67.9%	#VALUE!	#VALUE!	0.8%		8.6	47.3%	R 25,365
BD5	435.6%	-5.9	28.7	-52.4%	129.1%	77%	-62.0%	0.2	#DIV/0!	70.7%	R 5,773
BD6	69.1%	163.0	66.5	29.2%	54.6%	-22%	-5.5%	-12.5	19.8	60.8%	R 15,458

Business code name	Margin or deficit over breakeven	Need for working capital (in days of TO)	Supplier credit (in days of TO)	Mean equity ratio	Mean current debt ratio	Mean net current debt ratio	Mean liquidity ratio	Last cash flow to overdraft ratio	Mean interest coverage ratio	Max remuneration to cash flow	Max monthly remuneration per member
GOB07	10.6%	-10.7	24.6	91.6%	8.4%	6%	10.0%		248.0	0.0%	n/a
GOB08	52.3%	-28.6	42.6	73.1%	26.9%	18%	5.9%		5.8	0.0%	n/a
GOB 13	46.4%	35.1	27.2	37.2%	42.2%	6%	-25.5%	0.6	7.8	#DIV/0!	n/a
BB 03	36.9%	-3.3	88.4	17.6%	30.3%	2%	2.3%		2.1	0.0%	n/a
BB 04	62.4%	8.2	17.6	10.2%	58.8%	21%	4.4%		7.8	118.4%	n/a
BB 08	-96.8%	-2.9	2.9	17.0%	74.5%	75%	65.2%		-6.8	0.0%	n/a
BB 09	160.2%	174.4	42.6	24.7%	71.1%	-9%	-55.5%	-0.3	45.4	85.0%	R 9,496
CS3	-55.3%	9.2	12.2	64.3%	25.3%	-17%	18%		-0.5	0.0%	R 0
<b><u>Tier C) Serious doubts or only partly usable</u></b>											
Ned02	47.8%	50.6	0.0	36.4%	2.7%	-20%	0.0%		#DIV/0!	103.6%	R 4,000
Ned06	51.9%	39.1	7.7	19.6%	36.8%	1%	-8.7%	3.5	4.4	103.1%	n/a
WEC03	-44.3%	-52.5	120.7	-45.1%	128.5%	69%	3.7%		70.6	85.0%	n/a
WEC05	-44.8%	11.6	43.8	11.7%	47.5%	9%	2.0%		-3.8	0.0%	R 1,862
WEC08	144.2%	-99.5	163.4	52.2%	47.6%	28%	12.9%		1281.2	22.4%	R 6,975
BB 01	-20.2%	n/a	n/a	n/a	n/a	n/a	n/a		-23.9	523.6%	R 7,959
BB 10	-44.3%	n/a	n/a	n/a	n/a	n/a	n/a		-112.8	0.0%	R 0
CS1	35.7%	-4.7	27.6	n/a	n/a	n/a	-1.1%	-14.4	1.6	0.0%	R 15 000
CS4	23.7%	50.0	n/a	n/a	n/a	n/a	n/a		2.3	127.0%	R 14,506

*n/a indicates that data were insufficient (in quantity or quality) to perform the ratio calculation.*

*#DIV/0! indicates that the denominator was 0.*

## Annexure 20 – International comparisons of various ratios

### 1. Trade credit terms

Duration of supplier credit	Our sample (South African SMMEs, 1997-2002)						Fafchamps' sample (Zimbabwean industrial firms, 1997-98)						
	All (62)	black* (32)	white* (24)	micro & very small (33)	Small (18)	Medium (11)	All (167)	African (19)	White (81)	Micro (13)	Small (56)	Medium (49)	Large (46)
1-15 days	29%	31%	29%	33%	39%	0%	13%	11%	10%	15%	7%	18%	13%
16-30 days	31%	34%	29%	42%	11%	27%	41%	42%	40%	62%	43%	31%	41%
31-45 days	19%	22%	17%	15%	17%	36%	23%	16%	28%	15%	25%	27%	22%
46-60 days	3%	0%	8%	0%	6%	9%	13%	11%	11%	8%	12%	12%	7%
over 60 days	18%	13%	17%	9%	28%	27%	11%	21%	11%	0%	12%	12%	17%
average delay (days)	32	34	31	24	41	49	45	50	42	30	42	42	60

\* Sum of black and white does not correspond to 'all' as some have not indicated their race

Source: Fafchamps 1999 for Zimbabwe / Balance sheet sample for South Africa - (based on firms which do receive supplier credit, i.e. all firms in the sample except Ned02 and Wec02)

Compared with Fafchamps, our sample shows a stronger representation of very short credit (probably due to greater representation of micro- and very small businesses, which do not receive much trade credit), and of very long credit (over 60 days). The sample's proportion of very long trade credit is in line with Fafchamps' statistics for African businesses. Compared with Fafchamps, there is no significant difference between black and white (but black in the South African sample is mainly composed of Indian and coloured, unlike in Zimbabwe).

As in Fafchamps, there are significant differences between size classes. Small and Medium firms are much more likely to use very long credit (over 60 days).

Duration of customer credit	<u>Our sample (South African SMMEs, 1997-2002)</u>						<u>Fafchamps' sample (Zimbabwean industrial firms, 1997-98)</u>						
	<u>All</u> (47)	<u>black*</u> (21)	<u>white*</u> (19)	<u>micro &amp; very small</u> (25)	<u>Small</u> (12)	<u>Medium</u> (10)	<u>All</u> (164)	<u>African</u> (35)	<u>White</u> (71)	<u>Micro</u> (20)	<u>Small</u> (50)	<u>Medium</u> (43)	<u>Large</u> (47)
1-15 days	34%	33%	32%	40%	33%	20%	11%	26%	4%	30%	16%	2%	4%
16-30 days	15%	10%	21%	24%	8%	0%	38%	37%	37%	30%	42%	49%	26%
31-45 days	9%	10%	11%	0%	25%	10%	21%	9%	23%	10%	14%	30%	23%
46-60 days	19%	29%	5%	28%	8%	10%	15%	14%	23%	15%	14%	9%	23%
over 60 days	23%	19%	32%	8%	25%	60%	15	14%	14%	15%	14%	9%	23%
average delay (days)	40	42	40	33	36	61	50	41	57	46	54	41	58

\* Sum of black and white does not correspond to 'all' as some have not indicated their race

Source: Fafchamps 1999 for Zimbabwe / Balance sheet sample for South Africa (based on firms which do grant their customers credit)

Again, our sample shows a stronger propensity of firms to grant their customers either very short credit terms (less than 15 days) or very long (over 45 and even over 60 days). With the exception of medium-sized firms, the average duration of credit is usually not higher than in Fafchamps, but nevertheless relatively high considering the stronger representation of retail and food suppliers in our sample.

Part of the difference may be a consequence of accounting opacity, with some South African firms omitting to account for their trade payables or receivables, and others inflating them by amalgamating them with other short-term assets or liabilities, including control accounts

#### **Comparisons with developed economies:**

According to Fafchamps 1999, the credit terms he found for Zimbabwe do not differ substantially from those observed in developed economies (cf. Dun & Bradstreet). The conclusions above would therefore most probably also apply in a comparison of our sample with similar samples from developed countries.

## 2. Equity ratios

	micro	very small	small	medium	large	very large
South Africa: our sample						
mean	52%	44%	20%	28%	n/a	n/a
median	52%	35%	24%	31%		
EU manufacturing and construction firms (Wagenvoort 2003b:28)	n/a	n/a	34%	35%	36%	37%
German SMEs 2000 (Hommel & Schneider 2003:84)	n/a	n/a	13%	17%	21%	24%
French SMEs (Dietsch 2003:97)						
<i>first quartile</i>	n/a	n/a	18%	21%	21%	20%
median			32%	33%	33%	34%
<i>fourth quartile</i>			47%	47%	47%	46%
Italian manufacturing firms: median (Guiso 2003:124)	n/a	n/a	20%	23%	24%	24%

Notes:

*The definitions of size categories may differ from one study to the next.*

*Hommel & Schneider (2003:58) indicate that over 50% of the smallest German firms have operated with a non-positive equity capitalisation over the last few years; even medium-sized firms often had an equity ratio below 10%. However, the equity ratio has slightly improved since 2000.*

*Dietsch (2003) notes that in France, SMEs' median equity ratio has improved from around 15% in the mid-1980s to 30% at the end of the 1990s.*

## 3. Coverage ratios

	South African sample		Italian sample
	All	builders and manufacturers	manufacturing firms with less than 30 employees
Median inverse coverage ratio	0.13	0.19	0.312
Percentage of firms with inverse coverage >0.7	6.3%	0.0%	27.7%

Source for the Italian statistics: Guiso 2003:127

### Annexure 21 – Creditworthiness of case studies: Quantitative and qualitative scores

	Ratio score (0 to 16)	Qualitative score	Verdict
CS1	Fundamental: 0.0 Financial (/4): 2.0 Stability: <u>n/a</u> Total (/10): <b>2.0</b>	0,0 / 2 (missing data)	Distressed
CS2	Fundamental: 4.0 Financial: 8.0 Stability: <u>2.0</u> Total: <b>14.0</b>	8,5 / 15	Creeping
CS3	Fundamental: 6.0 Financial: 8.0 Stability: <u>2.0</u> Total: <b>16.0</b>	12,5 / 15	Cruising
CS4	Fundamental: 2.0 Financial (/2): 0.0 Stability: <u>missing</u> Total (/8): <b>2.0</b>	4,0 / 15	Distressed
CS5	Fundamental: 6.0 Financial: 7.0 Stability: <u>2.0</u> Total: <b>15.0</b>	12,0 / 15	Cruising
CS6	Fundamental: 6.0 Financial: 6.0 Stability: <u>1.0</u> Total: <b>13.0</b>	9,5 / 15	Uncertain

Due to missing data, the scores for CS1 and CS4 are based on an incomplete scale (quantitative score out of 10 for CS1 and 8 for CS4, qualitative score out of 2 for CS1).



## Annexure 22 – Balanced creditworthiness appraisal of balance sheet sample

Category	Cruising	Uncertain	Limping	Creeping	Drowning	Distressed
Criteria	Total score $\geq 15$	$8 \leq \text{Total score} < 15$ Fund-score $> 4$ Fin-score $> 5$	$8 \leq \text{Total score} < 15$ Fund-score $> 4$ Fin-score $\leq 5$	$8 \leq \text{Total score} < 15$ Fund-score $\leq 4$ Fin-score $> 5$	$8 \leq \text{Total score} < 15$ Fund-score $\leq 4$ Fin-score $\leq 5$	Total score $< 8$
Case studies	CS3, CS5	CS6	(CS5_2001)	CS2	(CS1_Dec99)	CS1, CS4
Tier A	13 CS5, Dir3, Ned3, Ned5, Ned12, Ned16, Ned18, Wecc1, Gob2, Gob5, Gob10, Gob15, Gob19	11 CS6, Dir2, Ned10, Ned14, Ned15, Wec7, BD2, Gob9, Gob11, Gob12, Gob14	6 Ned8, Ned13, Wec4, Gob1, Gob3, BB2	5 CS2, Ned1, Gob6, Gob16, BB6	4 Dir1, Gob18, BB5, BB7	1 BD9
Tier B	3 Ned4, Gob7, CS3	5 PWC1, Wec6, Ned11, BB4, BB8	2 Wec9, Gob13	2 Wec2, Gob8	2 BD5, BB3	2 BD6, BB9
Tier C	1 Wec8	4 Ned2, BB1, BB10, Ned6mini	2 Ned6, Wec5	/	/	3 Wec3, CS1, CS4
Total	17	20	10	7	6	6
In %	27%	30%	15%	10%	9%	9%

This table is based on a sample of 66, composed of the 64 firms constituting the balance sheet sample, as well as case study CS4 (which was assessed according to interview data) and an additional entry for footwear manufacturer Ned6. Indeed, due to uncertainty on Ned6's data, two sets of financial statements were assessed separately (Ned6 and Ned6mini), leading to diverging creditworthiness assessments.

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## Cruising businesses:

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last AFS	Legal form	Race	Type of business	Product or service
CS3 / CS3b	314	Manufacture of safety wear	11	2,856,588	126,570	very small	5	cc	Coloured	B&M	Manufacturing and wholesale of safety wear
CS5	712	Tourism	15	1,271,290	434,114	small	4	cc	coloured	HDSE	Safaris and sightseeing bus tours
DIR03	64	Restaurant	36	4149424	351707	small	29	pty	white	franchise	franchise family restaurant
Ned03	63	Trade in fuel	15	93,197	332,680	small	3	cc	white	franchise	petrol station
Ned05	64	Restaurant	40	223,110	394,733	small	9	pty	white	franchise	restaurant
Ned12	61	Specialised wholesale	3	4,472,161	190,886	very small	5	pty	white	LDSE	Copy shop, printing and office supplies
Ned16	64	Restaurant	15	865,014	1,050,408	medium	2	pty	white	franchise	fastfood
Ned18	64	Restaurant	8	3,009,774	4,150,251	small	3	Cc	white	franchise	restaurant
Wec01	642	catering	2	2,231,682	688,858	micro	1	cc	African	LDSE	catering, cleaning, stationery, clerical jobs and others
GOB 002	62	Retail - specialised	4	-	381,716	very small	7	cc	Indian	LDSE	Retail - men outfitters
GOB05	623	Other specialised retail	10-15	4,380,172	2,053,973	small	1	Cc	Indian	LDSE	Sales and service of cell phones and accessories
GOB10	853	Renting of personal goods	4	51,527,636	483,691	very small	2	Cc	Indian	LDSE	Hire of video films
GOB15	62	Retail – general	7	476,361	566,787	very small	20	SP	Indian	LDSE	General dealer
GOB19	62	Retail – food	7	2,423,849	21,190	very small	9	cc	Indian	LDSE	Butchery
Ned04	62	Retail – general	10	849,730	91,137	small	3	cc	white	franchise	Supermarket
GOB 007	64	Restaurant	5	13,025,433	1,638,018	small	1	cc	Indian	franchise	Chicken fast food outlet
WECB08	632	Maintenance & repair of vehicles	22	13,626,490	234,388	small	30	SP	Coloured	LDSE	Panelbeating and spraypainting

Two case studies were categorised as cruising: safety wear firm CS3 and tour operator CS5. However, both were different from the typical profile of cruising firms that emerged from the balance sheet sample, as represented in Table 22.1.

*Table 22.1 – Profile of cruising firms (n=17)*

<b>Type of activity:</b>	<b>Cruising</b>	<b>All</b>		<b>Enterprise size:</b>	<b>Cruising</b>	<b>All</b>
Builders & Manufacturers	6%	23%		Micro	6%	8%
HDSE	6%	20%		Very small	35%	45%
LDSE	47%	36%		Small	53%	30%
franchise	41%	18%		Medium	6%	17%
Art	0%	5%				

*HDSE = High Differentiation Service Enterprise*

*LDSE = Low differentiation service enterprise*

The table reveals that cruising businesses are more often franchises and low-differentiation service firms (wholesale, retail and restaurants). Once their premises and equipment are financed, the majority of these businesses are relatively low-risk, often following a set model (family business or franchise framework), serving a stable market and implying little need for working capital.

However, the examples of CS3 and CS5 show that manufacturing or transport businesses, which are typically more asset-intensive, may fall into the cruising category if, after a few years of steady growth, they are able to reap comfortable operating profits, repay their debt and build up their equity. Both case study firms were successful in this regard, and the commitment of their founding owners seemed to have been essential in this success.

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## Uncertain businesses

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last AFS	Legal form	Race	Type of business	Product or service
CS6	889	Packing services	11	1,429,327	594,166	small	12	cc	White	HDSE	Packing goods into crates
DIR02	32	Printing	6	447061	75261	very small	3	cc	coloured	B&M	printing of sheets, lytho, stationary
Ned10	36	Manufacturing – machinery & chem	4	1,306,432	441,773	very small	5	cc	coloured	B&M	Cleaning machines
Ned14	64	Restaurant	50	1,801,811	2,861,906	medium	1	cc	white	franchise	Restaurant
Ned15	62	Retail & Training	3	6,225,823	707,649	small	3	Pty	white	HDSE	retail of safety equipment
WEC07	324	Publishing	18	3,514,318	2,556,892	medium	2	cc	mixed	B&M	Desktop publishing & reproduction
BD02	96	Film production	6	-	-	medium	4	Pty	white	Art	Commercial film producers
GOB09	853	Renting of personal goods	4	598,577	124,502	very small	14	cc	Indian	LDSE	Hire of video films
Gob11	62	retail	11	66,276,282	184,966	very small	6	cc	african	LDSE	superette
GOB12	304	Food manufacturing	9	648,206	172,576	very small	8	cc	Indian	B&M	Manufacturing of sauces
GOB14	623	Pharmacy	3	419,160	-	very small	6	cc	Indian	LDSE	Pharmacy
PWC01	392	Manufacturer of DIY/sport products	25	-	2,542,017	medium	18	pty	white	B&M	Supply of sporting / DIY products
WEC06	615	Contractor for HVAC	14	1,510,116	264,591	very small	10	Cc	Coloured	HDSE	Supplier/contractor of Heating, Ventilation and Air Conditioning
Ned11	61	Commission trade – food	3	851,452	289,891	micro	1	SP	coloured	LDSE	Bread supplies
BB04	63	Maintenance of transport equipment	2	12,620,608	4,411,733	very small	3	Cc	White	HDSE	Aircraft repairs and maintenance
BB08	86	IT services	?	941,779	89,663	very small	n/a	Cc		HDSE	IT-based inventory control services
Ned02	32	Photographic	2	-	-	very small	1	SP	white	franchise	Photo development

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last AFS	Legal form	Race	Type of business	Product or service
BB01	6259	renting of equipment	6	3,009,129	#REF!	small	4	cc		LDSE	operator of 88 vending machines (snack and cool drinks)
BB10	623	Specialised retail	4	1,752,079	46,546	small	1	pty ltd		HDSE	Sale of TV surveillance equipment
Ned06 mini	31	Footwear	5	755,979	983,132	very small	4	Cc	white	B&M	Footwear

The ratio framework classified 20 businesses as uncertain, including case study crating business CS6.

A closer scrutiny revealed that uncertain businesses tended to respond to one of the following three profiles: (1) very young conventional firms, like franchise restaurants or retailers; (2) high-differentiation service enterprises, such as aircraft repairs and IT-based inventory control services, or (3) firms with higher capital needs, both for equipment and working capital (builders, manufacturers).

Each of these categories tended to experience specific sets of problems. The first category was often affected by a combination of insufficient turnover (which is not surprising in a start-up) and a few financing problems, such as insufficient coverage or low equity. These problems may however be transitory. Firms in the second group, including crating firm CS6, tended to suffer from volatility as well as working capital problems, which probably result from dealing with corporate clients. The firms in the third group, considering their needs for capital, were more likely to suffer from high debt, tense liquidity or a high need for working capital.

Compared with the cruising businesses above, uncertain businesses are typically confronted with a more complex and demanding type of activity, which often costs cash. Since the risks are higher, and the firms' managers may not be sufficiently skilled, the granting of credits may have to be tied to conditions, in particular with regard to financial management. For example, given CS6's particular problem with its working capital cycle, which put a strain on its liquidity although other ratios were generally good, CS6's bank would be entitled to request the rollout of a debt collection plan to balance out the working capital cycle. Granting creditors surveillance and enforcement rights to ensure good practices would appear to be a meaningful compromise, in the shared interest of the owner and the creditor.

## Limping businesses

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last AFS	Legal form	Race	Type of business	Product or service
Ned08	88	Business services	8	4,088,549	700,423	medium	2	Cc	white	HDSE	marketing services
Ned13	75	Communication	2	6,644,566	1,079,101	very small	5	SP	white	LDSE	courier services
WEC04	5	Construction	32	15,945,125	198,152	medium	3	Cc	Coloured	B&M	Construction
GOB01	62	Specialised retail	8	-	94,483	small	11	Cc	White	LDSE	Sale / service of lawn mowers
GOB03	61	Wholesale	12	-	1,215,704	medium	10	Cc	Indian	LDSE	wholesale - general dealer
BB02	96	Art	25	1,004,554	62,901	small	2	Cc		Art	foundry for bronze sculptures
WEC09	632	Maintenance & repair of vehicles	8	1,488,621	262,991	very small	3	Cc	coloured	LDSE	panelbeating and spraypainting
GOB13	304	Food manufacturing	16	406,235	165,405	small	26	cc (prev. Pty)	Indian	B&M	packing / blending of spices
Ned06	31	Footwear	5	755,979	983,132	very small	4	Cc	white	B&M	Footwear
WEC05	338	PVC manufacturing	51.5	235,918	232,386	medium	31	pty ltd	Coloured	B&M	Manufacture of PVC fitting for civil engineering and industry

The category of limping businesses in the sample is heterogeneous, yet it includes at least two types of businesses: on one hand, young and capital intensive businesses, which have a low equity and sometimes problems of interest coverage or liquidity (printing business Dir02, construction business Wec04); on the other hand, firms which have a naturally high need for working capital and therefore a high overdraft (jeweller BB07, food manufacturer Gob13 or safety training business Ned15).

The combination of liquidity problems (all but two limping businesses) with a low equity ratio (8 cases), a poor interest coverage (7 cases) and/or working capital problems (6 cases), indicates true vulnerability. Nevertheless, it is remarkable that most of these businesses are relatively stable (only 2 are classified as moderately volatile), which means that a creditor should have enough time to react to a deterioration. Under these circumstances, we would venture that these firms could be accepted as creditworthy – provided that they are monitored closely.

This may require providing financial management support. This belief that limping businesses, in spite of vulnerability, deserve bank support under a condition of close monitoring, is discussed in Chapter III, Section 4.4 on the dynamics of creditworthiness.

## Creeping businesses

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last FS	Legal form	Race	Type of business	Product or service
CS2	64	Restaurant	47	3,028,317	529,489	small	2	cc	White	franchise	Restaurant and take aways
Ned01	71	Transport	8	-	-	small	10	SP	coloured	LDSE	Transportation
BB06	63	sale of car parts	1	293,066	2,984,794	micro	2	cc		HDSE	Distributing 4*4 spare wheel carriers
Gob06	62	Retail - specialised	3	1,439,557	194,497	very small	27	cc (prev. Pty)	Indian	LDSE	Retail of crockery and domestic hardware
GOB16	5	construction	38	618,848	1,402,601	very small	2	Cc	Indian	B&M	Construction
WEC02	623	Retail	0	377,585	2,486,224	micro	2	cc	Coloured	LDSE	Supplying sports equipment and clothing
GOB08	64	Restaurant	5	5,157,346	1,485,953	small	0.5	cc	Indian	franchise	Chicken fast food outlet

A creeping business is one in which fundamental problems are visible, but not accompanied by financial deficiencies. The sample yielded only few businesses in this category, which could be grouped into three types: (1) cases with poor accounting reliability, where the apparent sound financial structure may be deceptive, (2) young firms whose poor potential has not yet affected the financial structure, and (3) 'passionate ventures', which their relatively wealthy owners seem to carry on against economic rationality.

An example of creeping firm is franchise restaurant CS2. Its financial structure is robust, with hardly any debt, a balanced working capital cycle, and hardly any overdraft. However, in spite of aggressive marketing and tight cost management, its market potential is too limited, impeding turnover growth, so that the business is neither generating profits nor remunerating its member.

Although creeping firms' bankruptcy risks are almost inexistent, their chances of success appear just as slim. Hence, the economic benefit of lending to this business is debatable.

Overall, although rare, creeping businesses present a challenge to creditworthiness assessments, as they may not be economically worthy of credit – although their immediate risk of failure is limited.

## Drowning businesses

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last FS	Legal form	Race	Type of business	Product or service
DIR01	64	Catering	5	8,211,798	58,792	very small	4	cc	White	LDSE	Catering services for upper end of market
GOB18	62	retail	6	1,395,578	211,818	very small	2	SP	Indian	LDSE	Butchery
BB05	342	pottery	5	-	985,009	very small	1	cc		Art	bisque and painted pottery
BB07	62392	Jewellery	2	4,060,569	-	very small	52	Cc		B&M	jewellery design and manufacture
BD5	88	training and consulting	3	-	-	very small	5	Pty LTd	white	HDSE	courses and energy-related consulting
BB03	88	Business services	39	208,933	111,668	medium	1	pty ltd		HDSE	shop-fitting

Most drowning businesses in our sample are young or very young SMMEs (their average age is 2.2 years), which seem unlikely to reach breakeven, and sometimes even have variable costs exceeding the turnover (as BB3). Furthermore, in spite of their young age, these firms suffer from various financial deficiencies, often related to a slim equity, high current debt and/or an insufficient interest coverage.

Unless they radically improve their financial profile, these firms seem unlikely to survive beyond a few years. As such, they illustrate how the combination of unconvincing business idea (lack of market or improper pricing) and fragile initial financial structure (lack of start-up capital, unsustainable debt) causes the high early mortality of SMMEs.



## Distressed businesses

Business ID	SIC	Sector (detailed)	Staff	Turnover	Gross Assets	size category	Age at last FS	Legal form	Race	Type of business	Product or service
CS1	391	Furniture manufacturing				very small	4	CC	White	Franchise	Manufacturing and retail of wardrobe furniture
CS4	88 / 5	Business services and construction				Micro	5 / 0.5	Cc	African	LDSE	Cleaning services, catering, construction, painting, renovation and other
BD6	93	health	6	-	-	very small	1	Pty Ltd	white	B&M	wheelchair manufacturing and services
BD9	5	construction	2	-	-	medium	9	cc	white	B&M	construction
BB09	62	specialised retail		4,242,894	2,697,720	very small	3	cc		HDSE	retail and assemblance of cam buckle
WEC03	86	Computer related activities	11	-	451,417	small	3	pty ltd	Coloured	HDSE	Supply, install and maintain PABX equipment, data cabling and fibre optical cabling

There were only few distressed businesses in the sample, probably because of the sample's inherent bias. As a result, it is difficult to draw a profile of the distressed businesses. But, with the exception of construction business BD9, they are young, undercapitalised and share a fundamental deficiency with regard to their turnover and/or cost structure.

Case study firms CS1 (franchise furniture business) and CS4a and b (township businesses), were categorised as distressed because of their poor scoring on nearly all fronts: lack of competitive advantage in a highly competitive environment, excessive owner's remuneration, insufficient capitalisation, heavy dependence on short-term debt, alarming interest coverage and lack of liquidity. Under these circumstances, the businesses can be regarded as failed. CS1 was liquidated later in the year. As to CS4a, as argued earlier, it could be regarded as 'failed in the way of survivalist businesses', i.e. merely suspended to avoid liquidation costs, and re-emerged in a different form through the creation of CS4b, whose chances of success are just as slim.

*Some profile indications of cruising, uncertain, limping, creeping, drowning and distressed firms*

	<b>cruising</b>	<b>uncertain</b>	<b>limping</b>	<b>creeping</b>	<b>drowning / distressed</b>	<b>total</b>
LDSE	8 36%	5 23%	4 18%	3 14%	2 9%	22 100%
Franchise	7 58%	2 17%	0 0%	2 17%	1 8%	12 100%
Builders and manuf	1 9%	5 45%	4 36%	1 9%	3 27%	11 100%
HDSE	1 11%	6 67%	1 11%	1 11%	4 44%	9 100%
Less than 3 years	8 26%	8 26%	4 13%	5 16%	6 19%	31 100%
3 + years	10 29%	11 32%	6 18%	2 6%	5 15%	34 100%
white-owned	7 29%	7 29%	4 17%	1 4%	5 21%	24 100%
Indian- owned	7 44%	3 19%	2 13%	3 19%	1 6%	16 100%
coloured- owned	2 17%	4 33%	3 25%	2 17%	1 8%	12 100%
African- owned	1 33%	1 33%	0 0%	0 0%	1 33%	3 100%
Micro	1 20%	1 20%	0 0%	2 40%	1 20%	5 100%
Very small	6 20%	11 37%	3 10%	2 7%	8 27%	30 100%
Small	9 45%	4 20%	3 15%	3 15%	1 5%	20 100%
Medium	1 9%	4 36%	4 36%	0 0%	2 18%	11 100%
<b>total</b>	<b>18 27%</b>	<b>20 30%</b>	<b>10 15%</b>	<b>7 10%</b>	<b>12 18%</b>	<b>67 100%</b>

*Note: The categories drowning and distressed have been merged for a wider statistical base.*

## Annexure 23 – Creditworthiness dynamics for CS1 and CS5

To enable a dynamic recognition of small changes, the model adopts interim thresholds (threatening problems). In Tables 23.1 and 23.2 the values must be interpreted as follows:

- 0.5 represents a ‘threatening problem’ (value below the ‘interim’ threshold)
- 1 represents a ‘mild problem’
- 2 represents a ‘serious problem’

Table 23.1 – Evolution of CS1’s creditworthiness assessment, Jan99 to Jun 00

	Period until Jan 1998	Period until Dec 1999	Period until Jun 2000
Breakeven deficiency <i>Deficit to breakeven</i>	0.5 16%	2 4.6%	2 6.5%
<i>Turnover growth</i>	<i>Young, high growth</i>	<i>Below inflation</i>	<i>Below inflation</i>
Excessive member remuneration <i>Salary to operating profit</i> <i>Monthly member’s salary</i>	0 14% R1667	1 86% R15 000	2 99% R15 000
Excessive financing costs <i>Interest coverage</i>	2 0.7	2 0.9	2 0.5
<b>Fundamental score (out of 6)</b>	<b>3.5</b>	<b>1</b>	<b>0</b>
Lack of working capital			
Excessive debt <i>Mean equity ratio</i> <i>Equity growth pattern</i>	0.5 7.9% Yes	1 3.9% Unclear	1 3.1% No
Excessive short-term debt			
Lack of liquidity reserves <i>Liquidity ratio</i> <i>Cash Flow to Overdraft</i>	0 4.5%	0 2.6%	1 -1.2% -14.8
<b>Financial score (out of 8)</b>	<b>7.5</b>	<b>7</b>	<b>6</b>
<b>Instability (out of 2)</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Total score (out of 16)</b>	<b>12</b>	<b>9</b>	<b>7</b>
<b>Category</b>	Creeping	Creeping	Distressed

Table 23.2 – Evolution of CS5's creditworthiness assessment, Feb01 to Feb03

	Period until Feb 2001	Period until Feb 2002	Period until Feb 2003
Breakeven deficiency			
Excessive member remuneration			
Excessive financing costs			
<b>Fundamental score (out of 6)</b>	<b>6</b>	<b>6</b>	<b>6</b>
Lack of working capital			
Excessive debt	2	1	0.5
<i>Mean equity ratio</i>	-2%	2,6%	10,1%
<i>Equity growth pattern</i>	<i>Declining</i>	<i>Unclear</i>	<i>Clear growth</i>
Excessive short-term debt			
Lack of liquidity reserves	1	0.5	0.5
<i>Liquidity ratio</i>	6%	8%	15%
<i>Seasonal effect</i>	<i>tight winter</i>	<i>tight winter</i>	<i>tight winter</i>
<b>Financial score (out of 8)</b>	<b>5</b>	<b>6.5</b>	<b>7</b>
<b>Instability (out of 2)</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>Total score (out of 16)</b>	<b>13</b>	<b>14.5</b>	<b>15</b>
<b>Category</b>	<b>Limping</b>	<b>Uncertain</b>	<b>Cruising</b>

## **Annexure 24 – Transaction costs and scale effects**

Market frictions are probably the most widely accepted explanation for SMMEs' financing constraints, as their existence cannot be contested, and they are proven to affect more strongly the smaller agents.

The question therefore is not whether market frictions exist, but how serious their effect is on financing constraints: are they a marginal factor which means that a small portion of demand and supply will always be unsatisfied? Or do they have such importance that a policy aiming to enable smoother market adjustments would significantly relieve SMMEs' financial constraints?

### **1. Literature on market frictions**

The existence of market frictions is the simplest neoclassic assumption to explain why the classic or neoclassic model of supply-demand-matching (Smith 1789, Walras 1874) does not hold in practice. In imperfect capital markets, a mismatch can occur because markets involve a potentially costly or ineffective search for the matching partner. The risk of frictional mismatch is then a function of the inefficiency of information platforms and market mechanisms.

Concretely, unallocated funds can then result from suppliers' failure to identify suitable investment opportunities, or the time needed until efforts bear fruits, as well as their inadequate deal-generating networks. In South Africa, DTI/UNOPS (1999) identify delivery and communication issues to explain the high surpluses in government enterprise funds. Unmatched demand can also be explained by borrowers' inappropriate approach to financiers, the skill and behaviour gap mentioned by Bates & Hally (1982).

Another obstacle to good market functions is the situation in which interest rates are inflexible. There can be many reasons for this: legally enforced interest rate ceilings, especially in developing countries (Gonzalez-Vega 1984), collusive oligopolistic agreements between financial institutions (Jaffee, 1971); implicit loan price contracts (Fried & Howitt, 1980). A neoclassic policy recommendation would therefore be to remove obstacles to interest rate flexibility and improve market efficiency in order to ease the automatic matching process.

By contrast, the Keynesian model emphasises unequal treatment of various types of borrowers. Keynes (1930/1971:327) argues that some borrowers have first claims on a bank's favours, while others, who lack influence with the bank, are "on the fringe". Depending on banks' liquidity preference, they may access credit at certain times and be denied it at other times.

In a neo-Keynesian model, North (1990) describes markets as institutions which, in line with the increasing specialisation of labour, have historically evolved from personal to impersonal exchange. He contends that the impersonal exchange of modern economies typically increases transaction costs to address the need for institutional enforcement systems.

Similarly, development economists, inspired by works of sociologists and anthropologists, have studied the difficulties of applying classic financial market models to third world communities, considering in particular transaction costs and contract enforcement issues (Kimball 1988, Coate & Ravallion 1993, Fafchamps 1992, 1994, Bardhan 1993).

As Nissanke & Aryeetey (1999) show, North's theories are useful to conceptualise Sub-Saharan Africa's *fragmentation* between formal and informal lenders, who apply distinct methods for financial risk management and have widely different transaction cost structures, to serve two distinct ends of the market. The lack of institutional linkages between formal and informal financial markets results in a gap in the middle range of the clientele spectrum. To the extent that South African formal SMMs are regarded as the middle range in the finance spectrum, this fragmentation model explains their difficulties in raising finance.

Tucker (2000) confirms, through a cost simulation, that very small loans would be unsustainable for the banking sector (screening and monitoring costs amounted to 50% of the loan principal in a start-up micro enterprise loan and to 10% in a very small start-up business loan). Transaction costs have also been showed to apply to equity finance (Cruickshank 2000:172-173; Falkena et al 2002:58).

To summarise, economic theory suggests that market frictions, especially transaction costs, may hinder the allocation of finance. The formal financial sector tends to be unable to serve cost-effectively the smallest firms.

## **2. Findings**

To investigate whether firms applying for a high amount of finance are more likely to access finance (the Scale Effect hypothesis), the success rate of finance applications of GEM respondents was studied as a function of the amount raised. Tables 24.1 and 24.2 illustrate the findings.

These tables show that the success of term loan applications was strongly correlated with the amount requested. Applications for amounts under R250 000 had slimmer chances of success than those for larger amounts. For overdraft applications, scale effects are less obvious. While the success rate is higher for desired overdrafts of R50 000-150 000 than for lower amounts, it is lowest for amounts higher than R150 000 – possibly because of the higher risk involved or the difficulties of entrepreneurs to provide sufficient security.

*Table 24.1 – Success rate according to amount demanded (term finance)*

	Amount of term finance raised				Not specified	Total
	up to 100K	101-250K	251-500K	> 501K		
total number	32	25	18	16	16	107
Successful	14	10	15	13	15	67
Success rate	44%	40%	83%	81%	94%	63%

Source: Analysis of GEM 2003 data

*Table 24.2 – Success rate according to amount demanded (overdraft)*

	Amount of overdraft 'desired'				Not specified or 0	Total
	under 50K	50-99K	100-149K	≥ 150K		
total number	15	12	11	16	29	83
Successful	7	8	7	4	14	40
Success rate	47%	67%	64%	25%	48%	48%

Source: Analysis of GEM 2003 data

These results confirm the scale effect hypothesis for long-term finance, but are inconclusive as far as short-term finance is concerned. Apart from the data ambiguity on the interpretation of “desired overdraft”, the absence of a visible scale effect for overdraft may indicate that transaction costs are less substantial for overdraft applications.

To conclude, the data support the theory that transaction costs, being proportionately higher in smaller firms, create a disadvantage in their access to term finance. For this particular product, market frictions would appear to be significant, and in Keynesian terms, SMMEs can be described as borrowers on the fringe, unable to find a market platform suitable to their needs on the fragmented South African financial market.

The fit is less convincing as far as overdraft finance is concerned. SMMEs liquidity constraints, hence, may need to be explained by different hypotheses.

## **Annexure 25 – Information substitutes: Credit history, network and relationship banking**

### **1. Literature on information substitutes**

Under the information hypothesis, a logical mitigation strategy is the recourse to information substitutes, i.e. behaviour or data which, without giving the lender direct insights into the business, help to categorise the risks along rules of thumb (Hawkins 2001).

One information substitute is the SMMEs' credit history, which the bank often acquires from external sources such as credit bureaux (see Balasuriya, 1999:11). Use of credit bureau data is an internationally accepted practice aiming to verify the firm's existence, its sound fundamentals and ruling out the existence of heavy debt. However, in South Africa the emphasis has been mainly on blacklist checks; the common language of being "listed by a credit bureau" (e.g. in ABSA 2004) has a clear negative connotation.

This approach is controversial for several reasons. It may penalise those firms too young to have a credit record. However, Levy (1996) found that South African young firms do have an access to loans, even though they are more financially constrained. The use of credit history for lending decisions has also been criticised on the basis that past defaults are not necessarily telling about the future (the argument that credit bureaux blacklist people for failing to pay rent during apartheid (SACP 2004) does not hold though, as information is only held by credit bureaux for a maximum of 5 years). More seriously, there have been many reports of irregularities or inaccuracy in credit bureau data (the DTI Credit Law Review 2003; Falkena & al 2002:5)

A further mitigation strategy against information asymmetry is for SMMEs and banks to exchange privileged information through their own channels, such as *relationship banking* (Boot 2000:10, Wagenvoort 2003a:12) and *network effects* (Loury 1998; Fafchamps 1996-99).

Relationship banking is present when the following factors are met: (i) the intermediary gathers information beyond readily available public information; (ii) information gathering takes place over time through multiple interactions with the borrower, often through the provision of multiple financial services, and (iii) the information remains confidential (proprietary). (Boot, 2000:10). The success of depends on firms' participative behaviour (Binks & Ennew 1997), but can have macro-economic benefits, as the bank's resulting quasi-monopolistic situation reduces the constraints on the interest rate (Petersen & Rajan 1995). In South Africa, ABSA (2004) openly invites its business customers to using



relationship banking for their advantage.

Network effects (Loury 1998; Fafchamps 1996-99) consist of socialisation and information sharing; Fafchamps specifically mentions connections with the business establishment, and efforts of business owners to distinguish themselves from the mass of small, inexperienced micro enterprises (Fafchamps 1996-99:17). The relevance of network effects in South Africa is confirmed by Karungu et al (2000), who caution that this tends to exclude black businesses from access to venture capital.

## 2. Findings

The combined effect of credit history, network and relationship banking is illustrated in Table 25.1 (next page). The table does not provide clear evidence that start-ups with no credit record are less likely to obtain funding. However, the cases of CS1, CS2 and CS3 do support the hypothesis that start-ups' access to facilities is eased by networks. Franchisor, partner and chartered accountant were found to play a role. On the other hand, entrepreneurs with no connection to the business establishment (CS4, CS5 initially) felt helpless in the search for capital in their early years – but for CS4 blacklisting appears to have been a more severe obstacle than the lack of networks, whereas CS5 was actually a case of self-rationing.

For older firms or serial entrepreneurs, evidence on the effect of credit history is mixed. The owner of CS4, having defaulted on a housing loan and electricity bills, has a negative credit record, which has evidently impeded the firm's access to any formal loan. As to CS2 and CS6, while interviewees did not expressly mention defaults, their history (failure of the potato factory started by CS2's owner; near-bankruptcy of CS6 a few years ago) suggest that their credit records may not be impeccable. This may explain CS6's difficulty in accessing some special types of finance, but CS2's owner seems to have circumvented the problem by using his networks. He openly admitted the role of this factor: *"There is a very easy way to get finance. You must have a Chartered Accountant, that you know well, and get him to write a letter to the bank, stating that you earn sufficient income"* (source: CS2 first full interview).

On the other hand, CS5's spotless credit record does seem to be the main reason why the firm now has an easy access to vehicle finance. Unfortunately at the time of the study it was too early to verify whether this would also apply to CS3.

Table 25.1 – Credit record, networks, bank relationship and access to finance

<b>Firm</b>	<b>Age; Credit history</b>	<b>Network</b>	<b>Relation with bank</b>	<b>Access to finance</b>	<b>Conditions</b>
CS1	start-up; no history	franchisor	franchisor was a good client of the bank	comprehensive start-up package	OD limit of R25K, 1,15% of reported turnover: low
CS2	start-up; previous bankruptcy	chartered accountant (also franchisor)	n/i	substantial personal loan	good
CS3 – at registration	start-up (one partner had been operating informally)	new partner comes on board	change of bank, as new partner had a good connection to them	high overdraft; term loan	(high collateral)
CS3 – time of study	good credit record			pending; expect that bank will support them	
CS4	blacklisted	none in ‘formal sector’	none in ‘formal sector’	rejected	
CS5 – initially	start-up	none	poor “ <i>did not know any bank people</i> ”	(did not apply)	
CS5 – time of study	6 years – has bought 8 vehicles on credit	chartered accountant	good “ <i>our children play cricket together</i> ”	easy: mere formality	good
CS6	13 years with the same bank, but a few years ago firm was close to bankruptcy	n/i	poor “ <i>they don’t know who we are</i> ”	high overdraft, but struggles to increase it application for property finance rejected	OD limit of R100K, 8,3% of turnover: high

See case study narratives (Annexures 31-36) for more details.

n/i: no information.

CS5's good relationship with his bank manager may be another factor of his success, which would support the theory of relationship banking, as compared with CS6's experience of the bank as an anonymous institution. However, rather than being exogenous, these experiences may reflect the bank's consciously differential treatment of clients of different quality.

As to the age of businesses at the time of the first bank loan, the data suggested a significant difference between franchise enterprises and stand alone. Among the case studies, only franchise firms CS1 and CS2 obtained bank loans at start-up, as opposed to 1 year for CS5, 3 years for CS3, apparently 6 years for CS6<sup>10</sup>. Among young firms from the balance sheet sample (less than 3 years), the probability of using term loans was significantly higher for franchise firms (78%) than for independent businesses (44%). While this could be interpreted as a support for the network hypothesis, demand factors also play a role, since franchise businesses need funds early on to acquire fixed assets and settle the initial franchise fee.

Overall, this review suggests that credit history, networks and relationship banking are strongly intertwined and may compensate each other – but a combination of these factors does seem to play a role in access to finance. The role of networks should not be exaggerated, though:

- Several examples of non-access hint at self-rationing rather than supply-driven rationing;
- Access to finance is multidimensional and occasionally difficult to interpret. For example, in spite of its comprehensive start-up package, CS1's overdraft limit was rather modest; conversely, CS6 had a sizeable overdraft facility, but was unable to access the required non-standard facilities, such as specialised equipment finance, industrial property finance and factoring.

These observations illustrate the fact that credit history, networking and bank relationship may ease SMEs' access to facilities, especially non-standard facilities, but their effect is also psychological in strengthening the entrepreneur's confidence and his feeling of being fairly treated. The relative importance of these aspects would need to be assessed by further research.

### **3. Further details**

This section gives more tangible evidence from the case studies about the relevance of the business's history, and more specifically its credit record with

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<sup>10</sup> For CS6, earlier vehicle finance is not excluded. In the case of CS3, the facilities were granted in 2000, just after the CC had been founded, but the operations had been running informally for 3 years prior to this.

the bank, as well as its networks, for its access to finance. In this regard, the case studies generated three observations:

### **3.1- Franchises are more likely to obtain credit facilities immediately at start-up**

The two franchise case studies (CS1 and CS2) obtained long-term credit facilities at inception, especially to finance the acquisition of fixed assets and the settlement of the initial franchise fee. In addition, CS2 was granted an overdraft facility immediately (CS1 obtained its overdraft after 1 year of operation).

All other businesses have taken their first bank credit at some later stage in their life. CS5 was still very young when it signed the first contract for vehicle finance (1 year), while the other cases of vehicle finance took place at a more advanced stage of the businesses' life (3 years for CS3, apparently 6 years for CS6<sup>11</sup>). The overdraft facilities were contracted after 3 to 6 years of operation<sup>12</sup>.

### **3.2 - The length and 'smoothness' of credit history affect demand and supply**

On the demand-side, the case studies provided significant evidence that (a) the number of years accumulated and (b) the compliance with repayment schedules gave the entrepreneurs confidence when their next finance application approached:

- The number of years was relevant for CS5: Having initially refrained from applying for finance because "at the time, it would have been crazy", the owner indicated in his first interview that he could now ask for an overdraft, emphasising that "now it is easier, because we have been around for a while".
- The impeccable repayment record was decisive for CS3: Having promptly repaid its vehicle finance and makes little use of its overdraft, the management announced that it was preparing its next move, suggesting that they were confident about the bank's support because "we have a good standing with the bank".

However, it makes little doubt that the business's age and its credit record also influenced the supply behaviour:

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<sup>11</sup> although there is a possibility that the crating business had bought another vehicle on credit earlier.

<sup>12</sup> In the case of CS3, the facilities were granted in 2000, just after the CC had been founded, but the operations had been running informally for 3 years prior to this.

- In particular, the higher overdraft limit granted to CS6 (100 thousand Rand or 8,3% of turnover) is probably explained by the business's longer history (it has already been running, and a client of the same bank, for 13 years), which gave the bank some confidence that the business would resist to difficulties.

### **3.3 - Negative credit records bar the access to finance**

Conversely, the negative credit record which affected the township entrepreneurs CS4 a+b (being listed with credit bureaus for their default on a previous home loan) barred them an access to formal short-term finance, although access restrictions depended on the type of institution approached.

- For formal micro-lenders (supposedly those registered with the MFRC and adhering to the legal framework), access was subject to a credit history free of judgements and defaults. Unfortunately this did not apply to the two township entrepreneurs reviewed, so that they could not qualify for this type of finance.
- On the other hand, informal township-based money-lenders (supposedly not registered with the MFRC) were less restrictive, granting funds even to "blacklisted" individuals. CS4b could not provide details about the procedure to access such loans, other than "filling in the forms" (sic).

To conclude this section, there is some evidence that personal networks, length and quality of the credit record ease the firms' access to finance, suggesting that these constructs may be used as substitutes for the insufficient accounting information. However, the methodology followed in these case studies per construction provided more support for a demand-side effect than for a supply-side influence of these issues.

### **3.4 - Effect of external recommendations**

Although this was not a focus of the data collection and analysis, case studies did provide possible anecdotal evidence of the importance of recommendations for the access to credit:

- The strongest case (almost provocative) was provided by CS2, who, in his first interview, declared casually: "There is a very easy way to get credit – you must just get a letter from your Chartered Accountant who certifies that you are earning enough to sustain the amount of loan that you are asking for. If you have such a letter, the bank will not even realise that you will not actually earn anything from your business when you start – they will give you the loan".

It was not possible to obtain further precisions or verify the actual

relevance of such a recommendation on CS2's access to finance: on the follow-up interview, the business owner softened his initial statement and denied having used this tactic.

- Another possible case was provided by CS1. The bank file suggested that the good credit relationship which the bank entertained with CS1's franchisor contributed at least partially to the franchisee's access to significant finance. In this sense, the franchisee was indirectly "recommended" by the franchisor. However, the case of CS1 also showed that the bank does not blindly follow recommendations for ever: if the recommended business does not seem worthy, the bank will become more restrictive.

Such recommendations may put specific categories of entrepreneurs at a disadvantage (young and possibly black entrepreneurs may be less well connected). However, the evidence was too slim to enable a strong conclusion on this point.

### **3.5 - Personal relationship between entrepreneur and bank staff**

The case studies did not provide conclusive evidence on the effect of a good relationship between the entrepreneur and its bank, on the access to overdraft.

- A case where it may have played a role is CS3, which has been able to secure a high overdraft and more facilities as soon as it registered as a CC, presumably because of the partner's history and good standing with the bank.
- Another example may be provided by CS5, whose relationship with his bank manager extends to the family ('our sons play cricket together'). CS5 was also easily granted an overdraft facility. However, at this stage, there is no proof of causality.
- A counter-example is CS6, which complained about a very bad contact with their bankers ("Ha! [laugh] Our relationship with the bank? There is none! We have been banking with them for 13 years, but when we took these premises we have been moved to a new branch. So, you see, nobody knows us and we know nobody, it is completely anonymous... Agh, you know, the bank only knows you if you have lots of investments with them"). This absence of a personal relationship did not prevent them from being able to increase their overdraft limit to a rather high amount.

While there was no clear evidence of causality between networking and supply of finance, the case studies did suggest that cultural problems could cause demand-side constraints:

- CS5 initially refrained from asking for bank finance because he felt that he would have needed personal contacts: “I knew nobody and nobody knew me” – adding that this networking constraint, especially for entrepreneurs from non-white backgrounds, may have been relaxed since then (“in these days, black entrepreneurship was such a crazy thing”).
- In a different context, CS4 showed a preference for township moneylenders, among other reasons because of the cultural proximity (“they understand me, they know where I come from”).

## **Annexure 26 – The relevance of collateral for access to finance**

### **1. Literature**

Collateral is a widely used, but controversial, information substitute. However, basing a bank's credit decision on collateral poses problem. Based on an international study, Jenkins argues that banks that rely on collateral tend to neglect borrower evaluation and follow up (2000:21). In South Africa collateral is a particularly sensitive issue since, as Tucker (2000) notes, Blacks were not allowed to own immovable property until the 1980s.

This situation is less serious if collateral is used flexibly, which Levy (1996) found to apply to South Africa, as banks tend to accept various types of assets as collateral, apart from property. Also, Levy found that the quantitative collateral requirements, measured by the ratio of collateral to loan amount, were reasonable, with a third of his SMME sample obtaining a loan by providing 50% collateral, while only 26% of SMMEs had to provide more than 100% collateral.

### **2. Findings**

Following the literature, collateral is expected to be especially important for riskier facilities, with frequency of use acting as a guide to judge the level of risk. To test this hypothesis, the main facilities used by SMMEs were organised in three classes.

Although they are not the most frequent (they were used by 45 to 48% of the balance sheet sample), asset-backed facilities such as equipment finance or instalment sale agreements are deemed least risky for the bank thanks to the lender's rights on the asset concerned. Due to this 'intrinsic security', collateral is expected to be of little importance for these facilities.

Overdraft facilities are deemed to be a medium risk: their short-term character reduces the risk but they tend to be rolled over from one year to the next, hence effectively assuming medium term character. Evidence confirms that this is the facility most frequently used by small businesses (used by 64% of GEM respondents and 52 to 68% of businesses in the balance sheet sample and case studies). Collateral is expected to play a moderate role in this class of finance.

(Non-asset backed) term loans were used by 17% of GEM respondents and 17 to 18% of the balance sheet sample. Due to their longer maturity and the absence of intrinsic security, these loans are riskier, and collateral is expected to play a significant role there.



### **a) Installment sale agreements: no collateral/collateral**

Data from the case studies and balance sheet sample did not fully confirm the irrelevance of collateral for instalment sale facilities or equipment finance. Tourism business CS5 and crating business CS6 bought vehicles on credit without having to pledge personal assets, but counter-examples were Repro house Wec07 or Bread Deliveries firm Ned11, which had to provide substantial personal securities to buy printing equipment, vehicles and computers on credit.

However, due to the small number of firms where collateral could be specifically allocated to the ISA, further going analyses were left out for this type of finance.

### **b) Overdraft facilities: guarantees vs. tangible assets**

Evidence shows that overdraft facilities may be secured either by a member's guarantee, or by more tangible collateral. In the balance sheet sample, two of the five firms with only an overdraft facility had secured their overdraft simply through letters of guarantee or cession of member's loans. The other three firms for which data were available had to provide more tangible assets such as investments (as for CS6), insurance policies, or house (see detailed table in Annexure 28).

The GEM survey, in spite of a low response rate, tends to confirm a slight advantage of firms with collateral over those without collateral in their applications for overdraft (see Table 26.1).

Due to the small number of firms with only an overdraft facility, and the important role of letters of guarantee as collateral, whose value cannot be ascertained precisely, no review of collateral amounts was undertaken for this facility.

### **c) Term loans: the need for tangible securities**

As to term loans, the evidence suggests that collateral plays a more significant role. In the balance sheet sample and the case studies, there was only one case (Ned3) of a firm obtaining a term loan without pledging tangible assets (the members' personal guarantees apparently being sufficient). All others had to provide tangible collateral, and CS6 confirmed that, if he were to apply for a term loan, he would need to take a second bond on his house.

GEM data also confirmed the stronger relevance of collateral for term loans as opposed to collateral, with a strong differential in the success rate of applications for finance, as illustrated in Table 26.1.

*Table 26.1 – Success rate of finance applications according to collateral*

	Applications for overdraft			Applications for term finance		
	Number	successful	success rate	Number	successful	success rate
No collateral available	9	3	33%	15	3	20%
Some collateral	13	7	54%	45	34	76%
<i>No data on collateral</i>	<i>61</i>	<i>30</i>	<i>49%</i>	<i>52</i>	<i>35</i>	<i>67%</i>
Overall	83	40	48%	112	67	60%

*Source: analysis of GEM data*

#### **d) Overdraft and term loans: coverage level**

The next step focused on studying the level of coverage, i.e. the ratio of the value of collateral pledged to the amount of the facilities secured, for the balance sheet sample and GEM data.

Since ISAs are primarily secured by the asset purchased, the coverage ratio was calculated excluding this facility. Unlimited personal guarantees were also excluded from the calculation as their value is not capped. Due to the low response rates, the analysis of GEM data was limited to applications for term finance. Further, owing to data uncertainty the coverage level is expressed as a range rather than a precise value. These factors constitute limitations to the validity of the following analysis.

Table 26.2 shows the coverage calculation for case studies, Table 26.3 shows the coverage levels for the full balance sheet sample (subject to sufficient data) and Table 26.4 for the GEM sample. The study of these three tables raises several observations.

In the case studies and balance sheet sample, in spite of sizeable variations, the coverage levels were generally higher than suggested by Lewis (1996), often at 100 to 300% of the facilities amount. There are however some outliers, suggesting that a firm's long history, franchise networks and bargaining may help to lower collateral requirements. In the case of partnerships, banks seem to be reluctant to add the securities provided by members, possibly because of doubts about the durability of such partnership.

Unlike for case studies and the balance sheet sample, coverage levels above 100% were rare in the GEM sample (6 cases) and their success rate appeared to be no better than those with lower ratios. It is not clear what caused this divergence in results, but there is a possibility that the more exhaustive data of the bank files (balance sheet sample) led to a more complete capture of all securities, while survey answers possibly focused on the main asset pledged.

Table 26.2 – Coverage level of facilities – case studies

	CS1	CS2	CS3	CS6
Value of assets pledged	188K	2 600 K	756K	“much higher than 100K”
Amount of Instalment sale (ISA)	228K		40K	149K
Amount of other long-term loans	60K	1 800 K	0	0
Overdraft limit granted	25K	80K	100K	100K
Coverage level (including ISA)	50 to 100%	100% to 200%	Over 500%	Assumed 50 to 100%
Coverage level (excluding ISA)	200% to 300%	100% to 200%	Over 500%	Assumed 100 to 200%

Source: bank files (CS1 and CS3), interviews, financial statements

Table 26.3 – Coverage level – balance sheet sample

	(Estimated) Coverage ratio						
	No collateral	under 50%	50-99%	100%	101-200%	201-500%	Over 500%
Firms with term loan and overdraft	Wec5	(Ned3)		Wec7	CS2, (CS6), BD2, Ned4, (Dir2)	CS1, Ned1, Ned5	CS3 (Wec7_i)
Firms with overdraft but no term loan					Ned11, Ned13, Wec6, (Gob1)	Ned15, (Dir3), PWC1	

A firm code name in (brackets) indicates that the coverage ratio is assumed; Wec7\_i refers to the initial bank requirement for Wec7 (later reduced)

Table excludes ISAs and personal guarantees given by members or third parties (such as Khula)

Notes:

- Wec5, a PVC manufacturer, has been in existence for 30 years;
- Ned3 is a franchise petrol station owned by a white family which provided unlimited personal guarantees;
- For Wec7 the initial bank requirement was for 600% coverage, which the owners negotiated down to 100%.

- Wec7 and CS3 are partnerships. It is possible that banks may have raised their collateral requirements due to worries on the durability of the partnerships.

*Table 26.4 – Coverage level and success of term loan applications (GEM)*

<b>Applications for term finance</b>	<b>Number</b>	<b>successful</b>	<b>success rate</b>
Firms with no collateral	15	3	20.0%
All firms with collateral	45	34	75.6%
Coverage ratio			
• less than 50%	19	13	68.4%
• 50 to 100%	11	10	90.9%
• over 100% (of amount raised)	6	3	50.0%
Collateral amount available, in Rand			
• up to 100K	18	12	66.7%
• 101-500K	16	13	81.3%
• > 501K	7	6	85.7%

*NB: the total differs from the sum of the categories, since in some cases, the amount of collateral or the ratio is unknown.*

Another possible explanation is the fact that very high coverage ratios tend to appear in the smallest enterprises (raising the lowest amounts), where success rates have been seen to be lower. To test for this possibility, the success of applications among GEM respondents was studied again, this time according to the absolute amount of collateral available. Table 26.5 shows that the success rate increases linearly with the amount of security. This seems to suggest that the nominal amount of collateral is more relevant than the coverage ratio in the bank's lending decision – a consequence of the scale effect already discussed.

*Table 26.5 – Collateral amount and success of term loan applications (GEM)*

<b>Applications for term finance</b>	<b>Number</b>	<b>successful</b>	<b>success rate</b>
Firms with no collateral	15	3	20.0%
All firms with collateral	45	34	75.6%
Collateral amount available, in Rand			
• up to 100K	18	12	66.7%
• 101-500K	16	13	81.3%
• > 501K	7	6	85.7%


*NB: the total differs from the sum of the categories, since in some cases, the amount of collateral or the ratio is unknown.*

**e) Conclusions on the relevance of collateral**

With the exception of the coverage levels, the three sources of data are consistent on the relevance of collateral for access to various types of facilities; they show that collateral is not always required for instalment sale facilities, but that it is the rule for overdrafts – although there is a good chance that personal guarantees will suffice without a need for tangible assets. As to term loans, in most cases tangible assets are required and the coverage level often has to exceed 100%.

*Figure 26.1 – Positioning of the three main facilities according to the type and level of security required*

	level of coverage (balance sheet sample)				Relevance for access (GEM)
ISAs	no collateral	personal guarantees	tangible assets; coverage ratio $\leq 150\%$	tangible assets; coverage ratio $> 150\%$	<i>not tested (insufficient data)</i>
OD	no collateral	personal guarantees	tangible assets; coverage ratio $\leq 150\%$	tangible assets; coverage ratio $> 150\%$	moderately relevant
Term loans	no collateral	personal guarantees	tangible assets; coverage ratio $\leq 150\%$	tangible assets; coverage ratio $> 150\%$	very relevant

 Distribution of balance sheet sample firms using a particular facility, according to the level of coverage available to the firm. (The shapes are indicative).

*Source: results presented above.*

## **Annexure 27 – The signalling effect of collateral**

### **1. Literature**

Apart from its value in the case of liquidation, collateral helps banks select their borrowers through signalling, as an entrepreneur who is confident in his chances of success will be more inclined to pledge his assets, than a risky one (Bester 1985). In addition, collateral reduces the risk of moral hazard on the part of the borrower (Bester & Hellwig 1989).

### **2. Findings**

According to literature, the expectation would be that firms with a lower credit risk are more willing to pledge their personal assets as collateral, thereby giving potential lenders a signal that they are (intrinsically) worthy of credit

The case studies and other interviews showed variable attitudes of business owners with regard to providing collateral, the dominant one being resignation and mixed feelings. Most business owners took banks' collateral requirements as a given, that cannot be questioned. Failure to provide collateral generally caused self-rationing. However, there were also several cases of glad acceptance and one case of bargaining: the six Wec07 owners, being shocked at the first bank's collateral requirements, defined their own terms, agreeing to pledge one sixth of the amount of security requested by the first bank, and found a lender that accepted their terms.

The motives for these various attitudes are often difficult to establish. However, the anecdotal evidence listed in Table 27.1 would suggest that the project risk (fear to fail) is only one of the factors influencing the willingness of an owner to pledge his assets. In an environment of uncertainty, no entrepreneur, whatever his quality, is able to exclude entirely the prospect of failure; hence the willingness to pledge collateral is also a function of the entrepreneur's personal risk aversion as well as the share of his assets which are not at risk (which in turn depends on the entrepreneur's total asset value).

This more complex framework explains why restaurant owner CS2, in spite of its low chances of success in a highly competitive environment, is happy to pledge his house, while the owners of ACSe, Wec7 and CS4, who have less 'fall back' assets, are reluctant to meet the banks' requirements. The evidence, hence, suggests that the owner's net worth may be more decisive than project risk in predicting their acceptance of collateral requirements – in rupture with the theory of signalling.

More research would be required to confirm the tentative results above.

Table 27.1 – Attitudes of small business owners on pledging collateral

Attitude	Business	Owner situation	Business situation	Quote	Assumed motives
Glad acceptance	CS2	owns a R2,6 million house; previous business failure	franchise in highly competitive environment	“Why would I be worried? the value of my house is much higher than the credit line”	value of assets
Resignation	CS4	blacklisted	service firm with huge working capital problems	“we are poor”	(fear of failure) value of assets
	ACSe	n/a	growing service firm with only intangible assets	“How will it work? I have no assets”	value of assets
Mixed feelings	CS6	mother has investments; sons hardly have savings	growing service firm with serious working capital problems	“The value of my mother’s investments is much higher anyway!” <i>“I could take a second bond on my house, but I am not keen on that”.</i>	value of assets (fear of failure)
Bargain	Wec7	6 owners, of which 5 are black	young growing business	<i>“We had to sign our lives away (...), so we decided to go and shop around”</i> => reduced the requirements by 1/6	(risk aversion)

## Annexure 28 – Type of collateral in balance sheet sample

*Type of collateral used to secure different facilities*

	Race	Type of facility			Type of collateral						Number of different securities required
		Term loan	Overdraft	ISA	Letter of Guarantee / suretyship / 3 <sup>rd</sup> party / member's loans	Khula guarantee	Fixed property	Tangible assets	(Owner's) Investments or life insurance policy	Business Assets (debtors, equipment or policies)	
BD2	White		x		x ML				x		3
BD5	White		x	x	x						1
BD6	White		x		x						1
BD9	White		x	x	x						1
CS2	White	x	x		x		x				2
CS3	Black	x	x	x	x		x (x)	x			4
CS6	White		x	x	x		(c)	x			2
Dir1	White		x		x						1
Dir2	Black	x	x	x		x		x			2
Dir3	White		x	x			(x)	(x)			2
Gob1	White		x	x	x			(x)		D	3
Gob5	Black	x	x	x		x					1
Ned1	Black	unc	x	x				x			1
Ned10	Black	x	x		x	x	x		x	x	5
Ned11	Black			x	x	x			x	D	4
Ned13	White		x		x	x	x				3
Ned15	White		x		x	x			x	D	4
Ned3	White	x	x	x	ML						1
Ned4	White	x	x	x	3 <sup>rd</sup>		x				2
Ned5	White	x	x	x	x				x	x	3
Ned8	White	unc	x	x				x			1
PWC1	White		x	x						D	1
Wec6	Black	x	x	x	ML	x	(x)				3
Count		9	22	16	12	7	7	3	8	6	3



*Unc: unclear*

*D: Debtors' book*

*(x): assumed*

*ML: member's loan*

*3<sup>rd</sup>: third party guarantee*

*(c) under consideration*

*Notes: Firms that are not mentioned here are those for which no data on the type of collateral were available. For the SMMEs listed here, the list of collateral types is not necessarily exhaustive.*

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## Annexure 29 – Type of collateral by facility and race

*Type of collateral used to secure different facilities*

	LG or Member's loan only		LG/ML and tangible security		Tangible security without LG/ML		Total	
	White	Black	White	Black	White	Black	White	Black
Overdraft only	2	0	3	0	0	0	5	0
	BD6, Dir1		BD2, Ned13, Ned15					
Overdraft and ISA	2	0	2	0	3	1	7	1
	BD5, BD9		CS6,Gob1		Dir3, PWC1, Ned8	Ned1		
Overdraft and Term loan, with or without ISA	1	0	3	3	0	2	4	5
	Ned3		Ned4, Ned5, CS2	CS3, Wec6, Ned10		Dir2, Gob5		
ISA only	0	0	0	1	0	0	0	1
				Ned11				
Total	5	0	8	4	3	3	16	7

*Source: analysis of balance sheet sample*

*LG: Letter of Guarantee; ML: Member's loan*

## **Annexure 30 – Case study design**

This annexure comments on the choice of case study objects and the methodology that was used to collect and evaluate data. The methodology choices were particularly guided by Eisenhardt (1989) and Yin (1994).

### **1. The advantages of a case study approach**

Unlike the review of the balance sheet sample and GEM survey among 224 'black' SMEs, case studies allowed for multiple sources of evidence and tracing the boundaries between the phenomenon (the complaints about financial constraints) and its context, that is, the internal management of the firm, the behaviour of financial institutions and other partners, market and political environment. By working with "more variables of interest than data points", case studies had a greater explanatory potential and a lower risk of being misled by spurious effects.

The case study approach was meant as a complement to the more systematic data, much in the spirit of Mintzberg (1979, p. 587): "For while systematic data create the foundation for our theories, it is the anecdotal data that enable us to do the building. Theory building seems to require rich description".

In terms of the classification proposed by Yin, the case study investigation was essentially explanatory, aimed at tracing operational links between the existence of financial constraints within small businesses, and the possible external (e.g. supply-driven) and internal (demand-related) factors identified in the theoretical work.

The following paragraphs give more operational links to connect the empirical data with the initial research question.

### **2. Case study design choices**

#### **2.1 - Study's questions**

The research was concerned with assessing the prevalence and amplitude of financial constraints for small businesses, as well as seeking explanations for them. In particular, two broad explanatory hypotheses needed to be tested, namely (1) the possibility of dysfunction in the market, especially with regard to informational opacity and (2) the lack of creditworthiness of small enterprises.

Transferred to a micro-economic approach, the study's questions could be

restated as follows:

- (1) What are the typical needs and financial resources of various types of small businesses, and what are their experiences with regard to access to finance?
- (2) Within each type, how opaque is the financial communication provided by the SMME?
- (3) How intrinsically sound are those SMMEs?
- (4) What can be the role of informational opacity on one hand, lack of creditworthiness on the other hand, in explaining these SMMEs' lack of access to the finance they require?

To operationalise the questions into a case study design, the following steps were required:

- select the case study objects in such a way that they would cover the variety of situations at hand and allow for a typology to emerge;
- within each "type" of firm, investigate
  - the total need for finance and the resources available, in order to identify possible gaps;
  - the intrinsic financial quality of the firm (in terms of financial ratios and financial management);
  - the quality of the firm's financial management and, in particular, its accounting transparency;
  - and aspects related to what has been called 'information substitutes', such as availability of collateral, existence of a credit record and network effects.
- connect the elements above to verify whether a general pattern emerges which holds true across the types of businesses.

## **2.2 - Units of analysis and sources of evidence**

Due to the variability of situations, it was decided to opt for a multiple case study design, with individual businesses representing single units of analysis.

The time boundaries were sometimes restricted by the availability of data, but in general the aim was to cover the history of a business from start-up to the time of data collection, i.e. between March and June 2004.

In some unanticipated cases the history of the business selected required an enlargement of the unit of analysis, to include another business entity, which has either been merged into the main business studied (CS3a) or has taken over the activities of the first business (CS4b).

The firms were studied within their context, including in particular (a) the partners associated in financial management, such as external bookkeeper or

accountant, and (b) the potential or actual providers of funds, such as family and friends, banks, suppliers, micro-lenders.

In order to combine the strengths of various types of data, the general case study design was organised around three main sources of evidence:

- interviews, especially of the business owners, which have the advantage of being targeted and insightful (Yin p. 80),
- direct observations, in the form of on-site visits, which are real and contextual, and
- archival records, namely the historic financial statements, which compensate the weaknesses of the other sources of evidence by being stable, unobtrusive, exact, precise and quantitative.
- Occasionally, some documentation (business brochure offered by the business owners; cash flow forecast; excerpts from bank file) was used as an additional source of evidence.

The combination of quantitative and qualitative data was used for synergistic purposes (Eisenhardt 1989 p. 538). In particular, in contrast to previous empirical undertakings, rich qualitative data were used for their usefulness in hypothesis-shaping, in explaining why emergent relationships hold or do not hold (Eisenhardt p. 542)

### **3. The selection of case study units**

#### **3.1. Initial plan**

It was decided to select case study units according to a “theoretical sampling” (Glaser & Strauss 1967), i.e. responding to theoretical rather than statistical requirements. For this, categories were built which were thought to be most relevant in investigating the questions at stake. The categories chosen to ensure that the case studies were representative were the following:

- (1) franchise, (2) manufacturing and construction enterprises, (3) low-skill service enterprises and (4) high-skill service enterprises;
- (1) white-owned, (2) coloured or Asian and (3) black-owned businesses, and
- businesses which have had various experiences with regard to access to finance (successful/unsuccessful initially and at a later stage).

### 3.2. Difficulties and necessary compromise

As described in the thesis, Chapter 1 section 4.4, in the process of selecting enterprises and gathering the data for the case studies, two problems surfaced:

- (1) it appeared that there was a strong correlation between low-skill and black-owned businesses; unfortunately, no black-owned business was found that fulfilled the conditions regarding to accounting quality;
- (2) in addition, the case study design was leading to a self-selection bias: the firms able and willing to provide both strong accounting data and time for interviews appeared to be all reasonably well-managed and reasonably successful with access to finance.

These two problems were unsatisfying because it was feared that they would lead to distorted (over-optimistic) conclusions. The case studies would neither provide a profound understanding for the black businesses' plea on the insufficiency of finance, nor would it reflect the financial institutions' claim that their funds are at risk due to bad management practices in most small businesses.

To obtain sufficient insights into those two issues, it was necessary to adjust the methodology. To deal with township micro-businesses, accounting data requirements had to be strongly loosened – with the core of the analysis being based on a critical analysis of interview data. On the other hand, it was felt that the best illustration of badly-managed SMEs and their consequence on the use of bank funds would come from the analysis of a failed business – but obtaining both detailed accounting information and qualitative interview-based data from a failed entrepreneur seemed almost impossible.

Therefore, the study design was revised based on the following compromise:

- Four regular case studies would be carried out, based on a combination of strong accounting data and interview data. However, the low-skilled and black businesses would not be represented, nor would there be any extreme cases with regard to management quality or access to finance;
- To reflect on low-skilled black businesses and their disastrous relationship to finance, two (related) cases would be studied, following an atypical methodology based primarily on interview data, and
- To reflect on firms squandering the generous finance granted through apparently dishonest practices, a failed business would be examined, again based on an atypical methodology using primarily accounting data, with no interview available.

This compromise was a way to maximise the two advantages of multiple case study designs for the building of theory, namely replication and extension (Eisenhardt 1991 p. 620): the choice of a relatively controlled sample for the four regular case studies enabled to “reduce extraneous variations” (Eisenhardt 1989 p. 535), hence easing the replication of emerging theoretical concepts. On the

other hand, the addition of two polarised cases (Pettigrew 1988), enabled extending theory (Eisenhardt 1989 p. 537)

### 3.3. Synopsis of the case studies undertaken

Table 30.1 summarises the six case studies undertaken:

*Table 30.1 – Synopsis of case studies undertaken*

<b>Business “code name”</b>	<b>Size category</b>	<b>Age (yrs)</b>	<b>Type of business</b>	<b>Sector activity /</b>	<b>Race</b>	<b>Methodology</b>
CS2	small	3	franchise	restaurant	white	“regular”
CS3	small	6	manufacturing (and retail)	safety wear	coloured	“regular”
CS5	small	6	high-skilled services	tourism	coloured	“regular”
CS6	small	13	high-skilled services	packaging	white	“regular”
CS4 a+b	micro	8 & 0.5	low-skilled services	cleaning	African	interviews only
CS1	very small	4	failed business; franchise & manufacturing	furniture (manuf and retail)	white	desk study only (bank file)

In the data collection process, several small businesses had been considered as possible case study objects, but the case studies have not been completed either because of the businesses’ inability to provide the data required, or because they were eventually found not to match the profile required.

In some cases, though, a substantial part of the data collection had happened prior to the case being abandoned, occasionally providing interesting insights. Therefore, on occasions, this report will mention these cases.

*Table 30.2 – Case studies abandoned*

<b>Business “code name”</b>	<b>Size category</b>	<b>Age (yrs)</b>	<b>Type of business</b>	<b>Sector / activity</b>	<b>Race</b>	<b>Reason(s) for being abandoned</b>
ACS a	very small	14	high-skilled services	Heating/Air Conditioning Systems	coloured	owner has become unavailable for second interview
ACS b	micro	6	low-skilled services	sport supplies	coloured	accounting quality insufficient
ACS c (Dir02)	very small	5	manufacturing	printing	coloured	not actually struggling
ACS d	micro	5	manufacturing	Furniture	African	no financial records
ACS e	very small	missing	high-skilled services	security services	white	eventually refused to provide financials
(ACS f) (Dir03)	small	13	restaurant	franchise family restaurant	white	too similar to CS2

#### **4. Operational case study procedure**

Each of the six case study units selected was studied according to the following sequence. Following the advice of Eisenhardt (1989:533), the choice was made to overlap data collection and analysis, in order to allow helpful adjustments to data collection.



#### PREPARATION

1. Pre-selection telephonic interview (in some cases two interviews)
2. Case study protocol / investigation plan
3. Confidentiality agreement

#### DATA COLLECTION AND PRE-ANALYSIS

4. First interview on-site (following a general semi-structured interview guide)
5. Study of financial statements and possible other documentation
6. Preparation of a case-specific interview guide (Lillis, 1999 p. 84) for second interview
7. Second interview
8. Additional analysis
9. Occasionally additional interviews, telephonic or written correspondence, with either individuals internal to the business, or external partners (accountant, client, franchisor)

#### WITHIN-CASE DATA ANALYSIS

10. Documentation of collected data, especially on the firm's history and management characteristics, following a Qualitative Analytical Protocol (Lillis)
11. Evaluation of financial statements quality
12. Analysis of financial ratios
13. Interpretation of results and verification according to an "audit trail" (Lillis)
14. Single case study final report

#### SYNTHESIS

15. Cross case pattern search
16. Shaping hypotheses (iterative process to verify the fit)
17. Building internal validity

## 5. Logic for the data analysis and interpretation

The logic used for a targeted data collection (interview guides), and for linking data to the concepts studied (Qualitative Analytical Protocols) was as developed in the conceptual framework. In particular,

- A review of the existing assets (as recorded in balance sheets), investing activities (as described in interviews and constructed in pro forma cash flow statements), and the ambitions disclosed by the business owner in

his interviews, enabled to get a sense for each firm's need for finance. In addition to long-term finance needs resulting from fixed assets, the need for working capital also had to be considered.

- The present resources available, as read in the balance sheet and the future resources, as estimated from the operational cash flow potential, were triangulated by interviews.
- The transparency of the firm's financial communication was evaluated according to the scoring model developed (see chapter 3), whereby a score of less than 50 was considered weak and a score over 70 was deemed good.
- The intrinsic soundness of the firm was interpreted according to the ratio-based creditworthiness model developed (see chapter 4), with the ratio-based suspicions being further linked to interview-based evidence. In addition to a pure quantitative view of creditworthiness, findings on management quality, especially financial management, as gathered from the interviews, completed the judgement.
- The availability of collateral as well as the existence of a credit record would usually be derived from the interviews, with the bank file (when available) occasionally providing more precise quantitative data.

In general, the interpretation of data was always based on comparing patterns from various case studies and probing the initial apparent frames from qualitative data through scale representation coming from quantitative data (as per Eisenhardt 1989:540)

## Annexure 31 – Narrative on Case Study 1

### Liquidated franchise in furniture (manufacturing and retailing)

Case Study CS1 was an atypical case study, added to the conventional case studies in order to avoid the self-selection bias. It is the only case that was studied without direct contact with the owner. It serves as an illustration of undeserved access to finance, improper accounting practices, and financial distress.

#### 1. Business Short Portrait:

Business Code Name: CS1	Form of registration: not clear
Member's initials: Mr. J. v.d.M.	(some documents quote it as a Pty Ltd, others as a CC)
Member owns 100% of capital	
Member's ethnic background: White	
Member is also manager	
Sector of activity:	
- Primary activity: SIC 3910	Manufacture of furniture
- Primary activity: SIC 6233	Retail of furniture
Product or Service: built-in cupboards for kitchen and bedroom	
Business concept: franchise	Market: Private domestic
Start-up date: 1996	
Current status: liquidated	
Staff members: 6	Annual turnover: R 2.2 million
(further details on staff were not available)	Gross fixed assets : R 357 thousand
	=> Size category: very small (tending to "small")
Main sources of finance:	Member's loan Instalment sale Long-term bank loan Trade credit Bank Overdraft Credit Card

## 2. The case study procedure

Unlike other case studies, the study of CS1 was based exclusively on archival data, derived from the following sources:

- Basic profile information on form provided by researcher and filled-in by the bank (e.g. number of employees etc)
- All financial data and reports of analysis that could be found in the bank file (the bank file in Cape Town is probably just partial, because Cape Town staff is presumably essentially a commercial agency, while the credit decisions are taken in a credit committee at the Head Office (Jhb/Pretoria); they may have been more attentive to the financial data.)
- franchisor's financial statements (without notes), 1994-95
- « application for franchisor approval », submitted by franchisor to bank, 1996
- financial statements: the bank file contained only very irregular accounts for the periods between 1996 and June 2000
  - o full financial statements for Feb 1997 (incl. AO report),
  - o Balance sheet, income statement and rudimentary notes for Jan 1998,
  - o monthly balance sheets for July 1999 till January 2000, as well as April to July 2000,
  - o monthly income statements for January 2000, June 2000, July 2000
  - o and income statements for the 10 months ended 31 December 1999, the 7 months ended 31 January 2000, and the 12 months ended 30 June 2000.
- Cash-Flow forecast for Apr-Sept 1998
- Statement of the bank's exposure on: 1996, May 1998, 1999
- Excerpt of the liquidator's report (March 2001) showing the Assets and Liabilities as well as the cause of the company's failure
- "Franchising", brochure from ABSA Bank Ltd, Ref 980660 GITAM SA

## 3. Profile of the business owner and history of the business

Unlike the other case studies, which were for going-concerns, this one referred to a liquidated business, and was based solely on written documentation – no interviews were available. For this reason, data on the business owner were scarce. The history of the business could mainly be deduced from the successive accounting documents, however these frequently contradict each other and there is an extreme confusion about some fundamental values.

Therefore, for the purpose of this section, the business history will be described

in a mainly verbal way, mentioning figures only if there is a reasonable assurance that these figures are real, otherwise restricting itself to orders of magnitude. The following, more analytical sections, will concentrate on reported figures and tackle the contradictions implied by these figures.

### **a) The business owner**

From its start-up date in 1996 until its liquidation in 2000, the business has had only one member, “Mr. van der Merwe” (not his real name). The bank indicated that he came from a “white Afrikaans” background.

Unfortunately, there was no further data available about the entrepreneur, his previous experiences and qualifications, his personal assets, his possible relationship to the franchisor, etc.

My attempts to establish a personal contact with him have been vain, he may have left the Cape Town area or he is not listed in the telephone directory.

### **b) Establishment of the franchise:**

Mr. S. Parker, the franchisor (not his real name), started operations as an independent business in Pretoria in 1992, as a manufacturer and retailer of kitchen and wardrobe furniture. According to an evaluation by the bank, the “secret” of the business was said to be the material used, fibre-board, which was cheaper, convenient and for which the business had an “exclusive supply agreement” with a “large national concern”.

The accounts showed that the Pretoria business was growing well and profitable, and started a second shop. It is probable that the bank has provided high commitments for the financing of this second shop: the 1995 balance sheet showed long-term debt amounting to R770 000, up from R270 000 the year before, but no note was available for further details.

Mr. Parker then decided to engage into nationwide franchising. Early 1996 he approached his bank for approval of a franchisor scheme, which foresaw sizeable franchise fees. The notes indicate that Mr. Parker’s expectation was that franchisees’ turnover should be in the region of R250 000/month, i.e. R 3 million / year.

The application for approval does not mention any amounts or facilities involved on the part of the bank. The bank’s Credit Committee approved the scheme, based on 2 main reasons, which were handwritten next to the signature: exclusive supply agreement and the fact that the franchise fees were paid in full upfront. A further element that came up from the bank file was that Mr. Parker seemed to have a good credit record with the bank (the exact wording says: “The franchisor is highly considered by the Commercial Manager responsible for the

account”).

### **c) Start-up of Cape Town business:**

Mr. van der Merwe (not his real name) started his business in Cape Town in 1996, supposedly as one of the first franchisees, with exclusive rights for the Cape Peninsula.

There is a first ambiguity as to the type of registration which Mr. van der Merwe chose for his business. The most probable is that he registered as a CC, since the accounting officer, in his report for February 1997, refers to the business as a Close Corporation and even mentions the registration number, which has the format of the register of Close Corporations. However, the firm’s letterheads, the bank’s file and even the liquidator’s report bear the mention “(Pty) Ltd”. It is not clear whether the liquidator has been confused by a false mention on the firm’s stationery, or whether the initial Close Corporation has later been converted into a private company.

Starting up a franchised business always represents a heavy initial investment, especially when the activity includes manufacturing, which requires substantial equipment. The initial investment was in the region of R 390 000. For start-up finance, Mr. van der Merwe naturally turned to the bank of the franchisor, which had agreed in principle to support the franchise.

Consistent with their approval of the franchise scheme, the bank supported Mr. van der Merwe’s venture with a term loan and an instalment sale agreement, jointly covering approximately three quarters of the total initial investment.

The business could then start to manufacture and sell its furniture in the course of 1996.

### **d) First few years of operation**

In a way that is not unusual for small businesses, the first few years of operation have been difficult, as Mr. van der Merwe did not immediately establish himself on the market and build up a customer base.

During those first two years, the firm apparently did not provide its main creditor any report on performance – the first official financial statements, for the period up to February 1997, only reached the bank almost 2 years later in December 1998.

There is conflicting evidence as to the annual turnover figures that the business reached in the first and second years, but it makes no doubt that they were significantly under the R 3 million mentioned by the franchisor. Considering this turnover gap, one would expect that the first two years have not been profitable, but there are again contradictions in evidence in this regard.

Not surprisingly, there is also some evidence that the pressure on the bank balance increased, and that by January 1998 the bank balance was negative.

However, the business seemed to be reasonably up-to-date with the repayment of its long-term facilities, so the bank obviously decided to support Mr. v.d.M. further. In 1998 he was granted an overdraft facility of R 25 000. On this basis Mr. van der Merwe pursued his business.

At the end of 1998 or early in 1999 the business acquired a new vehicle for an amount of R131K. To finance this investment, Mr. van der Merwe obtained a new long-term financing facility from a different bank, for approximately R100K.

### **e) 1999: increasing tension on cash**

At the latest in July 1999, the “home bank” of Mr. van der Merwe’s business supposedly became pessimistic about its evolution (although the bank file did not contain any analysis or written note to document this).

The persistence of high balances in the long-term liabilities strongly suggests that the SME was no longer able to adhere to the initial repayment schedules for the Instalment Sale and the term loan. In addition, the cash balances were significantly beyond the overdraft limit granted.

The only bank reaction that was visible from the file, is that the financial institution decided to monitor its client more closely, insisting on monthly reporting. (In principle monthly reporting is compulsory for all clients, but the bank SME manager for Cape Town admitted in an interview that they are especially insisting about it when they suspect that the business is in difficulty).

The monthly reports for July to December 1999 lead to mitigated impressions. On one hand, the cash balance at month-end has temporarily improved from –43 000 R in July to a positive value of R 92 000. This may have raised hopes of recovery. Also, the income statement for the 10 months ended 31/12/1999 showed a continued turnover growth, which would now bring the business close to the initial target set by the franchisor, at R 250 million per month (although this initial target would require to be inflation-adjusted). Furthermore, the costs as reported were under control.

### **f) 2000: Distress and liquidation**

It is probable that any hopes of recovery vanished in the following year, when the business’s bank balances reached unprecedented negative levels. Adding up the current account and the credit card, the deficit reached R43 000 in January 2000, R51 500 in April and R66 500 in June. Meanwhile, the operations also turned not to be profitable, with the income statements for the 7 months ended 31 January 2000 as well as the 12 months ended 30 June 2000 showing high losses.

A liquidation procedure was initiated during the course of 2000. By March 2001, when the liquidator sent his report to the creditors, the movable assets had already been liquidated and the proceeds were to be shared among the creditors.

In its section on the “causes of the company’s failure”, the liquidator’s report quotes from the director of the company the following reason: “the downturn in the economy and the lack of orders as well as working capital”. Hence, even after 4 years of operation, Mr. van der Merwe still felt that he had not reached sufficient volumes of turnover, and admits that it had not had sufficient working capital. This interpretation of the causes of failure will be further discussed later.

## 4. Business model and operations

### a) Franchise scheme

Financially, franchise schemes are usually described according to the following criteria: initial franchise fee required, total initial investment required (including a breakdown between franchise fee, stock, equipment and working capital), minimum amount of cash (i.e. minimum share of the initial investment which must be self-financed), and monthly fees for management services, advertising and possibly training.

Mr. Parker’s franchise scheme could be summarised as follows:

*Table 31.1 – Franchise scheme in 1996*

<b>Total investment</b> (upfront fee, fixed assets, stock & wrkg capital)	<b>Upfront fee</b>	<b>Amount of cash required.</b>	<b>Management Services Fee (“royalty”) and Advertising Fund</b>
Upfront fee: 120 K to 320 K Equipment: 198 K Stock: 30 K Wking capital: 30 K ----- 378 K to 578K	120 K to 320 K, depending on location and size of territory	not specified	R 9 000 per month, broken down as:  R 5 000 for “royalty” R 4 000 for “national advertising and promotions”

*Source: « application for franchisor approval », as submitted by franchisor to bank, 1996; K means R1 000, so 120 K means R120 000, etc.*

As far as fees are concerned, Mr. van der Merwe was lucky to pay only the lowest upfront fee of R120 000. As to monthly royalties and “advertising levy”, it is interesting to note that, instead of being proportional to sales as is usual, they were fixed at a total of R9 000 per month, or R108 000 per year. Assuming that the business would reach the targeted turnover of R 3 million per year, this fee would represent 3.6% of turnover, but this proportion would increase if the



business was underperforming. Of course, the fixed fees were subject to an inflation adjustment – for example the accounts show that the “royalty” was up to R5 600 in January 1998.

The scheme of the franchise which Mr. van der Merwe joined is difficult to assess, since there is hardly any known example of furniture franchises in South Africa to which it could compare. To have some general elements of comparison nevertheless, 51 members of the Franchise Association of South Africa (FASA) were reviewed, out of which 39 gave financial details about their fee structure and the investment sums that they require.

By general standards, the franchise scheme as designed by Mr. van der Merwe’s franchisor seemed relatively heavy and risky for the franchisee. Of the 39 FASA members reviewed, only 6 ask for upfront franchise fee equal to or higher than R120 000 and these are either “big names” (Nando’s), or foreign US franchises (Minuteman), or building franchises. This is in spite of the inflation that has taken place between 1996 and 2004.

Since it seemed that the building industry had generally heavier franchise fees than the average, a sectoral comparison seemed more accurate. Several FASA members from the “building, office and home” sector were reviewed to the extent that they were disclosing their franchise schemes. This sector included franchises in the areas of tiling, plumbing, timber, or signaling, as well as one furniture business. The only furniture franchise found was “Easylife Kitchens”, which describes itself as a supplier of DIY and fully installed storage solutions (kitchen/bic/study/office). Table 31.2 compares the franchise schemes of those businesses with the Parker scheme.

*Table 31.2 – Some examples of franchise schemes in the building and home industry*

	<b>Total investment</b>	<b>Upfront fee</b>	<b>Cash required</b>	<b>Monthly Fees</b>
Ceramic Tile Market (CTM)	R1 000 000 minimum	R500 000+	R500 000	
Easylife Kitchens	R400 000	R40 000		5% on purchases reducing to 2% after R70 000
Mend-A-Bath International (Pty) Ltd	R60 000+			
On-Tap	R500 000	R65 000	R200 000	1,5% purchases
SIGN-A-RAMA		R265 000	R330 000	6%.
Timbercity	subject to location and size of the outlet	R100 000		R10 000 per month fixed VAT excl

	<b>Total investment</b>	<b>Upfront fee</b>	<b>Cash required</b>	<b>Monthly Fees</b>
“Parker Furniture”	R378 000 to R578 000	R120 000 to R320 000	not specified	R9 000 per month

*Sources: elaborated from FASA Website (2004) as well as “Parker” Franchisor approval (1996)*

The table shows that, compared with other franchise schemes, many of which have a well established name on the market, the little franchise of Mr. Parker was quite expensive. Of course, costs must be measured in proportion to the quality of support provided, but it is doubtful that Mr. Parker, who was himself still an SME owner, would be able to provide an advertising strength and management services of comparable quality to larger established networks. Hence, it is probable that the franchise scheme itself, even with the lowest upfront fee of R120 000, was excessively expensive for the franchisee.

## **b) Assets**

Although not absolutely necessary, it is a typical feature of franchising that the initial investment is high, because new franchisees immediately acquire a fully functional business able to perform all operations required, instead of building up their asset base as they grow. After this initial investment, there is usually little need for further investments, except to upgrade the equipment from time to time.

Accordingly, Mr. van der Merwe started his business with the full equipment recommended by the franchise scheme, for a value of nearly R200 000. According to the note to the first financial statements, this amount breaks down as follows:

Plant and Machinery	R 100 641
Motor vehicle	R 80 025
Office equipment	R 17 281

In the following year, Mr. van der Merwe only undertook marginal upgrades of his asset base, investing approximately R25 000 in furniture, office and computer equipment (source: January 1998 management accounts). This brought the total (gross) value of its fixed assets to approximately R223 000.

Whether this investment was indeed sufficient for the business envisaged, is worth asking. For comparison, it was noted that in 1994, Mr. Parker, who was running only one shop supposedly comparable to the one that Mr. van der Merwe would need to run, had fixed assets of R492 387,86, and was generating a turnover of just below R2,5 million. In the next year, after opening its second store, Mr. Parker’s fixed assets amounted to R1,15 million (Source: Franchisor’s Financial statements; the carrying value of assets is net of depreciation).

In light of this information, one may wonder how his franchisee should have been able to generate a higher turnover with less than half the assets that the franchisor used in his own business. A possible explanation could be that the franchisor would take care of some parts of the manufacturing process on behalf of its franchisees, so that some pieces of equipment would be needed only in the head office. Unfortunately there was generally too little information to verify this possibility, but the fact that for his second shop Mr. Parker has invested even higher amounts than for the first one would tend to suggest that each shop would need full assets in order to be fully functional.

If this reflection is correct, it would mean that Mr. van der Merwe's business was under-equipped to deal with the amounts of business envisaged. This may be the reason why he decided in 1999 to invest in a new vehicle, for a value of R131 000. Even with this additional vehicle, the asset base remains significantly slimmer than for the franchisor.

### **c) Marketing policy**

In the absence of interview data or specific evidence, the analysis is limited to a discussion.

As a supplier of kitchen and wardrobe furniture, the business was selling to the public, hence having a potentially wide market. It is difficult to know exactly the market segment that the business was intending to serve. Although it prides itself to offer "ultra-competitively priced products" (source: Application for franchisor approval), it is unlikely that it was targeting the bottom end of the market. Indeed, it appeared to have no shop other than his factory shop located in Montague Gardens, an area hardly accessible for non-motorised low-income South Africans. It is therefore more probable that he was targeting middle-income customers – a market segment where competition is high, since it involves both small operators and large retailers.

Since the business's shop was not in a prominent shopping location, it must have had other ways of reaching its customers. Indeed, the advertising expenses and promotions have been relatively high (approximately R150 000 per year, of which R48 000 to 50 000 were for the head office) but no data were available as to the methods employed or the extent of support provided by the Head Office. With only five employees in the entire business, including manufacturing and delivering, it is probable that the business had only a limited capacity to promote sales: the business owner himself probably had to share his time between sales, manufacturing and the firm's general management.

There were, hence, difficult circumstances for selling: "industrial" location, lack of knowledge of the business name, hard competition, lack of capacity to promote sales. This may explain why Mr. van der Merwe has not been able to build up his customer base as quickly as he hoped.

## **d) Credit policy**

To push turnover up in spite of the competition, many furniture businesses in the late 1990s have engaged into a sometimes hazardous credit policy.

There is contradictory evidence as to whether, when and to what extent Mr. van der Merwe followed this path. The official financial statements for the first year (ended February 1997) indicate, in a note, that there are no debtors because “the Close Corporation undertakes work on a Cash on Delivery Basis”.

However, the management accounts for the previous month (January 1997) displayed trade receivables amounting to R 89 807. Compared with the annual turnover found in the Annual Financial statements, the trade debtors hence corresponded to an average credit period of about 32,5 days (the effective credit periods may however be longer since the business has only been trading for a few months). In addition, the cash flow forecast provided in the early months of 1998 was built on the assumption that approximately 50% of sales were credit sales. Both these indicators would suggest that there was a substantial credit activity taking place.

In the following balance sheets, the trade debtors have continued increasing in the absolute, reaching their maximum (R 186 345) in November 1999. However, relative to turnover – to the extent that turnover figures can be considered as reliable –, there was no escalation of trade receivables, which remained in the region of 4.5 to 7% of turnover, or 17 to 25 days. For comparison purposes, the franchisor in February 1994 and 1995 had trade receivables oscillating between 2% and 8% of turnover. It seems thus that the SME has generally refrained from granting 12 to 24 months credit periods to customers as is usual in the furniture industry.

In addition, the balance sheets suggest that the business has been able in some cases to obtain deposits from clients, sometimes for a long period. In particular, the February 1997 statements show a substantial amount of deposit (almost 10% of the year's turnover). In addition, the balance sheets for the second half of 1999 indicate a more modest deposit, but which has been on the business's balance sheet for at least 6 months (July to December 1999; previous balance sheets were not available to verify whether it may have been paid prior to July 1999). Although not systematic, these deposits supposedly helped the business deal with working capital constraints.

*Table 31.3 - Trade receivables in 1997 to 2000*

	<b>Jan 1997</b> (manag. accounts)	<b>Feb 1997</b> (official accounts)	<b>Jan 1998</b>	<b>July 1999</b>	<b>Nov 1999</b>	<b>July 2000</b>
Trade Debtors	89,807	0	100 646	128 481	186 345	126 389
in days of turnover	32.5	0	16.8	16.9	24.5	17.4
Deposits	0	88 806	0	30 932	30 932	0
in days of turnover	0	32	0	4	4	0

*Source: Annual Financial Statements for February 1997; management accounts for all other dates.*

NB: The average credit period in January 1997 has been calculated by comparing the trade receivables from the management accounts with the turnover from the annual financial statements for February 1997.

## **Bad debt**

There is evidence that the franchisor had an unpleasant experience with bad debt: in 1995 the Pretoria company wrote off bad debts amounting to 15% of turnover. Luckily Mr. Parker had strong and profitable operations, which enabled him to overcome these bad debts, unlike other examples of the furniture industry where improperly monitored bad debts have caused serious business failures (see for example “Furniture Credit Sales”, in *Business Day*, 29 Jan. 02).

If, as the accounts suggest, Mr. van der Merwe has only allowed short credit periods to a small number of customers, he will have avoided excessive bad debts, whose default he would not have been able to sustain.

The bad debts recorded for CS1 are rather low. The very first accounts made available to the bank, for January 1997, were the only ones to include a provision for bad debt for 34.8K (app. 4% of the turnover that year), which is reflected in the income statement as well as in the balance sheet. The following balance sheets, until Dec. 1999, still show a provision for bad debt in the region of 35K, which is then written off in January 2000. However, considering that the business’s accounting is relatively rudimentary and essentially cash-based, it is not certain that provisions for bad debt have been appropriately reflected in the accounts.

## **e) Sales performance**

The evidence on the performance of Mr. van der Merwe’s business in terms of sales is highly contradictory, and there is a strong suspicion that accounts have been misrepresented to cater for the various purposes of the successive accounting reports.

In general, the management accounts – which were supposedly prepared by the

business for the purpose of reporting to the bank – displayed rather high turnover figures. The only official financial statements, dated February 1997 and possibly prepared for tax purposes, were significantly less optimistic.

It is somewhat disturbing that the only official accounts carrying the signature of an accounting officer have recorded sales of just under R 1 million for the period up to February 1997, while the management accounts for the same period without the last month, had declared a turnover of R 1,4 million. After correcting for the shorter reporting period, this corresponds to a discrepancy of over 60%.

A possible explanation for this discrepancy is that the management accounts have significantly overstated the first year's sales in order to declare a profit – at least on the paper – and thus gain the bank's favour. If so, there is some reason to fear that the sales figures from other years are similarly overstated. All cost ratios and profit calculations are therefore likely to be false.

Another possible assumption is that the business has, in the official statements, strongly understated its turnover figures. Indeed, falsifying turnover in the accounts to be sent to the Receiver of Revenue was the easiest way to reduce profit and therefore companies tax. If this was the reason, Mr. van der Merwe probably had the complicity of the accounting officer. Another equally probable hypothesis is that a number of sales transactions were not recorded in the books, or were captured only in a parallel VAT-free record, which was not made available to the Accounting Officer – but was considered when preparing the management accounts. This practice of concluding a part of business “off the record” is known as a frequent and hardly controllable fraud among SMEs, generally aiming to save on VAT and eventually on companies' tax.

In whatever direction the misrepresentations have taken place, it is certain that the business has never really reached the initial target turnover of R 3 million per year, especially not if this figure is to be inflation-adjusted. In fact, in spite of the high advertising expenses and the use of customer credit, after the first two years, the growth rate has been limited and hardly above inflation.

*Table 31.4 – Sales performance, 1997-2000*

	<b>start-up to Jan-97</b> (11 months)	<b>**“official” start-up to Feb-97</b> (12 months)	<b>Mar 97 to Jan-98</b> (11 months)	<b>Mar 99 to Dec-99</b> (10 months)	<b>Jul 99 to Jun-00</b> (12 months)
Sales	1,463,089	993,359	2,162,236	2,051,605	2,614,059
Sales (12 months equivalent)	1,596,097	993,359	2,358,803	2,461,926	2,614,059
Nominal year-to-year growth rate in % p.a.	n/a	n/a	48%	2%	13%
<i>Real turnover growth</i>	<i>(p.a.)</i>		32%	-5%	5%

*\*Note: the statements dated start-up to February 1997 are the only formal financial statements signed by the accounting officer.*

## f) Profitability of operations

The question of profitability of operations is closely related to the correct level of turnover, and therefore just as blurred. All management accounts display a modest but positive operating profit, varying between 12.5% and 15% of turnover – down to 6.7% of turnover in June 2000. However, the “official” financial statements for the first year are closed with an operating loss. Such loss is essentially caused by the lack of turnover, while most other costs are unchanged.

For comparison purposes, the operating profit of Mr. Parker’s business in 1994-1995 was in the region of 21 to 24% of turnover. The difference came mainly from the cost of sales, which was at least 10% lower than in the Cape Town franchise. The reasons for this may be that the Cape Town franchisee had to source its wood through an intermediary (either the franchisor himself, or a local Cape Town agent of the national supplier), or that it did not have the same bargaining power as Mr. Parker.

Table 31.5 – Operating profit: Comparison of income statements, 1997-2000

	start-up to Jan-97 (11 months)	* “official” start-up to Feb-97 (12 months)	Mar 97 to Jan-98 (11 months)	Mar 99 to Dec-99 (10 months)	Jul 99 to Jun-00 (12 months)
<b>Turnover</b>					
Turnover	1 463 089	993 359	2 162 236	2 051 605	2 614 059
<b>Variable costs</b>					
cost of sales (materials)	793 291	519 082	1 016 002	1 054 809	1 593 897
in % of TO	54,2%	52,3%	47,0%	51,4%	61,0%
labour	202 061	169 725	450 080	277 557	381 018
Other variable costs	15 369	23 031	13 021	34 208	37 335
<b>Total variable costs</b>	<b>1 010 721</b>	<b>711 838</b>	<b>1 479 103</b>	<b>1 366 574</b>	<b>1 438 514</b>
<b>in % of TO</b>	<b>69,1%</b>	<b>71,7%</b>	<b>68,4%</b>	<b>66,6%</b>	<b>55,0%</b>
<b>Fixed costs</b>					
Fixed operating costs (rent, advertising, royalties, repairs, equip. hire)	269 398	302 041	369 204	373 320	427 123
<b>Operating profit</b>	<b>182 970</b>	<b>-20 520</b>	<b>313 929</b>	<b>311 711</b>	<b>174 686</b>
<b>in % of TO</b>	<b>12,5%</b>	<b>-2,1%</b>	<b>14,5%</b>	<b>15,2%</b>	<b>6,7%</b>

### g) Administration, finance and additional costs

If the operating profit recorded in the management accounts is real, it is more modest than the franchisor's profit but – according to the accounts – sufficient to cover the administrative and financial costs and pay the owner a reasonable member's salary. Except for the last year (closed on 30 June 2000), the management accounts were closed with a modest but positive profit.

However, again, caution is required because it appears that at least financial costs and depreciations have been incorrectly accounted for. Finance charges owed to the main bank for the provision of the term loan and equipment finance have been entirely omitted in several accounts, and seem surprisingly low in other years. As to depreciations, they have not been recorded at all in the management accounts.

The accounts were therefore recalculated with a new estimation of these two cost items. As Table 31.6 shows, after correction of finance charges and depreciation, the business is hardly profitable. As long as it pays (virtually) no salary to its member, it ends with a slightly positive bottom-line (provided that the operating profit from the management accounts is real); but when the owner started paying himself a more substantial remuneration, the business effectively made losses (although the accounts still show profits until June 2000).

*Table 31.6 – Final profit calculation – correcting for finance charges and depreciation*

	start-up to Jan-97	start-up to Feb-97	Mar 97 to Jan-98	Feb 98 to Feb 99	Mar 99 to Dec-99	Jul 99 to Jun-00
<b>Operating profit</b>	<b>182,970</b>	<b>-20,520</b>	<b>313,929</b>		<b>311,711</b>	<b>174,686</b>
Administrative costs (telephone, insurance, bank charges, accounting fees, etc)	98,155	77,655	117,508	data missing	106,439	169,692
Financial costs	8,218	50,146	38,208		19,217	39,743
<b>Corrected financial costs</b>	<b>45,688</b>	<b>50,146</b>	<b>51,293</b>		<b>63,974</b>	<b>80,619</b>
Depreciation	0	39,589	0		0	0
<b>Corrected depreciation</b>	<b>36,290</b>	<b>39,589</b>	<b>36,290</b>		<b>46,750</b>	<b>62,333</b>
Member's salary			20,000		120,000	64,000
<b>Profit or loss</b>	<b>76,597</b>	<b>-187,910</b>	<b>138,213</b>		<b>66,056</b>	<b>-98,749</b>
<b>Corrected Profit or loss</b>	<b>2,837</b>	<b>-187,910</b>	<b>88,838</b>		<b>-25,451</b>	<b>-201,958</b>



An additional note is due on the year 1998-1999, for which no data were available. A comparison of the “accumulated profits or losses” which appear in the balance sheets dated January 1998 and December 1999 suggest that, if the slight profit for January 1998 was real, the following financial year has been closed with a considerable loss.

*Table 31.7 – Profit calculation for Feb 1998 to Feb 1999 – from accumulated losses*

	start-up to Feb-97	Mar 97 to Jan-98	Feb 98 to Feb 99 (calculated)	Mar 99 to Dec-99	Jul 99 to Jun-00
Profit for the year (as per IS)	-186,823	136,228	-702 691	66,135	-98,655
Accumulated profits or losses at end of period (as in BS)	-186 823	221 671	-480 920	-414 785	-433 672

*Source: Income statements and balance sheets for the dates indicated; the Feb 98 to Feb 99 column is calculated by difference.*

If the profit figures are correct, the loss for the 13 months missing would have been over R 700 000, a remarkably poor performance for a company with an annual turnover of R2,5 million. This considerable loss may have come, in part, from the member paying himself a grossly inappropriate salary (see next section).

An alternative explanation is that the figures from the income statement up to January 1998 are grossly misrepresented, and accordingly that the analyses on operating and other costs are distorted.

## **h) Member’s remuneration**

The management accounts suggest that the business has not paid its member a salary for the first 22 months. This is not unusual in SMEs.

It is more surprising that the first monthly salary taken by Mr. van der Merwe, in January 1998, was R20 000, a fairly high amount for a young business in the growth phase (corresponding to almost 10% of sales).

The cash flow forecast for April to September 1998 suggests that the director’s intention was to draw this amount every month out of the business. Unfortunately, the data available do not cover the year 1998 (i.e. March 1998 to February 1999), so it is not possible to verify whether Mr. van der Merwe did actually draw R 240 000 out of his business in that year – but the considerable loss which the business seems to have incurred during that year (see Table 31.7 above) may point at a considerable drawing during that year.

A triangulation of the various income statements available for different

overlapping periods in 1999 and 2000 suggests that from March 1999 onwards, the monthly salary has been progressively reduced, to R15 000 per month between March and June 1999, R10 000 per month from July to December 1999, then on average R1000 per month between January and June 2000 (with an anomaly in January 2000 where the monthly income statement indicates a salary of R45 000), and eventually R 2 846 in July 2000.

To find out whether these salaries have been paid out in cash, a look at the member's loan is necessary. However, the balance sheet figures in this respect must be taken with caution – as they do not seem to be very transparent<sup>13</sup>.

From R 146 720 at the end of the first financial year, the member's loan went down to a negative amount in January 1998, suggesting that, although the business has not granted his member a salary, the owner has actually borrowed significant amounts of cash from his business. Unfortunately there is no data as to what happened in the following 1,5 years, but it is possible that, although Mr. van der Merwe officially "earned" a salary, he kept it in the business, for his member's loan has increased significantly to over R500 000 at the end of July 1999. This amount has remained relatively stable until December 1999.

January 2000 shows surprising figures in every respect. The monthly salary as indicated in the monthly income statement reached a high of R45 000, while the member's loan was suddenly reduced by more than R300 000, to just under R250 000. At the same time, the carrying value of fixed assets suddenly dropped from over R270 000 in December 1999 to R 25 336 in January 2000. If these figures are true, they indicate a considerable withdrawal of cash out of the business in this particular month. Unfortunately, there were no data for the following months – but in April 2000 the member's loan was back to the level of the previous year.

It is probable that there have been a series of mistakes in the January 2000 statements. In the balance sheet, the suspicion is that a zero was forgotten in the carrying value of fixed assets and that the member's loan, calculated by difference, was accordingly reduced – although other balance sheet items, such as long-term borrowings and accumulated deficits, are equally strange. In the income statement, on the other hand, a zero may have been accidentally added to the member's salaries; indeed, the total member's salaries as indicated in the July 1999 to June 2000 income statement were lower than the sum of the salaries for July to January.

Table 31.8 illustrates the evolution of member's loans in relation to the evolution of salaries.

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<sup>13</sup> In SMEs, the member's loan is usually very difficult to determine "positively", due to lack of records of the transactions occurring between an SME and its member(s). Therefore, it probably happens regularly that the member's loan is simply calculated by difference, as the amount balancing the assets, equity and liabilities. This means that any errors occurring in the accounting (whether in the valuation of assets and liabilities or in the determination of the income or loss for the year) will impact on the member's loan.

*Table 31.8 – Member's salaries and member's loan, 1996-2000*

	<b>Member's salary for the period (cumul)</b>	<b>Member's salary per month</b>	<b>Member's loan at end of period</b>
Start-up to Jan 1997	0	0	R 67 820
Feb-97	0	0	R 146,720
Mar 97 to Dec 97	0	0	n/a
Jan-98	R 20 000	R 20 000	R -44,866
Feb 98 to Feb 99 (assumed)	R 260 000	R 20 000	n/a
Mar99 to Jun99 (calculated by difference)	R 60 000	R 15 000	n/a
Jul 99	R 10 000	R 10 000	R 531 662
Aug 99 to Dec 99	R 50 000	R 10 000	R 551 170
Jan 2000	R 45 000	R 45 000	R 248 887
Feb to Jun 00 (calculated by difference)	R -41 000	R -8 200	R 549 890
Jul-00	R 2 846	R 2 846	R 544 478

The evolution of the member's loan will not be further discussed here as it is highly likely that the figures are not reliable.

Meanwhile, the evolution of the salary figures is symptomatic. While it is frequent that entrepreneurs refrain from taking a salary for their work in the first year or two, one usually finds three types of possible behaviour beyond this period. Some business owners still don't take a salary, although it can generally be expected that they do not run their business entirely graciously – they rather satisfy themselves with non-monetary benefits such as the private use of business vehicles and other assets; earning a rent on their home premises, etc. This behaviour of not taking a salary tends to pose a problem of discipline, since the separation between business and owner is blurred. On the other hand, many entrepreneurs pay themselves a salary, but keep it modest, partly for tax reasons, and partly because they are mainly interested in keeping the capital in their enterprises in order to ensure their long-term viability. Finally, a third category of entrepreneurs use their venture to earn disproportionate salaries, thereby depriving the businesses from the opportunity to build up its capital base. This behaviour can generally be interpreted as a lack of long-term commitment to the business. Mr. van der Merwe, it seems, fell into this third category in 1998 and early 1999, and was only compelled to revise his salary ambitions by the firm's cash difficulties at the beginning of 1999 and later again in 2000.

## **5. Financial management**

Again, there were no interview or qualitative data to judge of the various aspects of financial management; the only sources of clues are the accounts provided to the bank. They are usually of poor quality. The section will therefore start with the specific accounting issue before turning to other aspects of financial management.

### **a) Accounting and quality of financial statements**

The quality of financial statements understandably depends on the type of registration, with requirements being lower in Close Corporations, where there is no need for an audit of accounts.

A disturbing element however is that there is no conclusive evidence as to whether the business was registered as a CC or as a company. Most likely, it has registered as a CC but has labelled itself “Pty Ltd” for prestige reasons – unless it has registered as a company but refused to subject his company to a full audit of the financials.

To assess the quality of accounting and financial statements, a distinction must be made between the management accounts which have been regularly provided to the bank, and the official financial statements drawn up by the Accounting Officer, which have been provided only for the first year of operation, until February 1997. The latter are better in all respects, i.e. quantity of information enclosed, quality of presentation and formal correctness, as well as credibility of most figures – while the management accounts, apart from being less legible and containing less detailed information, reflect to some extent inappropriate accounting practices, such as the omission of depreciations and incorrect capture of financial charges.

The most flagrant indicator of reliability problems in the financial statements is the discrepancy between the management accounts for the period up to January 1997, and the official financial statements dated 28 February 1997. The differences in the income statement, especially the issue of turnover, have already been discussed. There are also significant deviations in almost all items of the balance sheets.

*Table 31.9 – Discrepancies between management accounts and official statements, 1997*

in Rand	February 1997 ("official" statements)	January 1997 (management accounts)
Turnover	993 359	1 463 089
Profit before tax	- 186 823	76 056 <sup>14</sup>
Member's interest	- 40 103	143 876
of which Member's loan	146 720	67 820
Long-term liabilities towards the bank	380 654	226 808
"Deferred finance charges" (in current assets)	122 629	
Trade Debtors	0	89 807
Creditors and Deposits received	142 868	77 807
Cash balance	35 142	21 518

A first area of divergence between the two balance sheets is the obvious change in equity resulting from the loss as opposed to a profit. One may also understand the increase in member's loan as a result of the loss and the member's need to maintain a certain level of capital in the business – although the difference amount of R78 900 cannot be directly understood or related to another figure in the accounts<sup>15</sup>.

Another significant area of divergence is the amount of long-term debt. According to notes made from the bank file, the (main) bank's commitment toward Mr. van der Merwe's business initially was approximately R288 000, comprised of about R228 000 for instalment sale (ISA) over 48 months (covering the purchase of equipment and initial stock), as well as a term loan for R60 000.

Assuming that the term loan was to be repaid in equal monthly instalments over 5 years, 20% of it and 25% of the ISA should have been repaid by the end of the first year, bringing the theoretic debt level for February 1997 to R219 000, and approximately R6 000 more in January 1997. The liability amount found in the January 1997 management accounts therefore seems to be correct.

The higher amount in the February 1997 statements seems to be related to the

<sup>14</sup> The Retained Income calculation suggests that the profit after tax for the whole year 1997 was R85 443.

<sup>15</sup> There may be an approximate coincidence between the total member's interest in the January accounts (R144 000) and the member's loan in the February accounts 1997 (R146 000).

treatment of finance charges. Table 31.10 shows the approximate correspondence between the amounts.

*Table 31.10 – Accounting for finance charges and the long-term debt*

in Rand	January 1997 (management accounts)	February 1997 ("official" statements)
Long-term debt towards the bank ("gross amount")		380 654
Minus		
"Deferred finance charges" (in current assets)	0	122 629
Finance charges (in income statement)	0	40 876
<b>Long-term debt towards the bank ("net amount")</b>	<b>226 808</b>	<b>217 149</b>

It seems that the accounting officer has capitalised finance charges related to the four years until the expiry of the Instalment sale contract (overall, R163 500). He thus created a current asset, which was balanced by an equal augmentation of the instalment sale liability. At the end of the first year, the asset was reduced by the amount of the current year's finance charges (R40 876, as recorded in the income statement), leaving a current asset of R122 629<sup>16</sup>, which is the figure appearing under the label "Deferred finance charges" in the current assets in February 1997.

Although incorrect according to GAAP, such capitalisation of future finance charges seems to be a relatively frequent practice among small businesses using Instalment Sale, and requires a gradual amortisation over the following years. However, the management accounts for the following years (1999-2000), have kept the item unchanged, simply "shifting it around" (in 1999 it appeared as a negative current liability, in 2000 as a negative long-term borrowing). Incidentally, the presence of this capitalised expense may be related to the omission of finance charges in the following income statements – although the cost should have been reflected if not directly, then by means of an amortisation of the capitalised item.

A further area of contradiction is the current assets and liabilities. The ambiguity on trade receivables, with the 1997 financial statements indicating that "the Close Corporation undertakes work on a Cash on Delivery Basis" while other correspondence of the business suggested that approximately half of the sales are on credit, has already been discussed.

<sup>16</sup> Considering that the Instalment Sale Agreement expires in three years and relating that finance charge to the initial amount of the facility, the amount of R 122 629 would correspond to an interest rate of 17.9% p.a., not unlikely for 1997 which was a period of high interest rates.

On the other hand, the “creditors and deposits received” in February 1997 are almost double the amount indicated in the previous month’s accounts. Again, it is not clear how to interpret this contradiction.

### Accounting transparency score

Quantitative score	10.5	/ 20	
Formal Quality Score	-0.5	/ 25	
Transparency Score	-3.5	/ 55	
Suspicion of manipulation	#		(strong suspicion)
Total score	6.5#	/ 100	

#### Main issues:

Accounts are irregular, there is no yearly rhythm, gaps and overlappings. The formal quality is bad (no comparative column, many negative liabilities).

Many figures are contradictory or not credible:

- there is a major ambiguity on the turnover; hence it is difficult to believe in the profit figures from the management accounts;
- no depreciations, no tax, giving the appearance of a reasonable profit
- inappropriate treatment of finance charges
- the financing structure is not clear; apparent falsification of members' loans and retained income to hide negative equity.

Altogether the accounts create a considerable confusion and do not allow a good insight into the real performance and financial situation.

### b) Quality of communication with the bank

Beyond the analysis of the accounting figures themselves, the financials delivered to the bank, as well as the dates at which the accounts were made available, provide some clues on Mr. van der Merwe’s strategy in communicating with his main creditor.

If the file is complete, there has been no financial information exchanged between the business and the bank during the course of 1996-1997. During the first two years of operation, hence, the bank apparently had no means to know how the business was performing, other than oral statements and the monitoring of the bank account balances.

## April 1998: First management accounts

The first financial correspondence between bank and business appears to have taken place more than two years after the initial facilities had been granted, namely at the end of April 1998, when Mr. van der Merwe approached the bank to negotiate an overdraft facility. In fact, it is probable that the provision of financial statements was motivated by the overdraft application.

The accounts provided were 'interim' and not formal annual statements – but the bank accepted them, supposedly as a means to deal with the application for overdraft rapidly. The accounts refer to the periods from start-up to January 1997 and from March 1997 to January 1998. Since the business closes its financial year at the end of February, it is surprising that CS1 chose to report on the period up to January 1997, leaving a gap for the month of February 1997. While this may be for comparison purposes (since it may be argued that the February 1998 figures were not yet available in April), the argument is not very convincing since the start of the first period probably differed from the start of the second period anyway (the exact month of start-up is not available).

As discussed in sections 4 and 5, the accounts provided to the bank at that stage, as well as the cash flow forecasts, were optimistic. Table 31.11 summarises the figures which are likely to have received the most attention from the bank:

Table 31.11 – Main figures communicated to the bank in April 1998

	start-up to January 1997	March 1997 to January 1998	Forecast Apr-Sep 1998 (6 months)
Turnover	1 463 089	2 162 236	1 345 771
turnover growth in % p.a.		48%	14%
Gross Profit	669 798	1 146 234	672 562
Gross margin in % of turnover		53%	50%
Profit before tax	76 056 <sup>17</sup>	136 228	175 422
Cash balance @ end of period	21 518	697	
of which current bank account	8 865	-8 523	+48 610
of which savings and petty cash	12 643	9 220	n/a

It is probable that these figures reassured the bank on the following issues:

- Turnover growth was substantial and brought the business reasonably close to the target of R 3 million p.a.;
- Gross margin was similar to the franchisor's margin (over 50% in 1998);

<sup>17</sup> The Retained Income calculation suggests that the profit after tax for the whole year 1997 was R85,443.



- The business was profitable already in the year of inception, and profits were increasing (even after accounting for the owner's monthly drawings of R20 000);
- The negative bank balance was compensated by sufficient petty cash. In addition, the current account would come back to a positive balance within a few months while loan repayments would take place in due time.

The bank then judged the overdraft request positively – although the limit granted was relatively low, at R25 000 or 1,15% of the turnover reported. This relatively low limit may betray some suspicion on the part of the bank, and the will to avoid an escalation of commitments.

### **17 December 1998: First “official” financial statements**

The first official annual financial statements, dated February 1997, were – as noted – significantly less favourable for the business than the management accounts. Interestingly, those annual statements were only provided to the bank 8 months after the provision of the first (‘interim’) accounts, on 17 December 1998.

The date of 17 December is unlikely to be the result of chance. Indeed, the data show that the accounts had been finalized and signed by the Accounting Officer in September 1998. It seems therefore that Mr. van der Merwe deliberately waited another three months, until the beginning of the summer holiday period, to deliver them to his creditor.

It is also worth noting that the business chose to report only about the first year of operation (Feb 1997), although one may expect that by September 1998 the second year of operation, (closed February 1998) could have been included in the statements.

One can easily imagine how the accounts have been treated within the bank. They have arrived at a date when most bank employees were either having their summer break, or hastily finishing year-end business. A quick look at the date of the report would suggest to a bank officer that the statements contained no new information compared with previously delivered accounts. It is hence quite possible that the statements were filed without being reviewed.

Indeed, even a superficial review would have sufficed to send alert signals within the organisation, since there was a gross contradiction between these final figures and the previous reports – suggesting a possibility of misreporting which may have caused the bank to step out of its loan agreements immediately. However, our data show no sign that the bank undertook particular measures until the middle of 1999.

### **Absence of reporting on the year March 1998 to February 1999**

From December 1998 to July 1999, no further financial communication took place between the parties, with the result that the bank holds no single accounting record of the financial year closed 28 February 1999.

It probably is no coincidence that that particular year saw several unusual occurrences. Firstly, it seems that during that year the owner has drawn the highest amounts of capital out of the business, supposedly granting himself a member's salary as high as R240 000 for the year (i.e. R20 000 per month).

Secondly, the financial year seems to have been closed with a considerable loss, which (if all other figures are true) has been estimated at over R700 000 (see Table 31.7 above). Thirdly, this was the period during which the business realised a new substantial investment, contracting an instalment sale agreement with one of the bank's competitors for the acquisition of a new vehicle.

Fourthly, possibly related to these various occurrences is the fact that, at the beginning of the following financial year, the cash levels had plummeted down to extremely low levels: the average level of overdraft during the four months from March to June 1999 was estimated at -R80 000. It is likely that this considerable overdraft figure had its roots in the previous financial year, for which we have no data.

### **July 1999 to June 2000: Close monitoring**

It is probable that by July 1999 the bank has been alerted by persistent breaches of overdraft limits and delays in loan repayments, and has insisted on more regular reporting. Mr. van der Merwe complied by supplying balance sheets virtually every month, as well as several income statements covering varying periods of time. However, it is striking that, from all the reports that have been provided during those 12 months, none was related to the actual financial year-end (February 2000); especially, the income statements covered periods varying between 1, 9, and 12 months, making comparisons and monitoring almost impossible.

It is also perturbing that the only missing balance sheets (February and March 2000) are those following the considerable drop in member's loan recorded between December 1999 and January 2000 (from over R550 000 to under R250 000), and the unusually high salary amount granted to the member for the sole month of January 2000 (R45 000).

Supposedly, during these months, Mr. van der Merwe was filtering financial information, forwarding to the bank only the favourable reports. To some extent the bank may have been comforted by the improvement of liquidity in October and November 1999, as well as the profit recorded in the income statement for the 10 months ended 31/12/1999 – and have overseen the perturbing evolutions of January 2000.

## Concluding words

This review suggests that Mr. van der Merwe has skilfully filtered and timed the information sent to the bank as a means to keep his creditor's favour for as long as possible. It also suggests that the bank has failed not only to enforce a regular reporting schedule, but also to pay sufficient attention to the official financial statements.

## c) Financing scheme and ongoing access to finance

As a result of the accounting confusion, there is no clear picture of how the business was financed throughout its lifespan.

### Initial financing scheme

Table 31.12 summarises the various “versions” of long-term finance available to the business:

*Table 31.12 – Initial financing scheme: comparison of sources*

	Notes from the bank file, 1996	January 1997 management accounts	February 1997 financial statements
Bank debt	- term loan R60K - Instalment Sale 228K Total: R288 K	long-term liabilities R226.8K	Long term loans (“gross”) R380,6K “Deferred finance charges” R122.6K
Owner's contribution	supposedly R 90 K (by difference)	no paid-in capital retained income R 76K member's loan of R 68K  Total R 144K	paid-in capital R100 Accumulated loss -R186,8K member's loan R 146,7K Total -R40K
Total assets	supposedly R 378 K (as in franchise scheme, with lowest franchise fee)		

A first remark is that the bank's instalment sale exceeds the value of tangible fixed assets acquired by the business. This is rather unusual, since financial institutions normally insist that equipment finance can only cover a portion of the total asset value, the balance being the entrepreneur's own risk participation.

A possible explanation is that the Instalment Sale refers not only to the equipment itself, but also to the franchise fee (intangible asset), in which case the



Date	May-98	Jul-99	Nov-99	Jun-00
Agreed repayment schedule	138 500	52 250	29 250	8 000
Actual debt amount {('gross")		232 394	191 767	124 776
{('net")	191 000	191 006	150 379	83 388
<b>Repayment Shortfall</b>	<b>52 500</b>	<b>138 756</b>	<b>121 129</b>	<b>75 388</b>

Sources: Balance sheets for the dates mentioned, except for 1996 and May 1998 where the data were sourced from bank internal notes.

### Additional credit lines and security

In spite of a delay in repaying the long-term loans, the bank in 1998 agreed to additional credit lines for Mr. van der Merwe's business, especially an overdraft facility as well as a bank guarantee. The bank's total commitment hence was as follows:

Table 31.14 – Bank's total commitments towards the business, 1996-1999 (in Rand)

	March 1996	May 1998	? 1999
Overdraft facility	0	25 000	25 000
Long-term loan	60 000	35 000	46 000
Installment Sale	228 000	156 000	107 000
Guarantee	0	15 000	15 000
Total	288 000	231 000	193 000
Secured by assets		188 000 (81%)	171 000 (88.6%)

Source: notes from the bank file, from May 1998 and 1999 (month unknown)

Interestingly, this internal note from the bank mentions securities held by the bank for an amount of R188 000. It is not exactly clear what this amount refers to. In theory, the Instalment sale agreement gave the bank a right on the equipment acquired by the business in 1996 (and financed by the bank), for a total value at the time of R198 000. In subsequent years, the business has omitted to depreciate these assets, which therefore still appear at their gross value in the subsequent balance sheets. It is possible that the author of the internal note has intuitively slightly depreciated the gross value of assets – the intuitive depreciation being far lower than what current accounting practice would have required.

In any case, the bank's acceptance of a 81% security coverage is also rather unusual. In most other SME files from the same bank, the tangible securities granted exceeded the value of the bank's commitments, and were complemented by unlimited personal suretyships from the members. This was not found in this particular case. It may also be that the reluctance of the owner to provide a personal suretyship has caused the bank to keep the overdraft limit to a relatively

low amount (R25 000 represents only about 1% of the turnover reported for the year closed in January 1998).

Another remark is that the total commitment as displayed in Table 31.14 is based on the limits of facilities granted – and do not take into account breaches of limit in particular with regard to the overdraft. The balance sheets show that the month-end utilisation of overdraft during the last 6 months of 1999 was generally over R30 000, adding R5 000 to the bank's total exposure in case of a default.

### **Additional vehicle finance**

In 1999, the business acquired a new vehicle (Hyundai) for an amount of R131 000, of which approximately three quarters were financed through a new long-term financing facility (the balance of the new instalment sale facility is R97 000 in July 1999). Further details about this investment are not available.

It is interesting that the vehicle finance has been granted by a different bank than the one which had provided the main facilities initially. Mr. van der Merwe may have requested the finance from its main bank in the first place, which may have refused to carry the additional exposure – although no record was found in the bank file of such application and rejection. It seems more probable, therefore, that it has been the entrepreneur's strategy to approach a different lender, possibly for fear of a rejection, or to spread its debt among several creditors in order to limit its dependence on the goodwill of one institution.

### **Debt levels and securities at liquidation**

From the excerpts of the liquidator's report available to us, it seems that CS1's debt at the time of liquidation (towards the end of 2000) was just over R450 000. This is lower than the debt on the latest available balance sheet (July 2000), which indicated at least R150 000 of long-term debt and over R400 000 of current liabilities.

On the other hand, the assets are also considerably lower than suggested by the balance sheet. This is partly explained by the fact that the accumulated depreciation in the July 2000 balance sheet is far too low (it should be in the region of R212 000 instead of the R83 582 recorded). Another surprising element is that, while the institution that financed the latest vehicle acquisition is listed under "Secured Creditors", the main bank is not.

*Table 31.15 – Main tangible assets and external liabilities in July 2000 and at date of liquidation*

Assets	value in thousand Rand		Liabilities	value in thousand Rand	
	Jul 00	Liquidation		Jul 00	Liquidation
Fixed assets	274,0	27,5	Long term debt – main bank (net) <sup>19</sup>	77,6	
(corrected for insufficient depreciation)	145,0		ISA for Hyundai	76,1	33,0
Stock	39,5	85,2	Short-term bank debt <sup>20</sup>	33,3	400,0
Debtors	133,7		Trade creditors	295,6	
			Public creditors (SARS, UIF, etc)	77,3	18,5

*Source: Balance sheet July 2000 and Liquidator's report*

A possible explanation for these findings is that an amicable agreement has been concluded between the main bank and the business prior to liquidation, whereby the bank has repossessed the securities that it was holding (essentially, the initial equipment and vehicle) and written off its long-term debt. If this is the case, the bank's exposure at the time of liquidation would have been limited to short-term balances, which may have been in the region of 25 to 50 thousand Rand. However, there is no evidence to confirm this speculation.

If no settlement has taken place prior to liquidation, the bank's commitment to the business at the time of liquidation is more likely to have been in the region of 150 to 200 thousand Rand. If this is the case, and if indeed for some reason the bank could not validate its securities in the liquidation process, then this high liability was subsumed under "Concurrent Creditors" and only 'served' after the secured debt and the arrears of the "Preferent Creditors" (SARS, UIF and the Industrial Council for the Furniture Industry). If so, the outcome for the bank may have been approximately as shown in Table 31.16.

#### **d) Management of working capital and cash**

Although the business has been reasonably successful in obtaining long-term finance for start-up and expansion, there are indications of shortcomings in its short-term financial management.

<sup>19</sup> "net" debt amount calculated as the difference between "long-term liability" and "instalment sale creditors", with no consideration of deferred finance charges.

<sup>20</sup> calculated as the sum of the current bank account balance and the credit card balance (both negative), minus the positive balance of the savings account

*Table 31.16 – Estimated outcome of liquidation for various creditors (assuming no previous settlement by the main bank)*

Status of creditors	Details	Amount owed to creditors
Secured Creditors	Bankfin	R 33 000
	Motor vehicle	R 27 500
Preferent Creditors	arrears from SARS, UIF and Industrial Council for the Furniture Industry	R 18 500
	Presumably served in priority from the proceeds of the sale of movable assets	R 85 180
Concurrent creditors	Cumulative Amount of debt (of which the bank supposedly represents app. R 175 000)	R 400 000
	Available proceeds from movable assets	R 85 180 - 18 500 = R 66 680
	Recovery rate	16,7%

*Source: elaborated after the data contained in the Liquidation's report, 2001*

## Cash flow forecasting

An important aspect of cash flow management is to be able to anticipate possible tensions on the liquidity. The data available from the bank file did not allow to conclude whether the business had maintained regular forecasts of sales, costs or cash flows. The only evidence of a forecasting comes from the year 1998, when Mr. van der Merwe sent the bank a cash flow forecast for the next 6 months. It is more likely that this forecast was especially prepared for the purpose of the application for a bank overdraft than a regular planning exercise.

In any case, a rough analysis of the 1998 forecasts indicates several weaknesses:

- The turnover growth previsions are rather optimistic, since the increase in sales between April and September 1998 corresponds to a growth rate of 51% p.a., even higher than the rate observed in the first year, between January 1997 and 1998.
- The cost previsions seem to be based on an operating margin of 13% of turnover, similar to the one experienced in the 2 previous years; however it does not take into account administrative fixed costs (bank charges, accounting fees, telephone, etc), which in previous years have amounted to further 6,7% of turnover.
- Most of all, the cash flow forecast is built on a conceptual error since the cash flow was built as the difference between total sales and costs, taking no consideration of the delay in customers' settlements of their invoices.

Table 31.17 illustrates this by selected months and items of the cash flow forecast:



*Table 31.17 – Analysis of 1998 Cash Flow forecast*

	<b>Forecast April 1998</b>	<b>Forecast June 1998</b>	<b>Forecast Sept 1998</b>
Sales	201,000	225,307	247,221
of which cash sales	101,242	120,307	139,567
<i>in % of turnover</i>	<i>50%</i>	<i>53%</i>	<i>56%</i>
Purchases = Payments to suppliers	123,369	112,653	123,610
<i>in % of turnover</i>	<i>61%</i>	<i>50%</i>	<i>50%</i>
Variable expenses	3,919	3,919	5,729
<i>in % of turnover</i>	<i>1.9%</i>	<i>1.7%</i>	<i>2.3%</i>
Fixed costs (prior to finance costs and owner's salary)	78,282	78,282	78,282
<i>Operating margin in % of turnover</i>	<i>-2%</i>	<i>14%</i>	<i>16%</i>
Loan repayments and owner drawings	29,448	29,448	29,448
<b>Cash flow</b>	<b>-34,018</b>	<b>1,005</b>	<b>10,152</b>

*Source: Cash flow forecast provided to the bank, April 1998*

Unfortunately we have no balance sheet data for the period between April 1998 and July 1999 so it is not possible to compare actual achievements with the initial forecasts.

### **Supplier credit**

The 1998 cash flow forecast is built on the assumption that all purchases necessary for the business will be made on trade accounts – there shall be no cash purchases. However, except for the first month, the payments to suppliers are always strictly equal to the purchases made in the month, suggesting that either the author of the cash flow forecast has not correctly reflected the supplier credit planned, or the credit period extended only to the end of the running month. This seems correct for January 1998, when the trade payables represented app. 11 days of turnover.

But, as Table 31.18 shows, in almost all other months the trade payables have been closer to 30 days of turnover (with the highest values being 34 days in November 1999 and 41 to 43 days in June-July 2000). These calculations are subject to the reliability of Mr. van der Merwe's management accounts.

If one assumes that a portion of purchases actually had to be paid in cash, it would mean that when suppliers offered credit, Mr. van der Merwe has probably used it up to the usual limit of 30 days, in order to provide additional liquidity. Up to the latest months, he seems to have been able to settle the invoices as they were due (at the expense of the overdraft); only in June 2000 did he become a bad payer, holding cash back due to uncertainties in his own business.

*Table 31.18 – Evolution of trade payables in relation to turnover, 1997-2000*

	Jan-97	Feb-97	Jan-98	Jul-99	Aug-99	Sep-99	Oct-99
Trade creditors	63 597	54 062	73 775	194 983	162 731	201 144	132 095
in days of turnover	14,3	19,6	11,3	25,7	21,4	26,5	17,4

	Nov-99	Dec-99	Jan-00	Apr-00	May-00	Jun-00	Jul-00
Trade creditors	258 009	199 639	25 980	209 542	186 175	310 061	295 610
in days of turnover	34,0	26,3	3,6	28,9	25,6	42,7	40,7

Source: corresponding balance sheets and income statements

Looking at a month-to-month evolution, it appears that the extent of use of supplier credit has been related to the rhythm of payment of customers. For example, in November 1999, customers were paying more slowly (trade receivables amount to 25 days of turnover), which caused the business to stretch the settlement of its invoices to 34 days. Subsequently, in January 2000, customers paid more promptly (7 days of turnover), and supplier credit was strongly reduced.

### Stock management

Except for the month of January 1998, which is an unexplained exception in the history of the business, all balance sheets available indicate a stock value of R30 000 to R 45 000. In July 2000 the business has supposedly undertaken a detailed valuation of its inventory and arrived at a value of just under R39 500, consistent with history.

*Table 31.19 – Stock on hand 1997-2000*

	Feb-97	Jan-98	July 99	Dec-99	Jun-00	Jul-00
Stock on hand	40 550	93 448	45 000	30 000	45 000	39 474
(in % of turnover)	4,1%	4,3%	1,8%	1,5%	1,7%	1,5%

Source: Balance sheets

### Use of bank overdraft and credit card

Instead of relying more and more heavily on trade credit, Mr. van der Merwe has apparently preferred to use initially its cash resources, then the overdraft, as well as the credit card.

According to the initial franchise scheme, the business should have started in 1996 with a working capital of R30 000. It seems that this initial cash has eroded rapidly. The credit card commission indicates that this instrument was, from the start, heavily used to provide additional liquidity.

Shortly after it was granted in May 1998, the overdraft limit of R25 000 was exceeded. As to the credit card, although the balances on the balance sheet

appear as positive until December 1999, the high amounts of credit card commissions reflected in the income statements suggest that that account was also frequently in deficit. Table 31.20 illustrates this.

*Table 31.20 – Use of current account and credit card, 1996-2000*

	1996	Feb 97	Jan 98	Dec 99	Jun 2000
End-of-month Balances					
Current Bank Account	30K ?	35K <sup>21</sup>	-8.5K	-35K	-60K
Credit Card		n/a	n/a	18.6K	-6.5K
Finance charges				(10 months)	
Interest paid		97	31	6123	2340
Credit card commission		9173	13792	13093	18603

The difference between the high interest charges in the period March-December 1999 and the more modest costs in the period July 1999-June 2000 suggests that the largest part of the interest charges have been incurred during the first half of 1999 (March to June). Unfortunately, no balance sheet data were available for that period, but cross-calculations including the January 2000 data led to an estimation of the interest charge in the 4 months from March to June 1999, of R5 328. Even assuming a high interest rate of 20% p.a. to reflect penalties for breach of overdraft, this high interest charge would mean that the average bank balance in these 4 months was approximately - R80 000: far beyond the overdraft limit of R25 000. This has probably caused the bank to start a closer monitoring of its client as from July 1999.

One can only speculate about the reasons that have caused this apparently dramatic drop in cash. Early 1999 is the time when the business acquired a new vehicle for a value of R131 000, of which only app. 75% was financed by the Instalment sale Agreement. This means that the business had to finance approximately R33 000 in cash. It appears that the cash portion of this investment has actually been paid on the overdraft.

In addition, we have speculated that between March 1998 and February 1999 Mr. van der Merwe has drawn a fixed salary of R20 000 per month out of the business (as foreseen in the cash flow forecast), later reduced to R15 000 per month until June 1999. As discussed, it is not entirely clear whether these salaries have been retained as member's loan, or paid out in cash – in which case the tension on the overdraft would be exacerbated.

Luckily, the cash situation improved remarkably in the following months of 1999, as shown in Table 31.21. The interest charges were accordingly strongly reduced. Supposedly, this improvement, as well as the positive credit card

<sup>21</sup> The statements only give one figure for "bank and cash", possibly significantly higher than the balance on the current account.

balances at month-end, caused the bank to tolerate the continued breach of overdraft limit until September 1999. In October and November, the liquidity even temporarily came back to positive levels, and this may have raised hopes of recovery.

Unfortunately, the data available gave no clues on how to explain this recovery, except that the owner's drawings have been reduced: between July 1999 and December 1999, the member's salaries have amounted to R60 000, i.e. only R10 000 per month.

*Table 31.21 – Monthly evolution of bank balances, 1999-2000*

	<b>Mar-Jun 99 (estimated average)</b>	<b>Jul 99</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov 99</b>
Current Bank Account	app. -80K	-43K	-30K	-33K	-4K	+92K
Credit Card		16K	16K	16K	18K	18K

	<b>Dec 99</b>	<b>Jan 2000</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul 2000</b>
Current Bank Account	-35K	-40K	-45K	-61K	-60K	-28K
Credit Card	18.6K	-3K	-6.5K	-4.5K	-6.5K	-7.5K

*Sources: Balance sheets July 1999-July 2000. The estimation for Mar-Jun 99 is based on the interest charges incurred in that period, assuming an effective rate on overdraft balances of 20% p.a.*

As the second part of Table 31.21 shows, the temporary recovery of liquidity in the second half of 1999 did not last until 2000. From December 1999 onwards, the current balance went back to negative values, while even the credit card account, which up to now had been showing positive balances, turned negative. This turn of events is again difficult to explain with the data available, but seems to coincide with the sudden considerable cash withdrawal of January 2000 (salary of R45 000 and reduction of member's loan by more than R300 000) discussed earlier.

In July, the business did reduce its deficit on the current bank account, but this was probably too late to make a difference.

## **Summary and conclusion on cash management**

To summarise this review, it is striking that the considerable fluctuations in the cash balance were not related to working capital considerations, since supplier credit and customers' payments have been balancing each other and have usually been favourable to the business<sup>22</sup>.

<sup>22</sup> In fact, the highest cash balances (Nov 1999) were found at a time when customers were paying more slowly (trade receivables amount to 25 days of turnover), while the subsequent

This means that the fluctuations in cash have been caused by other activities. For one, investment activities have strongly impacted on the overdraft (especially the acquisition of a new vehicle early 1999); on the other hand, Mr. van der Merwe's own salary (to the extent that the salary was actually paid out in cash, which could not be conclusively verified) was heavy for the firm. Generally, the evidence suggests that the owner has tended to draw more cash than the business could generate, restraining himself only late, possibly following admonishing from creditors.

## 6. Financial structure, ratios

### Turnover growth

To the extent that the turnover figures found in the management accounts can be trusted, turnover growth, as presented in section 4 above, has been rather modest.

The high growth figure in the first year (48% p.a. between January 1997 and January 1998) was caused by an understandably low turnover in the year of start-up.

During the two following years (1998-1999), the annual nominal growth rate has been 8% p.a., hardly above the South African core inflation rate during this period<sup>23</sup>.

In the last 6 months (January to June 2000), sales even went down by a nominal rate of -9% p.a., probably as a result of a price decrease decided to reduce stock and provide liquidity.

These figures hint at a first obvious weakness of the business: it has not managed the expected breakthrough on the market – probably because of competition, failure to deliver the promised value for money, general marketing insufficiency and inability of the franchisor to support the brand nationally. This is consistent with the verdict on the liquidator's report, citing "the downturn in the economy and the lack of orders" as main reasons for the firm's failure.

### Cost structure

At first sight, the operating cost structure (as presented in Tables 31.5 and 31.6 above) seems relatively normal for a business of this type, with a gross margin of about 50 to 55%, further variable costs amounting to 15% to 20% of turnover,

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drop in cash happened at a time when customers paid more promptly (7 days of turnover in January 2000).

<sup>23</sup> During the year 1999 the overall CPI fell sharply as a result of falling interest rates, but core inflation (which excludes the cost of mortgages and other goods and services with exceptionally unstable prices) remained high. The South African core inflation rate fluctuated between 8.75% in January 1998 and 6.9% in December 1999.

and fixed costs of about R600 000 per year for the rent, operations and administration. In this case, the royalties paid to the franchisor were considered as fixed costs, since they are not proportional to turnover.

The gross margin however has been significantly less favourable in the last year (July 1999 to June 2000), supposedly because the manager has decided to decrease its prices in order to reduce its stock and provide some liquidity. Although this last year may not be representative of the life of the business, its higher variable cost ratio has been included as a pessimistic scenario in the breakeven analysis.

As discussed previously, though, the fixed costs displayed in the income statements are incomplete since at least depreciations and the finance charges related to the main Instalment sale agreement and long-term loan have been omitted.

Furthermore, a major cost item was the member's salary. This item has fluctuated over the lifetime of the business, and Mr. van der Merwe's ambition to earn R20 000/month was certainly not sustainable. If one therefore works on a target salary of R15 000/month, i.e. R180 000 per year, the fixed costs are augmented by 30%, which has a strong impact on the breakeven calculation.

Table 31.22 therefore shows three versions of the breakeven calculation, "Break-even 1" based on the costs disclosed in the management accounts and prior to the member's salary; "Break-even 2" after correcting for the missing fixed charges, and "Break-even 3" after taking into account a target salary of R180 000 per year.

*Table 31.22 – Cost structure and breakeven calculation*

	low	high	mean
variable costs in % of turnover	67%	77%	
fixed costs 1 (as disclosed in income statements)	598 770	636 558	
fixed costs 2 (after correcting for finance charges and depreciations)	708 578	739 767	
fixed costs 3 (corrected and including member's salary)	888 578	919 767	
breakeven 1 (before correction)	1 793 262	2 764 997	2 279 130
breakeven 2 (to cover corrected costs)	2 122 127	3 213 303	<b>2 667 715</b>
breakeven 3 (to cover member's salary)	2 661 211	3 995 163	<b>3 328 187</b>
latest known turnover	2 614 059	2 614 059	2 614 059
surplus or deficit 1	46%	-5%	15%
surplus or deficit 2	23%	-19%	-2%
deficit 3	-2%	-35%	-21%

*Sources: own calculations*

The significant variation in the ratio of variable costs between December 1999 (low) and June 2000 (high), presumably explained by a price decrease towards

the end of the business's life, causes a strong difference between the high and low estimations of the breakeven point.

The table shows that even if the business had not paid its owner any salary, the turnover necessary to cover corrected costs (i.e. including all finance charges and depreciations) would have been above R2,6 million in the mean scenario (over R3,2 million in the highest scenario), meaning that after four years of operation, the business had still not reached its breakeven point.

The gap to breakeven is even more significant if one takes into account the target member's remuneration of R180 000 per year, in which case the latest annual turnover is more than 20% below breakeven, and even 35% in the higher scenario.

This analysis confirms the previous conclusion on sales insufficiency, but also points at a cost problem specifically with regard to the member's salary, which has been kept too high for the business to sustain.

## Interest coverage ratio

Again, two versions of the interest coverage ratio had to be calculated to reflect two sets of figures for financial costs: before and after correction of financial charges.

The ratios as shown in Table 31.22 show that the operating profits (prior to depreciation) have either been just too low, or just sufficient to cover (corrected) financial costs over the business's lifetime.

This hints at two problems: the general insufficiency of operating profit as already discussed, and a high level of financial costs caused by a combination of high long-term debt (especially after the conclusion of a new instalment sale agreement in 1999) and intensive use of overdraft and credit card.

*Table 31.23 – Interest coverage analysis*

	<b>Feb-97</b>	<b>Jan-98</b>	<b>Dec-99</b>	<b>Jun-00</b>
EBITDA	-97 088	174 436	85 352	-77 712
Financial costs (as indicated)	50 146	38 208	19 217	20 943
Financial costs (corrected)	50 146	51 293	63 974	80 619
coverage ratio 1 (as indicated)	-1,94	4,57	4,44	-3,71
coverage ratio 2 (corrected)	-1,94	3,40	1,33	-0,96

*NB: Financial costs are calculated as the sum of interest paid, finance charges and credit card commission*

## Equity

Again, the ratio calculations are to be taken with caution since it is highly questionable whether the balance sheet data related to equity, including

accumulated profits or losses and member's loan, are reliable.

*Table 31.24 – Equity ratio*

1/ Technical equity	at start up (presumed)	Feb-97	Jan-98	Dec-99	Jun-00
Member's interest <sup>24</sup>	100	100	0	0	0
Accumulated profits or losses		-186 823	221 671	-414 785	-433 672
Equity stricto sensu	100	-186 723	221 671	-414 785	-433 672
Total Assets	378 000	483 519	424 488	497 542	595 881
<b>Equity ratio (1)</b>	<b>0.02%</b>	<b>-39%</b>	<b>52%</b>	<b>-83%</b>	<b>-73%</b>

2/ Member's capital	at start up (presumed)	Feb-97	Jan-98	Dec-99	Jun-00
Member's interest	100	100	0	0	0
Accumulated profits or losses	0	-186 823	221 671	-414 785	-433 672
Quasi-equity (mb loan)	89 900	146 720	-44 866	551 170	549 890
Equity stricto sensu	90 000	-40 003	176 805	136 385	116 218
Total Assets	378 000	483 519	424 488	497 542	595 881
<b>Equity ratio (2)</b>	<b>23.8%</b>	<b>-8%</b>	<b>42%</b>	<b>27%</b>	<b>20%</b>

*Source: Financial statements for February 1997 and management accounts for the following years. The figures for start-up are as in Table 31.1.*

Although data are imprecise, it makes no doubt that the debt ratio has been high from the start, supposedly more than 75%. It is even surprising that the bank provided an Instalment Sale Agreement for more than 100% of tangible fixed assets, (or for 100% of the sum of fixed assets and stock), apparently not insisting on a minimal risk participation by the member. The member hence only needed to finance half of the franchise fee and the working capital – hence contributing to less than 25% of the firm's total assets.

In further years, as losses accumulated, the (strict) equity ratio plummeted to negative levels, compelling Mr. van der Merwe to increase its member's loan. However, even if he did lend R550 000 to the business as reported, this did not increase the initial low equity ratio of app. 25%.

<sup>24</sup> The figures in the table are presented as in the balance sheets provided by the member. Naturally, if the business is registered either as a CC or as a Private Company, it needs to have a member's interest so the "0" are not correct. Also, as already discussed, the positive profit and negative member's loan for January 1998 are highly questionable.



## Debt maturity

In the first few years, before the overdraft facility was granted, the debt was essentially long-term debt, thanks to the support received from the bank. Liabilities towards suppliers and customers who paid a deposit complemented this long-term finance.

However, as time went, current liabilities became more heavy and the use of overdraft increased, so that the business became more and more dependent on short-term debt, which financed 45% of assets in 1999 and almost 63% in June 2000.

Unlike other SMEs which are unable to secure long-term finance and have to use short-term funding to back their long-term assets, Mr. van der Merwe was lucky to obtain substantial long-term credits to get started. However, by accepting such high amounts of long-term debt, he was already at his maximum capacity so that, apart from the additional instalment sale facility which he managed to obtain from another institution, all other financing needs had to be covered by short-term credit.

*Table 31.25 – Debt maturity 1997-2000*

	<b>Feb-97</b>	<b>Jan-98</b>	<b>Jul-99</b>	<b>Dec-99</b>	<b>Jun-00</b>
current liabilities	142 868	77 807	210 319	221 280	310 061
overdraft	0	0	43 214	5 206	64 206
total assets	483 519	424 488	559 319	497 542	595 881
Current debt / Total Assets	29,5%	18,3%	45,3%	45,5%	62,8%

*Source: from balance sheets.*

Unfortunately, the way he managed his business did generate significant financing needs, which therefore impacted on the short-term liquidity. This also apparently caused him to use his overdraft to finance a part of his fixed investments, notably the cash portion of the vehicle bought in early 1999, as well as the small additions to fixed assets that took place between July 1999 and April 2000 (for approximately R15 000).

## Working capital cycle

Because of this particular case being a manufacturing operation, we modified the ratio framework to incorporate the average production cycle, which was assumed at 5 days. Even then, the working capital analysis suggests that, thanks to supplier credit and the occasional deposits paid by clients, there was virtually no need for working capital. In July 1999, the working capital need was positive, but limited to less than 2 days of turnover, i.e. less than R 12 000. This should have been largely covered by the bank overdraft facility of R 45 000.

*Table 31.26 – Working capital cycle*

(In days of turnover)	<b>Feb-97</b>	<b>Jul-99</b>	<b>Dec-99</b>	<b>Jun-00</b>
Purchases: Supplier Credit (average)	19,6	25,7	26,3	42,7
Deposits	32,2	4,1	4,1	0,0
Inventory	11,1	6,6	4,4	6,2
Production cycle (assumed)	5,0	5	5	5
Sales: Customer credit	0,0	19,8	10,2	21,6
<b>Total need for working capital (in days)</b>	<b>-35,7</b>	<b>1,6</b>	<b>-10,8</b>	<b>-9,9</b>
<b>Corresponding need for working capital (in Rand)</b>		<b>11 191</b>		

*Source: Balance sheets; production cycle is assumed. The balance sheet for January 1998 was not included because there seemed to be inconsistencies in the figures (the stock was high and the supplier credit seems abnormally low).*

## Variability of ratios

The accounting data available suggest that ratios for this business were extremely volatile. For part, this is likely to be a consequence of low-quality accounting, mistakes and even wilful misrepresentation of certain figures. On the other hand, there was probably a lack of commitment on the part of the owner, which caused fluctuations in the business (especially with regard to drawings).

## 7. Final Reflections

In spite of the lack of qualitative and interview evidence, the review of this case study has revealed a number of weaknesses, both in its business concept, its financial structure and the quality and honesty of its management. It is interesting that, from all the case studies, this business was the one that received, relatively to its size, the most substantial amount of bank finance, from the start, and on a long-term basis.

The fact that this business was operating as a franchise supposedly contributed to its success in securing start-up, expansion and working capital finance.

### The advantage of being part of a franchise

Commercial banks in South Africa, as well as internationally, tend to be more comfortable lending to franchise businesses than to independent enterprises. The rationale, as exposed for example by ABSA (2002), rests on the pre-existence of a successful business format, which reduces the risks of error by the business owner, as well as the comparatively easier establishment of a presence in the market, both factors arguably leading to improved predictability and reduced risk.

The statistical evidence on franchise firms' lower rates of failure, however, is controversial in the academic literature, with Stanworth et al (1998) arguing that such past results were affected by problems of definition and measurement, while in reality there is hardly a significant difference in the rates of failure between franchise and conventional businesses.

In addition, it is important to take into consideration the reputation and expertise of the franchise scheme – and accordingly the appropriateness of franchise costs. In the case of Mr. Parker's franchise, the cost appeared excessive considering the lack of expertise of the franchise scheme (and even of the franchisor's businesses themselves). It is not clear to what extent support services have been put in place to justify such high fees.

In addition, there is evidence that Mr. van der Merwe's access to finance has been facilitated by the good relationship of the bank to the franchisor, and the fact that the bank had approved the franchisor's scheme. However, a motivation for the bank's approval of the franchise scheme seemed to be the fact that it was favourable to the franchisor, with "franchise fee being paid in full upfront". However, de facto, this comparatively high franchise fee was ultimately paid by the bank on behalf of the franchisee (as part of the start-up loan), and the bank's exposure on both sides of the scheme strongly reduced the benefit of the existing scheme for the bank as a whole<sup>25</sup>.

## **The bank's mistakes**

The bank granted its support to CS1 on the basis of the "exclusive supply agreement" which the franchisor had with its fibre-board supplier. The credibility of this competitive advantage in a highly competitive furniture market would appear to have been overstated. It is possible that the exclusivity of the supply agreement applied to Mr. Parker in Pretoria, but not to the Cape area, where CS1 operated.

More seriously, the bank can be blamed for having been negligent on the management of this account. While the initial facilities were granted at start-up, at a time where no financial analysis was possible, a monitoring should have taken place. Instead, the bank has ignored considerable accounting flaws and has tolerated long periods without any financial reporting.

In addition, a new overdraft facility was granted after a few years of operations. At this stage of the firm's lifecycle, the possibility of a more rigorous analysis of creditworthiness and of cash flow forecasts existed; instead, the bank seems to have limited itself to verifying that repayments were taking place on time, as well as reviewing, in a supposedly superficial manner, reports which had visibly been falsified.

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<sup>25</sup> It may however have benefited the Pretoria branch at the expense of the Cape Town branch.

## Annexure 32 – Narrative on Case Study 2

### White-owned franchise restaurant

An illustration of

- (a) the importance of personal wealth, character and relationships to obtain finance, (b) the difficulty of being profitable as a franchise, and  
(c) the difficult interpretation of profit and equity figures.

#### 1. Business Short Portrait

Business Code Name: CS2	Form of registration: CC
Member's initials: Mr. H.W..	
Member owns 100% of capital	
Member's ethnic background: White	
Member employs a general manager	
Sector of activity:	
Primary activity: SIC 64201 (restaurant)	
Secondary activity: SIC 64203 (take-away counter)	
Product or Service: Family restaurant, take-aways and food deliveries	
Business concept: franchise	Market: Private domestic
Start-up date: 2001 (acquired existing business)	
Current status: active	
Staff members: 47	Annual turnover: R 3 million
Managers: 2	Gross fixed assets : R 752 thousand
Permanent employees: 16	=> Size category: small
Casual staff: 29	(tending to "medium")
Main sources of finance:	
<ul style="list-style-type: none"> <li>• Member's loan (backed by personal bank credit)</li> <li>• Bank Overdraft</li> </ul>	

#### 2. Case study procedure

The case study plan was to include a (running) franchise business. For this purpose, a few of the major restaurant and retail franchise schemes were contacted and agreed to send a list of their franchisees in Cape Town. This restaurant, which was first contacted telephonically, agreed to provide financial statements and interviews.

The case study rests on the following sources:

- 2 on-site interviews of the business owner
- financial statements for the years ended February 2002 and February 2003.
- franchisor's website, yielding information on the history of the franchise scheme,
- answers of the franchisor on a written questionnaire
- written documentation provided by the franchisor, including
  - Set up costs and budgets for two types of restaurants: take aways outlet and "combo" outlet, dated January to May 2004
  - Disclosure document
  - Franchise brochure
  - List of franchisees

### **3. The business owner**

#### **Background**

A qualified dentist, Mr. HW (not his real initials) owned a dental laboratory for 7 years, until he decided to start a new career. He underwent training as a Microsoft Systems Engineer, but did not follow this route any further, preferring to start, as he called it, a potato factory. Although this first project did not work, it helped Mr. HW cut his entrepreneurial teeth. Following this, he decided to try a restaurant. Having lived in Gardens for about 16 years, he had a fair idea of the market potential, and decided to buy a franchise restaurant and take-away. At present, two years after having bought this restaurant, he is starting up a new shop specialising in DVD and entertainment.

In spite of a somewhat sinuous curriculum, Mr. HW could be called a serial entrepreneur – and indeed there were many indications during the interviews, that he would not own this restaurant business for the rest of his life: Quite early in the first interview he indicated that he may, at some stage, want to sell this business again, although he wasn't too talkative about it. In any case, the franchise agreements with this franchisor are limited to 10 years, although this is renewable.

Prior to starting up as a new franchisee, Mr. HW gained some background through the 45-days corporate training organized by the franchise's head office. Specifically, the training involved going through every single section in the restaurant and learning to perform all the tasks that his future staff members would have to perform. In addition, the training included a small section on administrative matters, but this, according to Mr. HW, did not go beyond the usual food cost calculation and profit calculation. There was little on accounting and finance, but he had had accounting as a major at school and he "was quite good at it".

## Character

Mr. HW's character has certainly been decisive in bringing him to where he was – in the first place to “pass” the franchisor's selection process, which consisted in an extensive psychological test. Asked about what else was in the selection process, Mr. HW says “that was it – and we had to provide additional sureties”.

Mr. HW's character could be described with the word charismatic. In our interviews he was always casual, relaxed and charming, yet there was a particular natural authority in his tone. It felt like he was confident of his power and his effect. Although some interview questions took him quite far into the details of accounting figures or of possible ‘tricks’ used, he never showed embarrassment at these questions and acted as someone who knows his figures well. Contradictions did come up, though, between his assertions and the accounts – on which he would comment with a “I wonder why?”.

Mr. HW's openness about his financial matters has varied during the course of the case study. When I first contacted him telephonically to ask him about his readiness to participate in the project (indicating from the start that I needed to collect financial statements), he agreed friendly. By my second call, meant at confirming the time for the first appointment, he suddenly was reluctant to give me an access to the business' official financial statements, suggesting that he may at best show me his monthly accounts. As I insisted that I was working with annual statements, he declined participation in the project. I called him again the following week, and he eventually accepted to show me his financials. During our first interview, he was even relatively opened about some “jiggling” that he would use to achieve his goals, but in the second interview, noticing that I had studied his figures in some detail, he withdrew significantly. Overall, he proved surprisingly frank, although I could never fully convince myself whether or not he was “cheating” in some of his answers.

Undoubtedly, some of the tactics used suggested that he was a clever and pragmatic person. His pragmatism had another consequence: he did not have the same emotional attachment to the business as most of the other entrepreneurs interviewed: in fact, he was probably contemplating to sell the restaurant.

## Personal Finance

From all the case study entrepreneurs Mr. HW had the highest living standard. He owns a house, valued at 2.6 million Rand, 3 motor vehicles, savings and investments, this restaurant, as well as two other businesses: a property trust and a new video and entertainment business.

Asked whether he has personal debts, he replies “I suppose I do”, and mentions that his house and his car are not yet paid-up – “but, he adds, eventually, my debt is business-debt more than personal”. He did not mention whether he has had any debt related to the failure of the potato factory.

## 4. How the business started

The franchise scheme has been in existence for more than 15 years. It has developed to a relatively big network, with currently over 50 stores nationwide and in some African countries, the Head Office being in Cape Town. In addition to seat-in restaurants, the business concept includes take-aways and food deliveries. The corporate website suggests that, more than the number of restaurants/stores<sup>26</sup>, their priority in building the franchise network has been quality in terms of service and performance.

The particular restaurant that is the object of this case study was already running under a different franchisee, when it was bought by Mr. HW in March 2001. There was no information about the date when it was actually started.

In order to acquire the restaurant, Mr. HW founded a Close Corporation in December 2000. The first months were used for the setup process, including the contractual relationship with the franchisor and a 45-days training organized by the franchisor's head office. The CC effectively took possession of this restaurant approximately three months later.

### Initial investment

Buying a franchise is always a big investment upfront. Therefore, unlike most other case study firms which could start small and grow progressively, this business has been relatively big from the start. The initial investment sum was approximately as follows:

Purchase price for the assets	R 585 000
Stock	R 35 000
Franchise fee	R 45 000
<i>Estimated initial working capital</i>	<u><i>R 20 000?</i></u>
Total:	R 675 000

Mr. HW did not disclose exactly the amount of his initial working capital. His only indication was that the Working capital: "was supposed to be R 80 000<sup>27</sup>, but in fact I did not have that much".

With an initial investment of, supposedly, under 700 thousand Rand, this business is the largest of our case studies. It was, however, significantly cheaper than creating a new franchise which, according to the franchisor, would have requested an investment of approximately 1,2 million Rand. Table 32.1

<sup>26</sup> To simplify we occasionally use the word "restaurant" in this report with reference to the entire business, although the seat-in restaurant itself represents only about 25% of its turnover.

<sup>27</sup> This figure quoted by Mr. HW does not coincide with the indications from the Head Office.

compares the investment made by Mr. HW with the setup costs estimated by the franchisor.

*Table 32.1 – CS2 franchise setup costs compared with franchisor’s estimation*

	<b>Actual Investment (Mr. HW, 2000)</b>	<b>Estimated setup costs (Franchisor, 2004)</b>
Franchise fee	45 000	50 000
Assets	585 000	1 006 320 <sup>28</sup>
Stock	35 000	30 000
Working Capital – excluding stock	Supposedly 20 000	24 500
Training and Uniforms	<i>1.1.1.1 Not mentioned</i>	27 000
Total	Supposedly 675 000	1 137 820

*Sources: Actual investment figures from interview evidence, setup costs from franchisor’s written documentation (2004)*

The fact that the assets in the restaurant had been depreciated over several years and that some expenses were not required (architects plans, labour for the entire construction, initial staff training, etc) explained the lower investment sum.

It is possible, though, that the figures provided in interviews were understated. This would explain why the alleged price was approximately 22% lower than the (gross) asset value capitalized in the 2001 balance sheet (R 747 893). In principle Mr. HW should have capitalised precisely the amount paid.

I asked Mr. HW about the way that he made sure that the purchase price was right. He answered that he studied a number of aspects, including the books, as well as VAT returns. His answer showed that he was aware of the risk of overstatement of turnover in the management accounts, because he specifically indicated that “VAT returns were particularly important, because you don’t overpay VAT if you are underperforming”.

## **Business Financing scheme**

In order to ensure sufficient viability of the businesses, the Head office rules, as published on the Franchisor’s website, require a 50% cash participation of the member. “We require 50% cash and allow 50% gearing”.

In the case of Mr. HW’s business, apart from the bank overdraft, the balance sheet does not show any liabilities against financial institutions, only a member’s loan representing almost 98% of the liabilities at the end of the first year (the equity being negative). Insofar, Mr. HW was complying with the franchisor’s

<sup>28</sup> This figure includes all costs incurred for the drafting and building of the kitchen and shopfittings



rule, although the funds that he made available to the business by means of his member's loan ultimately came from a personal debt contracted by Mr. HW.

To acquire the business, Mr. HW initially contracted a second bond on his house. But, once the transaction was over and the business well started, he modified the financial scheme by negotiating a flexible long-term credit line, amounting to 1.8 million Rand, and still secured by the same house worth 2.6 million Rand. This personal credit line was, de facto, partly passed over to the business by means of a member's loan.

### **On the choice of a personal loan rather than business loan**

Asked whether he had considered taking the debt under the restaurant's name rather than under his own, Mr. HW answered that he had, but this would have been more costly. He was indeed able to obtain a favourable interest rate on his private credit line, namely Prime – 2%.

In addition, the personal loan gives him the possibility to use portions of the large credit line for other purposes as well. Mr. HW confirmed that the DVD/entertainment business was also benefiting from the credit.

Chains of interest-bearing loans may lead to hidden transfers if the interest rates differ. Mr. H.W. indicated that his member's loan to the restaurant carried the same interest rate as what he paid to his bank, Prime –2%, which, he said, is currently running at approximately 11%<sup>29</sup>. Asked whether the DVD/entertainment business was also paying the same interest rate, Mr. HW's replied with a diplomatic "it would", which may indicate that the business was not yet profitable enough to sustain interest payments.

Still on the question of the choice of a personal rather than business loan, Mr. HW admitted that it sometimes "creates problems with the tax man". He has had to prove several times that the loan was a real business loan, by providing documents for the payments he did in his own capacity for the benefit of the business. He added that while the "big chunks" (such as the direct investments into his various businesses) were easy to prove, other elements were not. However, the advantages of having the credit under his own name outweighed the disadvantage of the difficult tax treatment.

Ultimately, the financial construction chosen means that, although the CC's balance sheets do not show any long-term financial liabilities, the real source of the business finance is ABSA bank. The real initial equity participation was therefore limited to the member's interest of R200. The financing scheme was hence technically compliant, but economically in contradiction with the Head office rules of a maximum gearing of 50% – an example of Mr. HW's ability to 'use regulatory gaps'.

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<sup>29</sup> See following footnote on the inconsistency between interest rates and the possibility that Mr. HW was paying himself a premium on the interest rate due to the bank.

## **Subordination of the member's loan**

The financial statements include a note regarding Mr. HW's loan to the business. The note confirms that, as usual for SMEs, the member's loan is unsecured, has no fixed terms of repayment and bears equity risk, as the member has deferred the right to claim or accept payment of the value of negative equity, currently at approximately R155 000, until the accumulated losses are covered.

Mr. HW could not confirm whether such subordination agreement was required by other creditors or if it was indeed a technical requirement initiated by the accountant to give him the assurance that, in spite of the technically negative equity, he should set the accounts on a going-concern basis.

On the question of what would happen to the business if he lost this particular credit line, Mr. HW replied that there was no reason why this should happen, since the value of the security (the house) was substantially higher than the amount of the credit line. He was probably right, unless he runs into difficulties paying up the house or with other uses made of this same security.

## **Access to finance**

The personal assets of Mr. HW, as we have seen, were of great help in enabling his enterprise. He confirmed that he has had to provide them as securities "lots of time", but he was happy to do that as this represented an economic springboard for him.

In my first interview with Mr. HW, though, he unpromptedly mentioned another factor that eased his access to finance: "There is a very easy way to get finance. You must have a Chartered Accountant, that you know well, and get him to write you a letter stating that you earn sufficient income". Asked for more details in the second interview, he was more cautious, saying that he had discovered this "recipe" as he went along, but adding that he had not used it for the purpose of financing this particular business, because "the earning potential of the business itself was sufficient to convince the bank".

Mr. HW was vague on the process that led him to the loan or the role that a letter from his CA may have played. When he initially asked for the loan, he has not been requested to provide a business plan for the restaurant, although he did provide management accounts for the past 6 months. Knowing that management accounts need not be audited, there is a possibility that the figures he provided were arranged to his advantage, a possibility that he almost confirmed by saying that "it is easy to jiggle", adding that the bank was interested in his income and not in the expenses. Again, Mr. HW seems to have used a gap in the loan-approval procedure, which was simpler than usual due to the loan formally being a personal credit line.

## **5. Business model and operations**

### **Business model and franchise scheme**

The business model for Mr. HW's business is strongly determined by the franchise rules. The three activities are, by order of importance, (1) deliveries (representing approximately 45% of turnover), (2) take-aways (about 30% of sales) and (3) the seat-in restaurant, which contributed the remaining 25%.

Mr. HW mentioned that he was also using his other business (entertainment and DVD/video) to create additional value – although he did not give details, hence not making it very clear for which business the synergies were creating value. (He may have screened videos in the restaurant, which had a TV screen, and possibly the take-aways facility).

Apart from the initial fee of 45 thousand Rand, the franchise scheme requires the payment of a Management Services Fee (often called “royalty”) of 5% of sales, and an additional Advertising fee of a further 5%, as well as a 0.3% fee to pay for the staff training. Overall, then, more than 10% of the business' turnover is paid to the head office. This does not include the purchase of food items that are obligatorily sourced from the franchisor, which represent approximately 10% of all purchases.

### **Assets**

According to the balance sheet, the gross value of fixed assets (excluding the franchise fee), amounts to R753 000, for a net carrying value of R456 000.

As usual in a restaurant with a demanding corporate image, the “furniture and fittings” represent a high portion of the assets, namely about two thirds of the assets in the accounts. Mr. HW suggested that at least half of the assets were shop-fitting, such as walls, pillars, bar, artwork, benches, furniture etc. The interior décor was indeed quite onerous to fit to the corporate image.

Of course, another important part of the assets came from the equipment, kitchen, coldroom, ovens, as well as the dishes, cutlery etc.

### **Management style and philosophy**

Unlike some other food franchises where a person can own several restaurants, which are run by external managers or directors, the present franchise rests on the principle of owner-managed businesses. According to the franchisor's corporate website, it is a “primary requirement in selecting and approving a franchisee” that “the franchisee both owns and operates the business. This ensures total commitment as well as personalised service to customers.”

In spite of this, Mr. HW's business is actually operated by two employed managers, who co-ordinate the team of 16 permanent staff and currently 29

casual workers. The owner himself used to work in the restaurant six days a week, or an average of 65 to 70 hours per week. But currently his involvement has been reduced to approximately 10 hours per week. He admits that this is “not good” but he has “other things that require his attention”. Specifically, Mr. HW is spending his days working in his DVD/entertainment business, having only the evenings/nights left for the food business. He adds, though, that he has a “very competent General Manager”.

Once again, then, Mr. HW is not complying with a central rule of the franchise – apparently because his motivation has declined: he was apparently considering to sell the business.

Mr. HW describes his management style as “60% aggressive”, adding that aggressiveness was necessary in order to ensure a good food and service quality in a context where the staff is partially made up of people who have been unemployed before and are not used to working under pressure. His marketing style is also “pro-active”, trying to constantly propose special offers and deals in order to remain attractive in the eyes of the clients.

## **Market, Competition and Pricing**

The business is situated in a very busy street in a dense area of Cape Town, therefore has a very dynamic market. However, it is under constant and increasing pressure from the competition. In the last 1.5 years, a number of new restaurants and food delivery services opened in the area, making it difficult to maintain market shares.

To Mr. HW, this competition is the main threat to the business, which has to keep a constant eye on food and service quality as well as special offers, in order to remain a favourite.

The competition can be seen as threatening in two regards. On the downside, it requires constant effort from the restaurant’s management to maintain the customer base – so a decrease in the quality of food or service could be fatal for the restaurant which would lose its customer base, with the result that the decreased sales would no longer suffice to cover the fixed charges. The accumulation of losses could bring the business into insolvency.

But the competition also limits the upside potential. Even with an aggressive marketing and high-quality service, there is little hope that the business may grow substantially beyond its current size – hence it is unlikely that the business will ever produce enough profits to both strengthen its equity base and enrich its owner. This realization may have contributed to the decrease in the owner’s motivation and his search for more lucrative business opportunities.

## **Costing, Pricing and Credit Policy**

Most businesses can control their market share and their profit potential by using

several tools: reducing their prices on selected items to attract customers, sometimes even granting credit to their clients or, on the opposite, adjusting their prices to their costs.

To a franchise restaurant, these options are not available. Granting credit to clients obviously does not apply to the food sector. As to the prices, they are set by the Head Office. They are revised from time to time to respond to inflation – according to Mr. HW, there has been only one increase in three years, in 2002.

This means that, in order to become profitable or improve profit margins, Mr. HW has only two options: he must either increase the quantity of food sold, as this will raise the turnover above the breakeven point, or reduce costs.

As far as food costs are concerned, the Head Office's expectation is that franchisees should be able to work on a 36% food cost. This, according to Mr. HW, is not actually realistic. In spite of efforts to buy cheaply (they review price lists from suppliers on a weekly basis to select the cheapest) and to restrict wastage, he says, the average food cost ratio is 37 to 40%. (The income statement suggests that 'cost of sales' represents 43 to 46% of turnover, but this may include other cost items).

Fixed costs are also difficult to control. A large part of them comes from the premises and equipment, which are dictated by the capital-intensive business concept (the rent, depreciations, repairs & maintenance altogether amount to 12% of turnover). The rent is fixed on a 5-year-lease and reflects the quality of the location (although it remains lower than on the franchisor's budget, see next section).

Labour, on the other hand, is reasonably cheap but, since the restaurant needs much staff to ensure prompt service, salaries do add up to 20% of turnover. Mr. HW suggested that it would be dangerous to cut costs there. (Indeed, during my interviews with Mr. HW, which both took place in the restaurant before usual meal times, I saw four to five young people wearing the restaurant's colours – in the first interview in the late morning they were working at a slow tempo to prepare deliveries, while during the second interview in the early evening, there were three young people in my back waiting for customers).

In addition, the franchise fees at 10.3% of turnover represent a constant and significant cost factor.

## **Profitability**

This business seems to be a good illustration of the fact that the profitability of a small business is always a question of perspective.

When I asked Mr. HW in my first interview whether the business was profitable, he answered that he was satisfied with the profits and indicated that his profit margin before depreciation and member's salary was fluctuating between 13 and 17% of turnover.

However, a review of the financial statements available showed that, for the

years ending February 2002 and 2003, the restaurant has not been profitable: the financial years were closed with losses of respectively 4% and 1% of turnover. There was no member's salary at all and if one were to omit the depreciations and amortisation of the franchise fee, the business would just be profitable with, respectively, 1% and 3% margins on turnover – a gap of more than 10% compared with the stated margins.

Supposedly, the difference between these figures was to some extent explained by accounting adjustments meant to save tax. Indeed, when handing out the financial statements to me, Mr. HW had made several allusions to such adjustments:

*“These accounts that I give you are done for tax purposes. These are not the accounts that I would show if I were to sell the business”.*

*and “These accounts gave me a lot of headache. You need to understand how accountants think. You know, if you put something into your costs, you can reduce the profit, so you pay less tax”.*

In my second interview with him I tried to gain a better understanding of the business's “real” profitability as opposed to the tax-driven accounting. However, Mr. HW's responses were somewhat vague.

His first reaction on my question was (simulated?) surprise: “oh... oh... maybe it was that low”. He did however mention several elements that could partially explain the gap of more than 10% between the stated profit margin, and the one derived from the accounts:

1. He suggested that the profitability has improved in time. “The first two years were rough, but after 2003 it started happening”. “We now make margins of around 12-15%”.  
This statement could not be verified, since the financials for the year 2003 (ending February 2004) were not available. It is also not clear what may have caused the improvement. It is unlikely to be an increase in turnover, since he had previously indicated that the last year had been the most difficult, with an increase in competition, so that he had just managed to keep his sales stable.
2. Mr. HW also indicated that in the first two years he has invested a lot in repairs and improvements to bring the business back to standard, causing the losses. However, according to the financial statements, repairs and maintenance as well as small tools and equipment amounted to around 1% of the turnover in both years.
3. In addition, Mr. HW mentioned that in those two years, he has been concerned with “getting the loan down”. While a loan repayment has an impact on cash flow, it is not as such an expense item, so it does not really influence the profit, except to the extent that it helps reduce interest costs. Interest costs were in the region of 3% of turnover in the two years. Assuming that the decrease in nominal interest rates combined with a decrease of the value of the loan have enabled the business to reduce its

interest payments by half, this may have brought an additional 1.5% improvement in the profit margins.

Taken together, the reduction of repair costs and interest savings after February 2003 can explain that the business turned slightly profitable after writing losses, but it certainly does not explain the 10% gap between the profit margins.

There may be two reasons for the contradiction between stated profitability and the performance reflected in the accounts:

- a) Mr. HW may have used tax-saving practices (This issue of accounting treatments to reduce the taxable income is raised again in the section about accounting.).
- b) Or he may have been unaware of the exact final profitability figures, working more with a focus on monthly operating-profit, i.e. ignoring the year-end or the more general expenses like bank charges, insurance, security, licenses and levies, telephone and computer expenses, etc. Mr. HW's monthly profit reviews were more likely to have concentrated on basic costs, like cost of food, labour and rent.

### **Performance compared with Head Office's projections**

The restaurant, it seems, was not lucrative – at least not in the first two years after Mr. HW's investment, and probably not in the third year. It is likely that the financial results were a disappointment to Mr. HW who had expected a better reward for the financial risks taken.

In order to understand the reasons for the lack of profitability, the incomes and expenses were compared with the projections delivered by the head office for that kind of 'combo-store' (i.e. business combining sit-in restaurant, take aways and deliveries).

The result (see Table 32.2) shows that in the first year, the restaurant's sales were slightly under budget (5% below). However, this is not primarily what caused the loss, since the following year still brings a deficit, although the business has managed to increase its turnover to 5% above target.

In fact, a major area where the business is underperforming against the budget is with regard to food costs. Mr. HW is aware of this deficiency, suggesting that the targets of 36% food costs are unrealistic. Unfortunately, there is little that the management can do since they cannot control the prices. With a gross margin 6-9% below target, the business is already in a bad position to achieve the 15% net margin promised by the head office.

The next area of bad performance is with certain variable costs. The first are the food delivery expenses, which amount to 1,4 to 2,6% of turnover but were not budgeted for in the Head Office's target income statement. Another significant cost item are the bank charges, which are high in a context where many clients settle their bills with their credit card – the amount foreseen in the budget does not seem to take account of these costs. Beyond those relatively minor items, the

business also has more heavy staff costs than the head office suggested it would – this can be caused by the costs of the general manager, since the restaurant is not (no longer) owner-managed.

These factors bring the margin on variable costs to 11 to 13% under budget.

The fixed costs, on the other hand, are overall lower than in the budget – mainly due to a lower rent. Repairs and tool replacements on the other hand are significantly higher than in the budget, confirming Mr. HW.'s statement that he invested high amounts in upgrading in the first two years. In a way, this is not surprising since the budget is written for a new restaurant opening up, as opposed to an older restaurant which per definition requires more maintenance. However, these costs remain minor compared with turnover.

Lastly, financial costs and depreciations were not properly budgeted for in the Head Office's projected statements (nor was tax, in fact), but they are significant and use up the meager margin.

Two possible interpretations emerge from this analysis. Either the business is being careless on variable costs such as food costs and salaries, where its costs should be significantly lower – this is however denied by Mr. HW. Or the franchisor's budgets were too superficial, with a number of significant costs being omitted (such as delivery expenses, replacement of small tools, depreciations) or significantly understated (such as food costs, banking costs, financing costs). In this case, Mr. HW's business has little chance to reach the profit levels promised by the franchisor.



Table 32.2 – Comparison of Actuals 2002 and 2003 to Budget

	<b>Head Office Target</b>	<b>Actual 2002</b>	<b>Actual 2003</b>	<b>Comments</b>
Net sales	2 894 737	2 743 891	3 028 317	Turnover is in the +/-5% range of target
Food costs and packaging	1 085 526 38% of sales	1 269 246 46% of sales	1 318 229 44% of sales	Business loses 6-8% margin on food costs!
<b>Gross margin</b>	<b>63%</b>	<b>54%</b>	<b>57%</b>	
Franchise fee (incl. Advertising fee)	289 474 10%	282 621 10%	311 917 10%	Per definition proportional to sales
“Variable overheads I” like: cleaning, computer, electricity and gas, stationery, telephone	126 553 4%	84 195 3%	93 884 3%	
“Variable overheads II” like delivery expenses, entertainment, advertising, bank charges, uniforms	18 526 0,6%	113 467 4%	133 174 4%	Some costs were grossly under-estimated in the Head Office’s projections
Wages, salaries and other staff-related costs	570 865 20%	593 580 22%	656 094 22%	Business loses 2% margin on staff costs
<b>Margin on variable costs</b>	<b>28%</b>	<b>15%</b>	<b>17%</b>	
“Fixed overheads I” rent, water, insurance	316 800 11%	179 332 7%	224 889 7%	The restaurant saves a lot on the rent, which is far lower than projected
“Fixed overheads II” like security, repairs, small tools, travel, accounting and legal costs	29 558 1%	74 804 3%	78 083 3%	Some costs were under-estimated in the Head Office’s projections
<b>Margin before interest, depreciation and tax</b>	<b>16%</b>	<b>5%</b>	<b>7%</b>	
Finance costs	20 500 1%	101 259 4%	98 480 3%	} Not considered in the Head Office’s projections
Depreciations and amortisation of franchise fee	0	165 081 6%	149 203 5%	
<b>Net Profit</b>	<b>436 935</b>	<b>-119 659</b>	<b>-35 624</b>	
<b>Net Margin</b>	<b>15,1%</b>	<b>-4,4%</b>	<b>-1,2%</b>	

## Member's remuneration

Asked, during the first interview, whether he was taking a fixed salary from the business, Mr. HW said that he did not, but that, whenever the business generated some "excess capital", he would "take it to put it into his bond".

The issue of remuneration, hence, is as equivocal as is the business's performance – but it is probable that, if at all a remuneration took place, it has remained fairly modest. The financial statements available (for the years ending February 2002 and 2003) did not show any form of member's salary or dividends.

Asked for more details in the second interview, Mr. HW confirmed that the payment of dividends did not happen at all in the first two years since he had not made any profits. He added that he did pay himself a dividend out of the profit realized in the year ending February 2004. As to the amount of the dividend, he first replied that he did not know, and then added that it may have been in the region of R200 000.

Again, this figure could not be verified by 'hard' accounting data, but considering the previous years' figures and other information given by Mr. HW, it is unlikely to be true.

Indeed, the subordination agreement already mentioned obliged Mr. HW to use any net profit first to cover accumulated losses, possibly even to build-up his equity. Only the balance (after tax) should have been paid out as dividend.

Assuming that the owner paid out to himself as much as he could after just covering the losses accumulated in the previous years, and working with an effective tax rate of 30%, the pre-tax profit that would have been required to pay a dividend of 200 thousand Rand would be over 440 thousand Rand. Assuming that the turnover in 2004 was equal to the previous year's turnover (as Mr. HW. suggested), and even assuming that the depreciations, amortisations and financing costs could be reduced to at 6,5% of turnover, the operating margin would have needed to be over 21%, which is almost impossible after the 5 to 7% of the previous years.

At another stage of the interview, Mr. HW. had suggested that in 2003-04 he had reached operating margins of 12-15% before depreciation.

If one assumes that the business has indeed been able to achieve the median operating margins of 13,5% in 2004, and to decrease financial costs, depreciations and amortisations to 7% of sales, the distributable profit – after covering accumulated losses – would have been only ZAR 29 090: a rather modest remuneration for a whole year.

Finally, if one assumes that the business continued to perform as it has in the previous two years, only slightly improving its operating margin and slightly decreasing other costs, it would have just reached breakeven but, because of the obligation to settle accumulated costs, would not have been able to pay out any

dividend. Table 32.3 presents these three hypotheses and the dividend resulting from them.

*Table 32.3 – Simulation of profit and dividend calculation for 2003-04*

	2001-02	2002-03	2003-04 (simulated)		
			<i>Pretended (unlikely)</i>	<i>Middle scenario</i>	<i>Continuity</i>
Turnover	2 743 891	3 028 317	3 028 317	3 028 317	3 028 317
Operating margin	146 646 5,3%	212 047 7,0%	637 838 21,1%	408 823 13,5%	227 124 7,5%
Depreciation, amortisation and financing costs	266 340 9,7%	247 683 8,2%	196 841 6,5%	211 982 7,0%	227 124 7,5%
Pre-tax profit	-119 659	-35 624	440 997	196 841	0
Past losses	0	-119 659	-155 283	-155 283	-155 283
Net profit	-119 659	-35 624	355 283	184 373	0
Maximum possible dividend	0	0	200 000	29 090	0

### **Non-dividend remuneration**

Although he did not mention it, there is a possibility that Mr. HW found some other way of taking a gratification for his investment in the business. In theory, three main hypotheses are permitted: (a) he may have drawn personal benefits from some business assets, e.g. some travel and entertainment expenses may have been for his private use or he may have consumed meals for free for him and/or his family; (b) he may have used interest payments for his remuneration (i.e. earned a margin), or (c) he may have created or inflated some costs to mask cash drawings.

#### **a) Personal use of business assets**

This is a rather frequent and almost unverifiable scenario: the owner may use the business vehicle for private purposes, invite private friends and/or relatives to eat for free in his restaurant, treat private travel costs as business expenses. However, it is unlikely that these elements will have reached amounts comparable to the salary that a successful entrepreneur would pay himself.

#### **b) Margin on interest payments**

Mr. HW told me that the interest earned on his member's loan to the business was just compensating the interest paid on his private loan. However, there is a small possibility that he earned a small margin on the interest paid<sup>30</sup>. In any case,

<sup>30</sup> The notes to the February 2003 statements indicate that the member's loan was bearing interest

even if there was a hidden margin, the amounts involved would not make it a real alternative to salaries or dividends.

c) Creation or inflation of costs to mask cash drawings

The next section considers possible manipulations of accounts, which may have been used to conceal cash drawings. Since Mr. HW was the sole owner, and his business was registered as a CC instead of a Pty Ltd, he did not need to worry about disclosure of his dealings with the business – except for tax-compliance purposes.

The avoidance of audits may actually have influenced the choice of Mr. HW to register as a CC instead of opting for a Pty Ltd. However, again, the amounts if at all would be rather small.

## Conclusion

From all these analyses, it seems that during the first two years of operation, the owner has invested effort and capital into starting the business, supposedly with the expectation of profit levels as budgeted by the Head Office (15%).

Evidently, the business could not afford the remuneration expected. Even if he has been able to pay himself a first dividend in the third year, it appears that Mr. HW has become aware by then that the potential profits from this business would not be adequate to compensate for the work, the capital invested and the financial risk involved. This may be the main reason for the reduction of his involvement, at least in terms of time and maybe in terms of capital (if it is true that the member's loan has been strongly reduced).

The difficulties of Mr. HW in openly admitting this situation are not surprising, considering both his self-esteem and his position as seller of the business.

## 6. Financial management

At this stage, it seems necessary to seek better insights into the financial management processes, as well as the process of setting up the financial statements, with two questions in mind. First, one needs to understand to what extent the impression of a somewhat unsuccessful business, as conveyed by the accounts, may have been distorted for tax purposes. Also, it is interesting to see how stringent the financial management has been, and whether this can contribute to explaining the business's (lack of) success.

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at 15% p.a. Since in February 2003, the prime overdraft rate was peaking at 17% (Source: Standard Bank Ecoserv), this rate does correspond to the prime – 2% paid by Mr. HW to his bank. Mr. HW does not seem to have drawn a margin during that year. On the other hand, in May 2004, according to Mr. HW, the loan was running at 11%, although the Prime rate had been steady at 11.5% since mid-December 2003. He may hence have earned a margin of 1,5%. Assuming that the amount of member's loan in 2004 was as in February 2003 (R621 000), this would correspond to a remuneration of approximately R9320 for the year.

## **Sales and Cost Capture and Monitoring**

Mr H.W. was asked a number of questions related to financial planning and monitoring. Significantly, he appeared to have understood all of them as attempts to assess the risk for accounting errors or manipulations.

When asked about how the business kept track of sales and costs, Mr. HW answered that the sales were fully captured on the computer, adding that he had “a very SARS-friendly software: once you’ve entered something you can’t take it out any more”. (Would he sometimes have wished that this was possible?). At the end of every day, the software generates totals of sales, stock utilization, and other control sheets that are reviewed on a daily basis.

Food costs, he mentioned, are filed and monitored “religiously”, because “at the end of the month if there is a bill missing for thousand Rand or so it will never be possible to find what it was”. Other, larger expenses, are less critical because they are more easily recognizable.

As to monitoring, Mr. HW does it himself: “I try to do a full income statement every month”. If “trying” means that he does indeed do it, then one can say that the quality of monitoring taking place is reasonably good, probably better than the average South African SME.

## **Accounting and setting up of financial statements**

In the first interview, Mr. HW had suggested that working on the financial statements with the accountant had “given him a lot of headaches”. In the second interview, suspecting that there had been some tax-reducing accounting interventions, I tried to come back to this statement to understand what he had meant, and obtain a clearer understanding of the accounting process.

At that stage, Mr. HW was rather evasive about his previous statement. He indicated that he had had accounting at school and in his early years at university, and that he was “quite good at it”, but when talking to the accountants on practical subjects, it all “sounded like Chinese” to him. But for the rest, the process that he depicted was (too) simple.

## **Accounting processes**

Mr. HW mentioned two external persons involved in the accounting process. First, an external payroll administrative officer was coming in every month to prepare files and payments such as VAT, RSC levy, etc. In addition, at the end of the year, the chartered accountant would prepare the financial statements.

To verify whether a close relationship between Mr. HW and his chartered accountant may have had an impact on the financial statements as well as access to finance (as suggested by the anecdote about the letter to the bank), I asked how close was the contact. But he suggested that he saw his accountant only

twice a year. First, when the accountant comes in to collect all the information. Mr. HW gives him “everything”, especially all the printouts from the computer software, as well as an update on certain matters and a declaration stating that, to the best of his knowledge, the information provided is “true and correct, which I believe it is”, adds Mr. HW.

Then, at the end of the process, the accountant comes back to him, bringing the financials for signature.

Mr. HW was probably aware that the description of the process he gave contradicted previous statement and was not credible, but he was not keen to give any further details.

For example, he did not even mention any detailed discussions held to clarify certain matters. In particular, the amount of the member’s loan and the sum of interest paid are rarely easy to document, and it is unlikely that this would be part of the “printouts” – actually Mr. HW himself suggested that this particular issue always gave complications with the taxman.

There are, therefore, two possible interpretations of Mr. HW.’s statement regarding the headaches of the accounting process. Either there has been lengthy brainstorming about tax optimising operations, such as the inflation of certain costs. Or, the headaches were caused by the fact that Mr. HW had been under the impression that his business was well on track and profitable, hence he may have been shocked to find out that he was actually losing money: he may have had lengthy discussions with his accountant to convince himself that he had indeed failed to generate a profit.

### **Possible tax-reducing practices**

Tackled on the opportunistic accounting practices, Mr. HW was somewhat evasive, indicating that he has just used all the helps that government gives you to reduce your tax. He mentioned the depreciation of his assets and the interest payments on his member’s loan. These tax incentives, as he termed them, were enough to reduce his taxable income so he “did not need to cheat”.

- **Depreciation:**

He did not make it entirely clear whether he considered the simple fact of depreciating his assets as a tax-reducing practice, or if he had chosen a particular pattern of depreciation to that effect. A scrutiny of the notes to the financial statements did, however, reveal interesting details.

To start with, the gross value that was capitalised in the start-up statements, and which represents the basis on which depreciations are calculated, may have been pushed up. Indeed, when asked about his initial investment, Mr. HW had mentioned that he had purchased the assets at a discount because, in his words, they needed maintenance and repairs. He therefore paid only R585 000 for assets which had a book value of almost R748 000, a discount of approximately R 163 000. A GAAP specialist consulted about this practice confirmed that, when

buying assets at a discount, it is incorrect to capitalise them at a higher value than the price paid – unless a negative goodwill, corresponding to the discount, is shown as a negative asset on the balance sheet – in which case this negative goodwill must be progressively released into the income statement according to a complicated formula.

The notes to the financial statements give another possible explanation to the difference between the gross asset value and the initial purchase price of the assets. The note on asset valuation states that “Cost includes all costs directly attributable to bringing the assets to working condition for their intended use”. The data available do not enable to verify whether maintenance and repair expenses equivalent to the initial discount have indeed been occurred, in addition to the repair & maintenance expenses appearing in the income statement.

There remains a strong possibility that Mr. HW, by omitting to reflect the discount obtained on his balance sheet, has increased his yearly potential for depreciation. At an average depreciation rate of 18.6%, this could bring approximately R 30,350 of additional expenses every year, more than 1% of turnover.

There is also some uncertainty on the depreciation rates. The notes to the financial statements indicate that assets are depreciated on a straight-line basis, and the depreciation rates quoted there (see column 2 of Table 32.4) are consistent with usual practice. However, some actual depreciation amounts in the first year (2002, see column 3 of Table 32.4) differ.

A possible explanation for this is that the first financial year includes 15 months, because CC was created 3 months prior to the acquisition of the business. It could be that in February 2002 the depreciation was calculated over a period of 15 months instead of 12 months. If this were the case, a 4/5 pro-rata should bring us back to the ‘official’ depreciation rates. This, however, is not the case, so the explanation is not convincing, particularly since the mismatch applies only to a few items.

*Table 32.4 – Depreciation rates: comparison of notes with actual practice*

	<b>Rates announced in notes</b>	<b>calculated rates in Feb. 2002</b>	<b><i>calculated rates on a 4/5 pro-rata</i></b>	<b>monetary difference (R)</b>
Plant and equipment	20,0%	24,0%	19,2%	7 694
Furniture and fittings	16,7%	17,9%	14,3%	5 598
Kitchen equipment	20,0%	20,0%	16,0%	0
Office equipment	20,0%	25,9%	20,7%	797
Computer equipment	33,3%	33,3%	26,6%	0
Total				14 088

It seems hence, that, in addition to the R30 350 extra-costs that may have come from the increased gross value of assets, the choice of depreciation rates in the first year brought additional costs of R14 088.

Another element of discretion is the amortisation of the franchise fee. Unlike many businesses, which omit such amortisation, Mr. HW opted for a relatively rapid process, over 5 years (although the contract period is 10 years), generating expenses of R9 000 every year. These expenses, though, are not tax deductible.

Altogether, the depreciation and amortisation process may have been used for income reduction with a possible impact of up to R53 thousand, or just under 2% of turnover.

- **Interest payments on member's loan**

The matter of interest payments has already been discussed. Mr. HW regarded it as a tax incentive, although amounts to a real cost, since the interest was indeed owed to the bank. It could not be ascertained precisely whether the interest rate paid by the business to Mr. HW was higher than the rate he paid to the bank – if so, the choice of interest rate may indeed have had a tax-reducing effect.

But even if it is the case, the amount would have been limited with approximately R9300, or 0,3% of turnover.

- **Other Expenses**

Naturally, the income statement still includes substantial cost items which could not be verified. There is hence a possibility that some of the costs were overstated. Examples include:

- repairs and maintenance as well as replacement of small tools, which are significantly higher than foreseen in the Head Office's budget.
- the payment of fees for unspecified purposes. For example the 2002 income statement includes "Professional fees" for over R15 000 – down to R9 700 in 2003.
- the rent, which increased by over 30% between 2002 and 2003, from approximately R13 000 per month to over R17 000 per month, bringing a total cost increase of 47 700 for the year. Asked for the reason, Mr. HW answered: "It can't be right. I wonder why". While this is unexplained, the level of rent remains particularly low compared with the head office's budget, so it is unlikely that any cheating has taken place there.

- **Conclusion**

Overall, only a mixed conclusion can be drawn. There is a possibility that the bottom-line showed on the income statement has been pushed down by a combination of several mechanisms, but there are no indications that this has been done on a large scale. The anomalies detected may have actual reasons, or they may be mistakes rather than intentional.

Indeed, if opportunistic accounting had been used to reduce the firm's tax burden, it is unlikely that it would have been used to the extent of generating



such losses. Although accentuating losses increases the tax benefit for the following years, it puts the business owner under some pressure since the business has negative equity – and the tax benefits will only materialize if he keeps the business long enough to neutralize his losses by subsequent profits.

It is therefore more likely that the inconsistencies detected were due to a lack of care in the accounting process and/or an incomplete knowledge of business figures by Mr. HW, or his reluctance to admit the disappointing performance of his business.

### **Recipients of the financial statements**

To close the investigation on the financial statements I asked Mr. HW who, apart from the revenue services, would normally receive a copy of these statements. He suggested that nobody else asked for them.

On the question whether the bank asked for financials he replied with a “sometimes they do, but I will not add any comment to that”. He did later admit that the bank would usually receive “monthly management accounts” instead of the annual financial statements. There is little doubt that the profit figures showed on these management accounts would be significantly higher than the ones on the statements sent to the SARS.

### **Working capital and Cash management**

Enterprises in the retail and catering sector usually suffer less than manufacturing businesses from too little working capital, since their sales are usually paid cash. However, there may be a need for important stock, which can be a strain.

Mr. HW indicated that he usually kept approximately R45 000 of stock, adding that in theory he “could go as low as 25 000 but it becomes an administrative nightmare, you have to watch it all the time”. He therefore chose deliberately to keep a higher amount of stock, in order to have the peace of mind. This is confirmed by the accounts, where the inventories went up from R36 722 on 28 February 2002 to R46 020 on 28 February 2003.

Of course, keeping higher amounts of stock increases financial costs. Mr HW did not seem to be worried about that, obviously having enough liquidity.

He also indicated that the business never bought any supplies on credit, with the exception of the food items that were sourced from the Head Office, since these were settled together with other payments on a monthly basis. He would, however, use his credit card or debit orders for major expenses.

The liquidity situation in the business was reasonably relaxed, with an overdraft facility of R80 000, which was rarely used up (only “when something breaks”). According to Mr. HW, the average utilization of the overdraft was 5 to 10 thousand Rand. The balance sheets for Feb 2002 and 2003 showed, respectively,

bank overdraft amounts of R6 722 and R37 999. Asked to comment on that later figure, Mr. HW showed some surprise and said “I don’t know what happened. Of course, it is silly to have such a high overdraft when one has a credit card”. He added that the business’ financial statements had to be reconciled with his personal tax returns and other personal financial documents, but did not give further details.

A simulation of the cash flow statement for 2003 indicates that the increased utilisation of the overdraft resulted not from operations (they generated an operating cash–flow of 119 thousand Rand) or from investing activities (the only investment was in a computer for less than 5 thousand Rand), but from the repayment of a substantial portion (19%) of the member’s loan.

In fact, Mr. HW seems to have chosen a repayment scheme for his member’s loan that roughly corresponds to the depreciation scheme of his assets (repayment of R145 500 as opposed to a depreciation of R140 200). Unfortunately, the operating performance is not sufficient to fully cover the depreciations, hence the need to increase the overdraft.

*Table 32.5 – CS2’s simulated cash flow statement for 2003*

	<b><u>2003</u></b>
<b><u>Cash-flow from operating activities</u></b>	
Operating Cash-Flow (incl. finance costs)	113 579
Change in Working Capital	5 505
<i>Cash-flow from operations</i>	<i>119 084</i>
<b><u>Cash flow from investing activities</u></b>	
Change in Gross Fixed Assets	4 860
<i>Cash-flow from Investing activities</i>	<i>-4 860</i>
<b><u>Cash-flow from financing activities</u></b>	
Change in Members' contribution	0
Change in Members' loan	-145 501
Change in LT Liabilities	0
<i>Cash-flow from Financing activities</i>	<i>-145 501</i>
<b><i>Change in Cash Resources</i></b>	<b><i>-31 277</i></b>

On the cost of the overdraft, again, Mr. HW was relaxed. He did not know the rate he was paying but would not complain about it. The financial statements suggest that interest on overdraft has amounted to R1 226 in 2002 and R1 633 in 2003 – small amounts when compared with the turnover of 3 million Rand. Assuming an average utilization of R8 000 to R10 000, this cost would suggest an effective interest rate of 16.3 to 20.4% in 2003, which – considering that the

average prime rate during these 12 months was 16.1% p.a., was indeed not excessive.

## Ongoing access to finance and relationship with creditors

For Mr. HW, the question of ongoing access to finance was not really applicable since the only financial debt contracted by his business was the overdraft, while the member's loan – and the underlying personal credit line – have been secured early on and would not require further increases.

Nevertheless, Mr. HW was striving to keep an active and positive contact with the staff at the bank, whom he saw “very regularly”, adding that “it helps to have good relations”. Referring to the amount of information that the bank requested from him, he did, however, mention that “nowadays the banks are more difficult than they used to be” – but he did not appear to be particularly worried about that.

This is understandable if one considers that the bank's only direct involvement in the business was through the overdraft facility. Compared with the levels found in other SMEs, that overdraft facility was relatively limited (less than 3% of turnover), and secured by the owner's property. It seemed quite unlikely that the business would suffer from a liquidity crisis.

## Accounting transparency score

Quantitative score	12	/ 20
Formal Quality Score	17,5	/ 25
Transparency Score	36	/ 55
Suspicion of manipulation	*	
<b>Total score</b>	<b>66</b>	<b>/ 100</b>

## Main issues

Light suspicion that (1) carrying value of assets has been increased; (2) owner may have drawn hidden remuneration.

The performance figures seem correct, but do not correspond to the statements made by the owner.

## 7. Financial ratios

The financial ratios calculated are further commented on below.

### Cost structure

*Table 32.6 – Breakeven calculation for CS2*

	<b>low</b>	<b>high</b>	<b>mean</b>
variable costs in % of sales (vc)	83%	85%	
fixed costs (FC)	520 476	550 655	
breakeven = FC / (1-vc)	3 153 985	3 721 575	3 437 780
latest known turnover	3 028 317	3 028 317	3 028 317
deficit	-4%	-19%	-12%

Variable costs are unusually high. Indeed, the business is operating at a rather low gross margin of 55-56% (compared with the head office's target of 63%). Staff costs (22%), delivery expenses, bank fees linked to the use of credit card, etc, add to the variable costs. In addition, the fees paid to the franchisor (management services fee and advertising fee) cost another 10% of turnover.

Fixed costs are also relatively high, although the business has rather low overheads (especially the rent). But the business is relatively capital intensive, and the high asset value generates finance costs, high depreciation and repair & maintenance costs. The amortisation of the franchise fee is an additional element. The fixed costs hence go up to 550 thousand Rand.

To cover these fixed costs with a margin on variable costs of 15%, a turnover of R3,7 million would be required – or, working on a more optimistic scenario of 17% margin and 520 000 Rand of fixed costs, a R3,15 million turnover.

With its R3,03 million turnover in 2003, the business was still 12% short of the mean breakeven resulting from this calculation. Such a 12% increase appeared hardly feasible in the context of harsh competition experienced by the restaurant. However, if one admits that the fixed costs have been decreased in 2004 (with a lower need for repairs and maintenance after the upgrade of the first two years, and lower financing costs due to the partial repayment of member's loan), then the turnover increase required to break even would have been only 4% or less, which is possible.

In any case, this calculation shows clearly the main problem of this business: it does not have enough sales. By comparison, another sample firm operating a similar business (franchise family restaurant) but in an area where competition is almost inexistent, managed to have far better sales figures with lower assets and staff members. Table 32.7 shows the difference between these two businesses:

*Table 32.7 – Compared efficiency of staff and assets between two franchise family restaurants*

	Area	Staff	Total Assets	Turnover	$\frac{\text{Turnover}}{\text{Staff}}$ (R/person)	$\frac{\text{Turnover}}{\text{Assets}}$
CS2	City (high competition)	47	502 489	3 028 317	<b>64 432</b>	<b>6,0</b>
Dir 03	Suburb (quasi-monopole)	36	351 707	4 149 424	<b>115 262</b>	<b>11,8</b>

If one measures the efficiency of a firm by the turnover that it is able to generate divided by the “means of production” used (labour and capital), Mr. H. W.’s business is only about half as efficient as the other franchise restaurant from the sample, both in terms of labour force and capital. This does not mean that Mr. H. W.’s staff is sluggish or incapable, or that the expensive equipment is underused. Rather, it suggests that when competition is intense, entrepreneurs need to put much more effort (e.g. personal attention to clients, equipment ensuring the customer’s comfort, etc) to achieve the same result. It may not be worthwhile, though, since the resulting costs may not be covered by the turnover.

Supposedly, Mr. H. W. has not considered this fact when studying the market prior to investing. He found that the food demand in this part of the city was buoyant but neglected the supply, which has a considerable impact on the firm’s capacity to generate sufficient turnover.

## Interest coverage

*Table 32.8 – Coverage ratio calculation*

	2002	2003
EBIT	-18 400	62 856
EBITDA	146 681	212 059
Interest paid (overdraft)	1 226	1 633
Interest paid (overdraft and member's loan)	101 259	98 480
<b>coverage ratio (overdraft)</b>	<b>119,6</b>	<b>129,9</b>
<b>coverage ratio (total interest)</b>	<b>1,4</b>	<b>2,2</b>

If one considers only interest on overdraft, the interest coverage ratio is very high (the operating margin, before depreciations and amortisations, covers the interest expenses 120 to 130 times). However, if one includes interest paid to the member (which is ultimately due to the owner’s bank), the ratio goes down to 1,4 in 2002 and 2,2 in 2003. If calculated on the EBIT (net of depreciations and amortisation), the interest coverage would even be under 1 (2003) and negative

in 2002.

This poor ratio reflects a combination of poor profitability and heavy financing costs due to the high level of investment required initially and the owner's need for a substantial bank loan to cover it.

Luckily for Mr. HW, the interest rate, at Prime – 2, is very low, especially when compared with all other businesses encountered, which had contracted business debt as opposed to Mr. HW's personal debt. It seems that the financial construction found by Mr. HW has exempted him from the need to pay a risk premium on a business loan.

Apart from the benefit of personal debt, it seems to be a consistent observation, that white franchisees pay less interest than the average small business. The four businesses that paid the lowest interest in the balance sheet sample are all white franchises, either in retail, petrol station, or restaurants (in 2001 respectively 14,5%, 16,5% and Prime on instalment credit – while other businesses pay up to 27% of interest for instalment credit).

## Equity ratio

Mr. HW's business was a good illustration of the limited meaningfulness of equity ratios in small businesses. Three versions of the equity ratio could be calculated:

1/ Technically, i.e. not including the member's loan, the CC's equity was negative, reflecting accumulated losses for more than R155 thousand.

2/ When considering the member's loan as quasi-equity, the equity ratio would be very high at 97% in February 2002 and 88% in February 2003, since the business has hardly any debts.

*Table 32.9 – CS2's equity ratio calculation (including member's loan)*

	2002	2003
Member's interest	200	200
Accumulated losses	-119 659	-155 283
<i>Quasi-equity (member's loan)</i>	<i>766 819</i>	<i>621 318</i>
Member's capital	647 360	466 235
Total Assets	664 534	529 489
Equity ratio (2)	97%	88%

3/ These ratios however are still misleading, since the member's loan is ultimately a bank credit, at least in part. To obtain an economically correct understanding of the equity ratio (i.e. the share of the owner's *own* resources to the business), it would be necessary to study the assets and liabilities of Mr. HW himself, which was not available. Assuming that 20% of the member's loan were ultimately financed by the owner's personal resources, as opposed to bank

capital, the equity ratio would be as follows:

*Table 32.10 – CS2's equity ratio calculation (excluding member's personal debt)*

	2002	2003
Member's interest	200	200
Accumulated losses	-119 659	-155 283
<i>Quasi-equity (assuming that 20% of mb loan is self-financed)</i>	<i>153 364</i>	<i>124 264</i>
Equity corrected	33 905	-30 819
Total Assets	664 534	529 489
Equity ratio (3) (based on a 20% self-finance assumption)	5%	-6%

This tentative ratio rests on arbitrary assumptions, but serves to illustrate that it can potentially differ widely from the ratio derived from the financial statements themselves.

## Debt maturity

Unlike many small businesses, Mr. HW's restaurant does not suffer from an inadequate (too short-term based) financing structure. Short-term debt, although slightly higher in 2003 due to an increase in overdraft, remains marginal at less than 3% of total assets in 2002 and less than 12% in 2003.

*Table 32.11 – CS2's Current Debt Ratio (CDR)*

	2002	2003
Current liabilities	17 174	63 254
Total assets	664 534	529 489
Current debt / Total Assets	2,6%	11,9%

## Working capital cycle

Working capital is not problematic for this business. The only aspect that creates a need for working capital is the need to keep some stock, but since the stock is made of mainly perishable food products, it has to turn over quickly. On average, Mr. HW's inventory turns over on a 5 days cycle.

*Table 32.12 – CS2's need for working capital*

<i>in days of turnover</i>	<b>2002</b>	<b>2003</b>
Purchases: Supplier Credit (average)	3,0	6,9
Inventory	4,8	5,5
Production cycle	0	0
Sales: Customer credit	0	0
<b>Total need for working capital</b>	<b>1,9</b>	<b>-1,4</b>

The production cycle is almost instantaneous, i.e. orders are prepared immediately. As to payment, it is also in cash so there is no need to grant clients a credit.

This need for working capital is easily covered, either by supplier credit or by a combination of supplier credit and overdraft.

In fact, the only factor that caused the increase in overdraft in 2003 was unrelated to working capital: it was the need to repay a substantial part (almost 20%) of the member's loan.

## Variability of ratios

The analysis of variability is limited since there are only two sets of financials (one statement including a comparative column).

*Table 32.13 – CS2's volatility*

<b>Ratio studied</b>	<b>Volatility</b>	
Turnover	growth +10,4%	
Operating margin	from 5% to 7%	(due to cost of sales)
Net profit ratio	from -4% to -1%	(due to cost of sales, financing costs and depreciations)
Equity ratio (1)	from -18% to -29%	(due to new accumulated losses and reduction of total assets)
Short-term debt / Total assets	from 2,6% to 11,9%	(due to increase in overdraft and reduction of total assets)
Total need for working capital	from 1,9 days to -1,4 days	

Overall, in these two years, the franchise has remained relatively stable. There has been a reasonable growth of turnover, but not as high as one sometimes sees among new businesses. The profit margins have slightly improved as a result of the slight reduction of cost of sales, financing costs and depreciations.

However, the inability of the business to stop the cycle of deficits, and the reduction of total assets resulting from the depreciation of fixed assets, have



caused a slight worsening of equity ratios. Meanwhile, the repayment of a part of the member's loan forced the business to increase its use of overdraft, which caused the short-term debt ratio to go up. Nevertheless, all these changes, which are quite predictable, remain limited and do not change the fundamental interpretation of the business's performance or financial status.

## **8. Final reflections**

Overall, this case study represents a type of business which is both low-margin (as usual in the food industry) and capital intensive (with the assets being mostly image-related). The combination of these two aspects results in the necessity of a high turnover to cover fixed charges.

Unfortunately, in spite of a buoyant location with many professionals coming for lunch and young people eating out in the evenings, the severe competition restricted the firm's chances of reaching turnover targets – explaining its lack of success in terms of growth and profit.

The business owner seemed quite capable, having notably been able to secure a low rent and low interest rate. Although there was probably some potential for more stringent management, e.g. running with a lower stock, these would have a limited impact on the bottom-line. More radical interventions like reducing staff to cut the labour costs would most likely result in lower customer satisfaction, hence more limited growth.

The profit potential, hence, appeared to be limited by the firm's context (intense competition) as well as the franchise scheme (cost and lack of flexibility).

In spite of its low success, the business appeared to be well managed and did not suffer from financial constraints, as the owner's personal loan covered most of the enterprise's needs. It is ironical that the loan has been granted on the basis of the business's earnings potential and the owner's alleged high income, although the owner has been unable to take any remuneration from his business for the two years under review.

The comparatively easy access to finance experienced by this franchise restaurant partly reflects the banks' risk aversion. As discussed in relation to Case Study 1, banks are usually more prone to finance franchises than conventional businesses, because franchise businesses are less likely to fail. In this case, indeed, there is no imminent risk of bankruptcy. However, if business failure is defined as including the situation in which a business fails to generate profits and remunerate its shareholders, as is frequent in the failure prediction literature (see for example Altman 1983:6 or for South Africa, De la Rey 1981:11), then the business can be considered failed. The most likely outcome of such failure is that Mr. HW will, in the near future, sell this business to concentrate on his DVD business and possibly seize other business opportunities.

## Annexure 33 – Narrative of Case Study 3

### Manufacturer of Protective Clothing

An illustration of a self-sufficient business benefiting from family and professional relationships, and choosing to accelerate its growth after breaking the founding partnership.

#### 1. Business Short Portrait:

Business Code Name: CS3	Form of registration: CC
Member's initials: Mr. R. A.	
Member owns 100% of capital (but only since 2003)	
Previous co-owner: Mr. J.S., until Feb 2003	
Member's ethnic background: Indian (Malay)	
Member is also manager	
Administrator's initials: Mr. A. D.	
Previous subcontractors: Mr. and Mrs. v.d.S.	
Sector of activity:	
<ul style="list-style-type: none"> <li>- Primary activity: SIC 6131 (Wholesale trade in clothing and footwear)</li> <li>- Secondary activity: SIC 3140 (Manufacture of safety wear)</li> </ul>	
Product or Service: Safety wear: protective clothing, footwear, helmets, etc	
Business concept: independent	Market: Mainly corporate, a bit private
Start-up date: 1998	
Current status: active	
Staff members: 10+1	Annual turnover: R 2.2 million
<ul style="list-style-type: none"> <li>- Managers: 1</li> <li>- Permanent employees: 9</li> <li>- Casual staff: 1</li> </ul>	Gross fixed assets : R 126 thousand => Size category: very small
Main sources of finance:	
<ul style="list-style-type: none"> <li>- Member's loan (partnership)</li> <li>- Instalment sale for vehicle (now repaid)</li> <li>- (Trade credit and Bank Overdraft are minimal)</li> </ul>	

## 2. Case Study Procedure

Initially, the business was part of the cohort provided by the bank for the balance sheet sample. It included only one set of financials, the income projection, and notes on the bank's exposure.

This business seemed appropriate for a case study because of its sector (manufacturing as well as trade) and the reasonable quality of financial information. The enterprise agreed to participate and offered me the possibility to interview the administrative officer (called 'administrator'), the head of the manufacturing unit and later the owner. I also had the opportunity to talk to the external accountant.

Overall, this case study was based on the following sources:

- Financial statements for the years ending 28 February 2003, 28 February 2002 and 31 December 2000;
- Income Statement Projection for April 01 to March 02;
- Notes from bank file on exposure in May 2001 and security requirements;
- 2 interviews of the "administrator" (senior administrative employee) and 1 interview of the owner;
- interview of the former subcontractor, now merged into the main business;
- telephonic conversation with the external accountant (he did not reply formally to my written questionnaire)

## 3. The business owners

Although the business is currently sole ownership of Mr. R.A., it can be seen as being the result of contributions from three entrepreneurs. Indeed, when Mr. R.A. decided to incorporate his business after having worked on a freelance basis, he started his CC in partnership with another member, Mr. J. S., who owned 50% of its capital. Since this second member quit the enterprise less than 1 year before the interviews, he would certainly have influenced the business's development up to now, so I attempted to collect some information on him as well.

The third person, Mrs. v.d.S., used to run a little CMT business with her husband, which was later absorbed by Mr. R. A.'s business, so that a part of Mr. R. A.'s success is also due to her.

The following sections therefore will review these three persons.

## **Mr. R. A.**

### **Background**

Mr. R.A., who is in his late 30s, has the background of a salesperson. He gained his first significant experience while working as branch manager in an audio-visual retail chain, where he managed one shop (on behalf of the owner). This is when he met Mr. A.D., who, at the time, was branch manager of another shop in the same chain. They operated the shops for 5 years (1982-1987), until the company, confronted with increased competition from Asian countries, had to close down.

Interestingly, when talking about this experience, Mr. A.D. labelled it as a “business management experience” while Mr. R. A. dismissed it as saying that it was a simple sales function.

After this, Mr. R. A. worked for 10 years (until 1997) as a salesperson in his uncle’s business, which was involved in safety wear. Mr. R. A. indicated that, compared with his enterprise, his uncle’s was a big business (probably a “medium-sized enterprise”). After these 10 years, his uncle wished to retire and sold his business to a “big conglomerate” (sic). Mr. R. A. could have staid in the company, but he was not keen on working in a big structure and preferred to be independent. Therefore, he decided to start his own business in 1996

### **Character**

The owner’s personality could be characterised by the adjectives: dynamic, affable, relaxed. He always appears doing several things at the same time, walking fast, helping a client while answering the phone and at the same time looking for some documents in his files, but always appearing perfectly relaxed with an inviting smile.

This serenity also dominated his answers to my questions: he seemed full of confidence about his business and would not linger on commenting problems. It may be a salesperson’s habit, the natural inclination of someone used to selling, hence presenting things under their most favourable angle. His account of his partner’s past involvement (see below), which is at least partly inconsistent with the information contained in the balance sheets, shows that Mr. R.A. was also able to elegantly work his way out of embarrassing questions.

### **Personal Finance**

Mr. R.A. owns a property, one motor vehicle, savings, a life insurance, but no debt except on the house.

Notes from the bank file confirm that Mr. R.A. and his former partner had a modest, but sound personal financial situation. In June 2001, the members had

been granted personal facilities by the bank as follows: Bond, respectively 161 and 175 thousand Rand, Personal overdraft, respectively 5000 and 8500 Rand, and Credit Card, respectively R500 and R1 600. (Unfortunately the data do not indicate which amount refers to which member).

Asked whether Mr. R. A. had needed to provide his personal assets to the bank as a security to access external business finance, Mr. A. D. answered by “yes, initially”. He did not explicitly indicate whether the bank still held any collateral for the overdraft. This issue will be addressed again in the section on access to finance.

## **Mr. J. S.**

### **Background and involvement with the business**

For three years, between 2000 and 2003, Mr. R. A. has shared ownership in his business with another member. However, this has not been mentioned to me in the early stages of the study, I only found indications of that in the financial statements. When I first asked Mr. A.D. about this, he seemed embarrassed and reluctant to give information about this second member. He limited his comments to the fact that both members had parted because they had “different ways of thinking about the business”. When I finally interviewed the owner, he dismissed it as something minor in the life of the business, and gave the following account.

After Mr. R. A. had been in business as a sole proprietor for 3 years, he began to think of registering as a Close Corporation. At the same period, his neighbour, who was a schoolteacher, was looking for a new occupation. For several years he had been willing to leave the teaching profession but did not know what to do. He had first invested some capital into a franchise venture that did not get off the ground, and was now looking for an alternative opportunity. An attractive factor for Mr. R. A. at the time was that, since the failed franchise attempt, his neighbour still owned a Close Corporation, registered under his name, but inactive. The two neighbours decided to team up, using the registered CC as a framework for Mr. R. A.’s business, and Mr. J. S., although he did not know the business of safety gear well, offered to invest 50 thousand Rand in the CC in order to become a 50% member.

However, according to Mr. R. A., the sum that he had proposed to invest was based on the expectation that he would recover enough from his previous franchise investment – an expectation that has never materialised. Mr. R.A. did not indicate precisely how much his partner effectively invested in the business, but he said it was very little (the balance sheets for the three consecutive years, however, show Mr. J.S.’s member’s loan as R74,8 thousand, higher than Mr. R.A.’s loan of 67,6 thousand Rand).

Mr. R. A. said that he would not have had problems with the failure to provide capital, if his partner had brought enough sales in, to grow the business.

Unfortunately, still according to Mr. R.A., Mr. J. S. knew too little of the market to be as effective as Mr. R. A. The latter therefore felt that it was not appropriate to maintain a 50/50%-ownership split, when his partner was neither contributing in capital, nor in significantly growing the enterprise.

Eventually, the partnership split during the course of 2003 and Mr. J. S. agreed to pay him out R100 thousand over a period of 10 months (this sum represented 70% of the book value of the business's equity, including both members' loans). "Not that he had ever invested that much in the business, but agh, I did not want to have a dispute with him", added Mr. R. A. He also indicated that Mr. J.S. was now starting a similar business of his own, and had taken a few customers with him.

## **Character**

Mr. J.S. was not available for interview, nor did the comments of the other interviewees betray much about the previous partner's character. Mr. R. A. insisted that there was "nothing personal" about the separation, which was a purely business-driven decision – adding that they remained "good neighbours" until Mr. J. S. moved to a new area. Mr. A.D., meanwhile, had suggested (with some embarrassment) that there had been divergent views on the business.

The embarrassment of Mr. AD, the fact that Mr. J.S. failed on a franchise venture while still employed as a teacher, that he obtained a 50%-share in a business whose activity was foreign to him, and may have been unable to pay up his share, and his apparently too high compensation upon resignation, and finally his recent competition with his former partner, suggest that he may have been a difficult business person – but the data are too meagre and one-sided to confirm this impression.

He may just have been an unlucky entrepreneur. And the high price paid at resignation may just indicate hidden reserves in the balance sheet (e.g. due to the rapid depreciation of assets) and a high goodwill to reflect the growth prospects of the business.

## **Personal financial situation**

From the assets of Mr. J. S., which could have been used as collateral for the business, Mr. R.A. mentioned only a life insurance policy worth R15 000.

Notes from the bank file, though, revealed that in 2001 the bank was securing its facilities through two life insurance policies worth R140 000 each (supposedly, one for each member) as well as two mortgage bonds, the smallest of them being for R161 000. This would suggest that, in terms of his assets, Mr. J. S. would fall in the same LSM category as Mr. R. A.

However, the fact that he made heavy losses in his previous venture would also suggest that he had debts and his assets may have been encumbered, unlike Mr. R.A.'s assets. The bank file did not reflect this.

## **Final words**

Mr. R. A. tried to convince me that his partner's resignation has not hurt the enterprise. Although this second owner is now starting a similar business of his own, and has indeed taken a few customers with him, his capacity as a start-up is still limited and in fact, he is buying from Mr. R. A.'s business, hence remaining a "friendly competitor".

When I asked whether the departure of Mr. J. S. had had an impact on the amount of collateral available and the opinion of the bank on the business, Mr. R. A. answered that there had been only complications of technical nature: it had taken two or three months for the bank to release the collateral that they were holding on Mr. J. S., but they had not reduced the overdraft facility. They had simply asked for new projection figures for the business, to satisfy themselves that the business would still go in the right direction.

## **Mrs. and Mr. v. d. S.**

Mr. and Mrs. v.d.S. are the in-laws of Mr. R. A., and have, for 7 years, run a CMT<sup>31</sup> business and worked as subcontractors for Mr. R. A.'s business. (Mr. R. A. and Mr. A. D. both referred to Mr. v.d.S. as the head of the manufacturing, although when I wanted to talk to him, he just referred me to his wife, who spoke as if the business had always been hers; the way that her husband was occasionally interrupting to ask for her advice seemed to confirm this).

Mrs. v.d.S., a woman in her late fifties, keeping her head covered in the Muslim way, seemed to be driven by a sense of discipline as well as loyalty to the family.

She has worked in the sewing sector for many years, and gave the impression of someone who has worked hard for all her life in order to come to where she was now. Indeed, she had not much understanding for what she perceived to be sluggishness or exaggerated ambitions of some of her staff. "Nowadays people are funny, everyone wants to be a boss", she said with a smile. However she was extremely friendly and humble, apologising because what was left of her previous business was so small.

She was not driven by any ambitions of size, though, preferring to keep good control of a small entity rather than enduring the stressful life of an SME manager, with labour regulations and marketing problems. Asked what she would do if her previous clients came back to her and asked her to work for them again, she answered that it had actually happened, but she was "not prepared" ("my husband is over sixty now, so he is becoming irritable", she said with a smile).

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<sup>31</sup> "Cut, Make and Trim", i.e. a micro-operation involved in standard textile manufacturing.

## **4. How the business started**

### **The start-up phase**

Unlike the franchises CS1 and CS2, Mr. R.A.'s business started very small, as a home activity, described as "cutting plastic sheets". This required no equipment other than scissors and therefore there was no substantial investment done initially. Whenever Mr. R.A. was asked to provide items that he could not produce himself, he would outsource them.

Understandably, the preferred subcontractor was the CMT business owned by his in-laws. By outsourcing his business within the family, Mr. R.A. was able to obtain preferential conditions especially regarding payment terms.

The only financial constraint for Mr. R.A. initially was working capital, essentially to buy the materials he needed to carry out large orders, and to pay subcontractors. He estimated that in the first year he invested about R20 000 of personal resources into the business. To that effect, he mainly used his personal credit card, and he occasionally needed to stretch his credit card limit over up to six months. He commented: "It is surely not the way it stands in the textbooks, you should not use your personal credit card for the business, especially for such a long time. But I knew it was a good client, I knew I would make a good business out of it – and eventually one day my bank sent me a Gold credit card because I was using it so much".

He added that his wife had a permanent employment, which made it easier for him to use his personal savings for the business.

The v.d.S. business also started small without any substantial initial investment. Before starting her CMT, Mrs. v.d.S. had been employed by a small textile manufacturer, which closed down in the 1990s. Her previous employer allowed her to use his equipment for her own purposes until she could afford to buy her own. She could therefore start without the financial burden of equipment finance. As time went, she could accumulate a bit of income and later invest in her own sewing machines and cutting table.

### **The growth phase**

Little by little, Mr. R. A.'s business expanded and in 1998, after running from home for a year, he could afford to rent his first office, whose purpose was essentially to accommodate his phone/fax and answering machine, since he himself was "never there", having to organise production, orders and deliveries. After another year, he moved again to bigger premises, bought his first sewing machine (a second-hand machine which he paid cash, obtaining a discount from a subcontractor who was not using it any more), and employed his first receptionist and machinist. At the time he was still doing most of the deliveries himself, with his personal vehicle, but he could also arrange with some of the clients, with whom he stood in a personal relationship, to send their own driver



to collect the goods from his premises.

From then on, he gradually improved his manufacturing and delivery capacity.

## **The move into the formal economy**

In 2000, Mr. R. A. entered a partnership with Mr. J.S. and started operating under his Close Corporation. This has enabled a new growth phase, with the employment of other staff members, as well as investments in other assets as follows:

- a modest delivery vehicle, which is currently used as occasional extra delivery capacity – but stands still most of the time. The vehicle was bought cash and at a discount from another relative;
- a delivery van, bought in 2000 and representing the business's first longer-term debt<sup>32</sup>. The instalment credit facility (ISA) granted for this purpose amounted to R 40 000 and interest was charged at prime + 2% (source: bank file, May 2001). However, the facility seems to have been only partly used since the vehicle, bought on an auction, was paid R30 000 (source: interview with Mr. R. A., who however suggested that the vehicle's real value was R45 000). The business repaid the credit in only 24 months, because "it was such a small amount". The December 2000 financial statements include an ISA liability for R11 762, secured over a vehicle with a book value of R22 332. The low amount of R11 762 suggests that either a significant part of the vehicle's price (R 30 000) has been paid cash by the business, or the firm has been able to repay a large portion of the funds borrowed in a short time.
- later, computers and printers to enable screen-printing on the manufactured goods; according to information given by Mr. A. D., that computer equipment was financed on hire-purchase; however, the only instalment sale agreement reflected in the financial statements concerns the delivery van (see below).

A further investment happened when the business informally merged with the CMT business owned by Mr. and Mrs. v.d.S.: no price was paid, as the couple formally remained owners of the machinery, but they became employees of Mr. R.A.'s business.

Although developing, the manufacturing unit was still modest and neither Mr. R.A. nor his usual subcontractors could technically manufacture the sophisticated products which customers were increasingly asking for. In order to satisfy the clients, Mr. R.A. had to provide these products nevertheless. This is how the share of retail increased gradually.

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<sup>32</sup> Apart from the computers and printers, which may have been bought on hire purchase, but are not reflected in the statements.

## **The new phase / strategic plans**

On my last interview with the business owner at the end of May 2004, he informed me that he had just bought new premises.

He chose to buy an old house, i.e. residential property, rather than industrial property because the latter was too expensive. He would therefore need to reconvert the house in order to make it suitable for their purposes. Mr. R.A. declined to comment on the legal risk with regard to the rezoning of the property from residential to commercial.

Although he had paid the deposit, he was still not entirely sure about the financing, as he was “still busy approaching the bank”.

Mr. R. A.’s strategy is to use the new premises to expand the business into a medium-sized operation, with an extended manufacturing capacity as well as larger space for storage and offices. This is a bold move.

## **5. Business model and operations**

### **Business model**

The business is involved both in manufacturing and in sourcing/retail, but the share of manufacturing has gone down to approximately 40% of turnover.

Over its lifetime, the business has used various arrangements for its manufacturing, from the own cutting of the owner and the sewing by his first employee to the outsourcing, especially to the in-laws. At the end of 2003, the business has eventually absorbed his former subcontractor, thereby integrating a manufacturing capacity into its enterprise. Mr. R. A. is hence formally employing his in-laws and their staff. Manufactured goods are mainly aprons, as well as overalls, cuffs, and butcher caps. While these are relatively ordinary products, the screen-printing capacity enables the business to personalise these items and add value to them.

Apart from those products, the business sources and supplies a considerable variety of safety gear, with a wide range of clothing and footwear, as well as protection for the eye, the head, the ear and the hands. According to the advertising printed on his delivery vehicle, he is also able to supply cleaning materials, packaging and tarpauline.

The inclusion of manufacturing into the business has increased the staff count to 10 employees (lower than the figure of 13 indicated initially by Mr. A. D.), of which 4 are in the “factory” (CMT), 2 are preparing the products (screen-printing, packing and organising the stock), 1 works as a salesperson, 2 are responsible for the administration and books, and 1 is doing the deliveries.

## Premises

Premises have always been a problem for the business. According to Mr. A. D., the business has moved to new premises about 20 times in 8 years (this has not been confirmed by the owner). This happened especially in the early stages of the businesses, while in the last 3-4 years, the business has moved only once.

These moves were mostly caused by the growth of the business requiring to frequently increase the space available, as well as the shortage of office space in Maitland. It is important for the business to remain in Maitland, close to their customers.

At present, the business uses two units in an industrial park in Maitland: one unit contains the office (three people sitting on approximately 15 square meters) and the stock of finished goods, while the other unit accommodates the manufacturing department and an office. While the front unit is packed, the space in the factory is underused. Although the office space was tight, with much movement, the atmosphere in the business was methodical and organized. The office was neat and the filing looked tidy. In the warehouse behind the office, the stock was hanging neatly.

There were signs of bustling business activity as people (supposedly the driver and customers) came in and out, presenting sheets at the main counter, walking through the office into the warehouse and back, loading merchandise into their vehicles. They were always greeted warmly and – it seemed – served efficiently.

The dissatisfaction with the current premises has been a recurrent topic in interviews, with the rental, at R5700/month, being qualified as “killing” (source: first interview with Mr. A. D.). In addition, the location was in a rather low-traffic zone, hence less exposed to potential clients as previously, when they occupied premises directly on Voortrekker Road. The plan was, as Mr. A. D. told me, to try and acquire industrial property in order to move to own premises towards the beginning of the following year. But according to Mr. A. D., this was not yet on the agenda, as they would need another six months or so to sound the market, compare various options, plan what would be required and approach the bank.

I was therefore surprised to hear, on my last interview with the business owner at the end of May 2004, that he had just bought new premises – choosing to buy residential property, which was more affordable than industrial property but posed a legal risk in terms of rezoning. Since the financing of the acquisition was not yet arranged, the acquisition of these premises was still tentative (and reminiscent of CS6’s unsuccessful attempts to obtain loan finance for a purchase of property).

## Assets

Owing to the previous subcontracting arrangements, the manufacturing

equipment (essentially one cutting machine and two sewing machines, as well as smaller tools) does not belong to Mr. R. A.'s business. After the dissolution of Mr. and Mrs. v. d. S.'s CMT business, the machines remained private ownership of the couple, who are now permanent employees of the business. They however decided to put the equipment at the disposal of Mr. R. A.'s business (for free).

Other assets include the two delivery vehicles, the computers and printer, furniture and fittings.

## **Management style and philosophy**

Mr. and Mrs. v.d.S. have run their CMT business defensively. Although they did not grow beyond their micro enterprise size, their cautious management approach has paid off, since they have been able to acquire machinery.

As to Mr. R. A., he was more enterprising and ambitious. There were several indicators to show that he had a strong focus on turnover growth:

- He would have forgiven his partner's inability to bring in the necessary capital, if this partner had been able to bring clients.
- He would not consider increasing his prices to become profitable, preferring a strategy of improving his margins by sourcing better.
- If he had surplus cash, he would rather spend it in increasing stock (with a view to improve sales) rather than saving it in preparation for future larger investments.

The priority placed on growth in 2003-4 may just come from a need to catch up, since turnover growth in 2001-2003 has been far lower than initially budgeted (possibly caused by a loss of focus during the last years of his partnership with Mr. J. S.). In addition, Mr. R. A. was certainly not trying to grow his turnover at any price – in particular, he was reluctant to contract debt to finance his growth. He referred to growth as a slow and steady process, which “takes time”, and he wanted to “keep it manageable”. He also repeatedly distanced himself from “the guys that start up and fall along the wayside”.

However, he sounded unaware of the capital costs implied by his growth, and did not seem to appreciate that such growth (especially with the new investments envisaged) was likely to raise his fixed costs, requiring him to watch his gross margins carefully. Even the fact that he had, up to now, run at a zero-profit level, not being able to build up equity, was not a worry to him. He suggested that he was paying himself a salary and did not need profits beyond that: if he had a good month, he would rather use the cash surpluses to invest in stock.

As to internal management style, Mr. R. A. was a ‘hands-on’ manager. Having initially run the business entirely by his own, he would still feel involved and concerned by every function within the enterprise. The fact that many of his employees are still new in the business accentuates the need for his multi-disciplinary backing. However, he remains primarily a seller, seeing his main

role in the long run as negotiating prices with clients and suppliers as well as defending his business's cause with the bank.

## **Market and Competition**

The business's market has been extended gradually. When the business started initially, it was specialising in protective clothing for the food industry, and had a rather small list of clients. But diversifying the client range has been an early priority of Mr. R. A. Therefore, the range of products supplied was widened to include boots, helmets etc. This enabled to attract new corporate clients and even some private clients who would just "walk in" for once-off purchases, for example boots. The business hence sustained some growth in the first 3-4 years.

In spite of this diversification, the business until about 2003 was still depending on a few large customers. It even came to stagnation in 2002-03. It is only after engaging a sales representative in 2003 that the customer base could be really expanded and the dependence reduced. The business intends to grow further by accessing electronic trade databases (in 2003 the business acquired a license for "tradeworld sourcelink"), launching a new advertising campaign (advertising expenses 3000R in 2003-04 after 0 in previous year), and in future participating in tenders.

The competition is quite intense. Mr. A. D. indicated that they are often asked for quotes, which do not lead to a contract, but they have not yet lost existing contracts to competitors. He believes that the quality of their service brings loyalty.

Mr. R. A. confirmed that the positioning of his business against the competition is quite favourable. He perceives a split in the market, between "the other small guys" and "the bigger guys", and tries to use it to his advantage. The "Safety Equipment and Clothing" section in the Cape Town Yellow Pages illustrates this split: it lists 27 enterprises, of which 7 have a "display advert": they are probably generally the larger ones.

Initially, Mr. R. A. used to rely on existing contacts, keeping a small list of preferred clients. But, from 2003, he has increased his ambition and tried to play "in the bigger guys' yard". He suggested that this was not as difficult, since clients tended to be unsatisfied with the larger companies, which could not give the level of service and personal relationship that a smaller business offers. He added that staff in the large companies was changing frequently, and the new employees felt often unable to cope with the big amounts of business coming in. Meanwhile, the smaller competitors were fragile and a number of them had failed recently. By placing himself "in-between", Mr. R.A. hopes to be a more attractive alternative for customers.

## **Costing, Pricing and Credit Policy**

### **Costing and Pricing**

The pricing seems to be dictated by competitiveness considerations. Mr. A.D. says that, when the business started, it had to work with very low margins in order to gain an entry into the market. Mr. R. A. confirmed that he would initially work on a 20% margin, which was easy since he had no overhead costs.

Since then, although they have established themselves as a credible player and have built up fixed costs, they have not significantly increased their margins: Mr. R. A. assumes that the average gross margin is approximately 30%, that is 15 to 20% for retail and 50% for manufacturing. He is not planning to increase his prices any further, expecting that his clients would penalise him for that, but seeks to improve his margins by lowering his costs of materials (e.g. by taking larger orders). The financial statements confirm this evolution (although the gross margin in December 2000 seems to have been an outlier at almost 40%): the margin on the cost of materials improved from 24% of turnover in 2002 to 29% in 2004.

From Mr. A. D.'s comments, it seemed that there was an intention to strategically re-think the pricing and product offer. Up to now, everything has been intuitive and market-driven. But the growing activity creates a need to review the potential of the various lines of activity and concentrate on those that are most profitable – among other things, pushing the share of manufacturing up. This was one of the major tasks assigned to Mr. A. D. when he was employed early in 2004.

When he gave me his second interview in May 2004, I asked him about the progress made in that analytical process. He was still unable to give any more details, except that the process was still “only starting” – and cited examples about the difficulty of doing costing exercises when the cost of materials itself is so volatile. There is a constant need to review suppliers and it often happens that new entrants on the market offer the same products at 30% discount from established suppliers.

5 months after his start in this job, the apparent lack of progress of Mr. A.D., who pretended to have been employed to carry out strategic analyses, raises several questions. Has the “administrator” needed so much time to get to know and understand the business, although he pretends that he knew the enterprise well before joining as a result of his friendship with its owner? Has he been pulled into the everyday concerns of the business, like the review of supplier prices, hence having no time left for his analyses? Has he found some weaknesses which he preferred not to mention in the interview? Has he made some suggestions which did not meet the approval of the owner-manager? Only conjectures are possible.

With the difficult birth of a management accounting system, the only costing that

I could notice during my visits was rudimentary, and concerned self-manufactured products. Mr. v.d.S., at the factory, suggested that for each new product he has to indicate the time spent on the cutting and sewing of each item, which is used in the pricing. This effort to estimate material and labour costs is commendable but, if it is restricted to self-manufactured products, which represents only a small share of overall business, it would be insufficient to found a full management accounting system.

### **Credit policy**

There is some contradiction in the data about customer credit. From the interviews it would seem that Mr. R. A. has had to grant credit to his customers “from day one”, although initially he tried to privilege clients whom he had (in his previous job at his uncle’s business) identified as paying promptly. He was therefore always concerned about having a number of clients paying COD in order to reduce his need for working capital. But even then, the majority of clients were buying on credit.

However, the balance sheets (except for December 2000) do not reflect such significant customer credit. The balance sheets ended February 2002 and 2003 did not mention any debtors / accounts receivables, while on the balance sheet for February 2004, the “Sundry debtors” represented only 1.1% of sales, corresponding to an average payment cycle of only 4 days. Neither Mr. R. A. nor Mr. A. D., nor the accountant, could explain this contradiction.

While initially, Mr. R. A. granted credit only to clients that he knew well from his previous employment, he later had to expand this service to other customers as well. This decision did not come without a learning curve. In the last year, the business experienced two severe losses related to customer defaults, for amounts of R30K and R40K respectively (that is, taken together, 3% of the annual turnover for 2003).

According to Mr. R. A., one of them was a client whom they trusted, because they “had been dealing with him for a while”; the client left the country without settling his last debts – there is little hope to recover anything. The other case is an enterprise that is still operating, and after intervention of the attorneys, an agreement has been reached by which the business would repay his debt in monthly instalments of R1000. So far, the business has recovered R5000, and Mr. R. A. hopes that the client will keep paying for the next 3 years.

The business has learned lessons from these defaults and have now strengthened their credit application procedure, using forms and checking trade references.

### **Profitability and Member's remuneration**

As for CS2, the profitability of this safety wear business was somewhat equivocal – with a contradiction between the owner’s apparent satisfaction and the accounting figures, which were not extraordinary.

*Table 33.1 – CS3 summarised income statement*

	<b>Dec 2000 (10 months)</b>	<b>Feb-02</b>	<b>Feb-03</b>	<b>Feb 2004 (draft accounts)</b>
<b>Turnover</b>	1 163 955	1 759 219	2 272 423	2 856 588
12-months equivalent	1 396 746	1 759 219	2 272 423	2 856 588
cost of sales	704 578	1 344 101	1 656 902	2 042 439
salaries	41 883	66 890	102 693	143 005
rent	20 257	70 524	77 040	86 448
motor vehicle expenses	67 890	40 904	64 728	76 240
Interest earned	120	11	0	0
Interest paid	1 728	5 932	6 181	6 606
Members' salaries*	140 000	110 000	105 000	180 000
Profit for the year (before tax)	69 918 / -1 698**	-596	-1 492	179 483***
Tax (as reported)	0	0	0	0
<b>Profit after tax</b>	69 918 / -1 698**	-596	-1 492	179 483***

*Notes:*

- \* *The members' salaries are shared between two members in the first three years.*
- \*\* *In spite of a profit of R69 918 in the ten months ended December 2000, the retained income calculation for February 2002 suggested that the business closed its first year with a loss of R1 698 in February 2001.*
- \*\*\* *The accountant admitted in his interview that the profit for 2004 would not remain as high once the draft accounts would be finalised.*

The accounts for 2002 and 2003 show a positive operating profit but a negative bottom line, after considering financial costs and the remuneration of members, which is relatively modest and has decreased between 2000 and 2003.

In 2004, after the departure of the second member, the business seems to have come back to profitability, paying his single member as much as 180K of salary in 2004 and still generating a profit of 179K. However, there are several indications that this result is not real but the accounts were tuned for the purpose of the loan application with the bank.

Asked whether they were satisfied about the business's profitability, Mr. R. A. (member) and Mr. A. D. (administrative officer) had rather different responses.



According to Mr. A. D., the business was generally profitable, but they were never satisfied, always trying to do better. Asked for more details, Mr. A. D. acknowledged that in the past 3 years the results were indeed just enough to pay the owners' salaries, and there had been no possibility to accumulate equity – although the business would need it, especially since it is planning to buy premises. “It is only in the past few months, that things are beginning to escalate”, he added. The surge in turnover generated by the new sales representative will hopefully bring additional profit.

Mr. R. A., meanwhile, said he was fully satisfied with the profitability, and saw no need to generate a profit since he was paying himself a sufficient salary and did not need any dividends. He did not seem to see that, especially for the purchase of property, the business would need a strong equity base, which it did not currently have.

Again, the contradiction between the losses illustrated by the official figures (at least up to 2003) and the member's satisfaction raises questions. Mr. A. D. insisted that there was no tax-driven policy of concealing profits. It therefore seems more probable that the member, as a borne seller, was exaggeratingly positive in the interview. There is also a possibility that he found alternative ways of remunerating himself, e.g. shifting personal expenses on to the business's account. This possibility will be further explored under the heading “accounting transparency score”.

## **6. Financial management**

### **Sales and Cost Capture and Monitoring**

The financial management capacity of the business is quite limited, with only 2 staff members working in the administration (the secretary and the newly appointed ‘administrator’). The records have always been purely manual in the past, and the severe lack of space means that it is unlikely that records have been filed thoroughly (The little office showed only limited cupboard and shelf space for files). However, the business has acquired a new PC in January 2004, which will be used to support the financial management.

There seems to be no systematic forecasting and monitoring taking place on a regular basis. However, projections are prepared occasionally especially at the bank's request – that is, in 2000, when the overdraft facility was granted, and in 2003 when the second partner left the enterprise. I specifically asked whether any forecasts or budgets had been prepared before engaging on a more aggressive sales strategy (employing a sales representative, using electronic client databases). Mr. R. A was rather vague about this, suggesting that (a) the various marketing decisions that were taken were nothing drastic, and were rather guided by instinct, (b) the salesperson was engaged on the condition that he would generate enough turnover to pay for his costs within 6 months – which

did happen, and (c) whenever formal forecasts were required, the accountant would handle it.

## **Accounting and setting up of financial statements**

Due to the limited administrative capacity, the business is reliant on its external accountant, who comes in once a month to collect records and update the books. According to Mr. A. D., the co-operation with the external accountant is going well. He is not aware of any problems. He reserved comments on the cost of accounting, which represents 3% of gross margin.

The accountant similarly indicated that the co-operation with the business was going well and that he could always obtain all the documentation that he felt he required for the purpose of setting up the statements.

There are several indications that this general satisfaction comes from a lack of interest (unless it is a shared interest for inexact accounting) rather than an ideal co-operation. For example the question of debtors shows that the accountant has not correctly reflected customer credit, but this did not raise any concerns from the member or the administrative officer. Even more characteristic is the fact that for the financial year ended 29 February 2004, the accountant has prepared very optimistic financial statements, which – when asked for explanations – he dismissed as being “just pro forma accounts which the owner wanted in order to apply for a credit at the bank”. He confirmed that he would, in due time, prepare a final set of statements to be sent to the Receiver. If the accountant occasionally prepares “pro forma accounts” to serve the immediate needs of the business, without indicating in any way that these are not final accounts, then one cannot exclude that the accountant also uses opportunistic accounting for other purposes.

If opportunistic accounting has been used for tax-saving purposes, then some cost items might be inflated in the 2002 and 2003 statements. A possible confirmation of this hypothesis is the fact that the rental expenses recorded on the income statements for 2002-2004 is consistently and significantly higher than the R5 700/month which Mr. A. D. had indicated. The difference is 13% in 2003 and 26% in 2004.

Within the enterprise, the lack of interest for accounting details and financial statements was manifest. As for many small businesses, Mr. R. A.’s enterprise does not keep a copy of financial statements in its offices. The only statements that were sent directly from Mr. R. A. to me, were the 2004 statements, which Mr. R. A. had kept in his files, because he needed them for his loan negotiation with the bank.

The administrative officer does not know to whom the financials are being sent, in particular, whether the bank receives regular accounting updates: he says that the accountant handles that.

## Accounting transparency score

The analysis of the four sets of financials available yielded a relatively poor score of the business, as follows:

Quantitative score	13,5	/ 20
Formal Quality Score	16	/ 25
Transparency Score	20	/ 55
Suspicion of manipulation	*	
Total score	49*	/ 100

The main issues that emerged from the analysis of the reliability of accounting figures were the following:

- The 2004 accounts are not prepared with care (e.g. inconsistencies between balance sheet and income statement with regard to depreciations and stock); they are clearly done to convey the bank a certain impression (high profit, high member's remuneration);
- The provision for bad debts related to both customer defaults (for a total of app. R70 000) was not reflected in the 2004 statements. This cost item would significantly reduce the (pre-tax) profit for 2004, unless the member's salary gets reduced accordingly.
- The earlier financial statements seem to be prepared with more care but there are contradictions between the figures and verbal explanations, especially on working capital. Accounts receivable and payable, stock and cash balance do not correspond to interview evidence.
- The profit for December 2000 is not confirmed in February 2001. There is also a possibility that profits for 2002 - 2003 have been minimised for tax reasons.

## Working capital and Cash management

The evidence from the financial statements regarding the working capital cycle contradicted the interview data, suggesting either frequent strategic changes in time, or (more likely) a weakness of the accounting process.

## Suppliers credit

According to all interviews carried out within the business, the business is currently buying most of its supplies on 30 days credit, an advantage which it has acquired through the years, by gradually improving its relationships to its suppliers.

As Mr. R. A. said, from the beginning he tried to buy on credit, but initially, suppliers would only give him low credit limits. He had to rely on his credit card and later on the bank overdraft. Fortunately, the access to supplier credit increased with time, and is not a problem any more. The business occasionally pays suppliers cash, but this is quite rare and motivated by the management's own choice (because they can obtain a better price), or to secure some materials that are vital for the business, or because they trade with new suppliers which do not offer credit.

According to Mr. R. A., he currently buys app. 25% of his materials COD (especially when he needs to buy specific items, that are not part of his usual business, e.g. if he gets an order for golf shirts or corporate shirts), while the rest is on 30 days.

From the balance sheets emerges a completely different picture (see Table 33.2). The accounts suggest that in the early stages of the business (2000 is the first year of operating as a CC), accounts payable were amounting to over R90 000. If one assumes that these accounts payable corresponded to purchases for the 10 months between March and December 2000, this would correspond to an average credit of 38 days – rather unusual for a young business. Of course, it is possible that the business has been late payer, stretching the credit limits granted by suppliers because of liquidity constraints. However, at the same date the cash balance was comfortable, not justifying such late payment.

Meanwhile, the accounts payable recorded in the following balance sheets, especially for 2003 and 2004, do not reflect the 30 days payment terms that the interviews mentioned. The average payment terms as calculated from the accounts payable and purchases went down from 19 to 2 days and back to 5 days in 2004.

Neither the owner nor the administrative officer could see any reason why the accounts payable were so low and could not think of any seasonal effect affecting these.

*Table 33.2 – Accounts payable as accounted for*

	<b>Dec. 2000</b>	<b>Feb 2002</b>	<b>Feb 2003</b>	<b>Feb 2004</b>
Accounts payable	90 048	71 328	8 332	41 328
AP in % of purchases	12,8%	5,3%	0,5%	2,0%
Average payment terms in days	38 <sup>33</sup>	19	2	7

Asked for the reason of this contradiction, the accountant pretended that up to now, the business was almost always paying suppliers on delivery or on receipt of invoice. It was apparently Mr. J. S., Mr. R. A.'s former partner, who used to

<sup>33</sup> The result of 38 days is based on the assumption that the period closed on 31 December 2000 comprises only 10 months.

settle all invoices quickly. Only since this member's departure has the business started to make more use of supplier credit.

Although not expressively mentioned, the rationale of the accountant's clarification could be that Mr. J.S.'s departure would have put a strain on the business's liquidity (possibly because the loss of some collateral caused the bank to reduce the overdraft facility), forcing Mr. R.A. to delay the settlement of invoices. This explanation is only partly convincing. First, according to Mr. R.A.'s comments, his partner himself was not very liquid (and his member's loan has not changed in the three years of his membership) nor has his departure caused a change in the overdraft limit. Secondly, it is surprising that the external accountant should know better about Mr. J.S.'s payment habits than his partner himself. In addition, if Mr. J.S.'s departure had caused Mr. R. A. to start practising the 30 days payment which he indicated, then this should be reflected in the accounts by a significant increase of accounts payable in February 2004, which is not the case.

It seems more probable that the communication on outstanding invoices between the business and its accountant has been incomplete, so that the accounts do not reflect the real extent of supplier credit.

## **Stock**

For inventories, similarly, there were contradictions between the figures observed and the answers collected in the interviews.

According to the administrative officer, the ability to keep stock has been reduced since the move into new premises during the course of 2001. The lack of space simply compels the business to keep stock at its minimum.

According to Mr. RA, on the other hand, there is no intention to keep the stock low; on the contrary he is trying to build-up certain lines. Whenever he has excess liquidity, he buys stock so as to be better prepared to serve clients' orders. He prefers to buy large quantities in order to benefit from discounts and also reduce transport costs for the elements that come from out of town. He indicated that on average, he was trying to keep his stock at R200 000.

The financial statements were more in line with Mr. A. D.'s than M. R.A.'s statement. They showed a level of stock that is far below the R200 000 mentioned by the owner, and fluctuating between 55 and 86 thousand Rand, but consistently decreasing in relation to the turnover. Hence, if the accounting figures are right, the stock turnover went down from about 1 month to about 10 days, which significantly reduced the need for working capital.

*Table 33.3 – Inventory as accounted for*

	<b>Dec. 2000</b>	<b>Feb 2002</b>	<b>Feb 2003</b>	<b>Feb 2004</b>
Inventory	<b>73 296</b>	<b>86 414</b>	<b>62 155</b>	<b>55 385<sup>34</sup></b>
(in % of turnover)	10,4%	6,4%	3,8%	2,7%
(in days of turnover)	31 <sup>35</sup>	23	14	10

This accelerated stock turnover would also explain why the business has been able to pay its suppliers more quickly in the latest years.

### Customers credit

Again, there is a contradiction between the financial statements and the comments given by the member and the administrative officer. According to the interviews, the business has always granted 30 days credit to most its customers, although initially it tried to collect payments more promptly when possible to ease the liquidity burden.

In addition, the interviews revealed that in 2004, two accounts to customers went seriously overdue, for a total value of approximately R70 000.

Except for December 2000, the financial statements give a widely different picture, with no bad debts and even no debtors, except a very low amount in February 04 corresponding to 4 days of turnover.

*Table 33.4 – Accounts receivable, as accounted for*

	<b>Dec. 2000</b>	<b>Feb 2002</b>	<b>Feb 2003</b>	<b>Feb 2004</b>
Accounts receivable	79 000	0	0	32 659
(in % of turnover)	6,8%	0,0%	0,0%	1,1%
(in days of turnover)	24	0	0	4
Bad debts	0	0	0	0

Again, it is not clear what causes this discrepancy, but the most likely assumption seems to be a miscommunication between the business and its external accountant. If one assumes that the representation of accounts receivable, accounts payable and stock is incorrect, it becomes difficult to obtain a good idea of the working capital cycle.

<sup>34</sup> This is the “closing stock” as read in the 2004 Income Statement (Cost of sales calculation), which does not correspond to the 2004 balance sheet (the latter showed precisely the same value as for 2002, R86 414).

<sup>35</sup> The result of 31 days is based on the assumption that the period closed on 31 December 2000 comprises only 10 months.

Assuming that the average delay of supplier settlement equals the average duration of normal customer credit at slightly under 30 days, then the need for working capital would mainly come from the stock (which, if equal to R200 000 as suggested by the member, would have a cycle of approximately 35 days), the production cycle (a few days), as well as bad debts. The excess of member's loans (the only source of long-term capital in the balance sheet) on fixed assets, in February 2003, is less than R80 000, hence it is unlikely to cover this need for working capital. One would therefore expect a significant use of the overdraft facility.

### **Cash and Overdraft**

There is some confusion about the exact amount of the overdraft facility and the date it was granted: according to Mr. A.D., the limit of the overdraft facility is currently R80 000. Mr. R. A. first mentioned an amount of R100 000, granted in 2001, then – prompted by my question – corrected himself to R80 000. This contrasts with the data from the bank file, in 2001, which mentioned an overdraft facility of R100 000. A possible explanation for this contradiction is that the bank, left with lower amounts of collateral after the departure of Mr. R. A.'s partner, may have reduced the overdraft limit to the business. Mr. R.A. assured, though, that the facility had never been reduced.

In any case, according to Mr. R.A. and Mr. A. D., the limit is never really fully used. It was essential in the early stages, when access to trade credit was rather limited. Now, with supplier credit balancing customer credit, the meaning of the overdraft is mainly to enhance the firm's buying power, and is therefore used only occasionally for big purchases.

The three balance sheets available do not show any use of overdraft at the dates of closure of the financial years. Instead, the balance sheets suggest cash surplus of 64, 43 and 21 thousand Rand respectively, and as much as 83 thousand Rand in 2004.

These high positive cash balances are consistent with the assumption that customers pay on delivery and that the stock is very low (as reflected in the accounts), but they are surprising if one supposes that customer credit and stock turnover are as indicated by the member (see above). In this case one would expect a full utilisation of the overdraft facility.

In fact, according to the accounts, the interest charges are quite high, suggesting that, if the business was paying Prime +2% (which was found to be an average interest rate on overdraft among SMEs in the sample), the average utilisation of overdraft may be in the region of R30 000 to 40 000.

*Table 33.5 – Estimation of average overdraft from interest paid*

	Period ending Dec. 2000 (10 months)	Period ending Feb 2002	Period ending Feb 2003	Period ending Feb 2004
Interest paid	1 728	5 932	6 181	6 606
approximate average prime rate over the period	15%	14%	16%	14%
Theoretical average overdraft utilisation @ Prime+2%	-11 695	-37 006	-34 339	-41 288
Cash (Overdraft) at end of period	64 208	43 048	21 339	83 048

*Source: Interest paid from income statements, cash (overdraft) from balance sheets, prime rate from SARB, average overdraft utilisation as calculated.*

Mr. A. D. confirmed that R30 000 to 40 000 corresponded approximately to the average level of utilisation of the facility. Neither Mr. R. A. nor Mr. A. D. knew exactly the interest rate paid on the overdraft, but Mr. A. D. suggested that in his opinion, the cost was acceptable, because they “did not really have a choice”.

## **The business’s long-term financing scheme**

### **a. Member’s loan**

As Mr. R. A. said, his member’s loan “was always there”. Unlike many businesses where the member’s loan changes almost on a daily basis each time the owner pays an invoice on behalf of his business, Mr. R.A.’s and his partner’s loans were written on the books at the start of the CC and have been kept constant from 2000 to 2003. Only the 2004 balance sheet suddenly sees a drop, with Mr. J.S.’s loan being withdrawn and Mr. R.A.’s loan decreasing from R67 585 to R 44 734.

Mr. R. A. could not comment on this change, nor did he seem aware of the amount of his loan to the business. Asked whether he would ever want to increase or decrease his contribution to the business, he answered that at present he saw no need for such intervention but - if he ever needed it - he would need to talk to his accountant.

Asked for more details, the accountant said that the members loans corresponded to investments in kind made by the members initially, corresponding to equipment and other assets brought in. Indeed, the gross value of fixed assets in 2000 (net of the share of the vehicle that was financed through instalment credit) was approximately R117 000, which represents a large portion of the R142 000, the total amount of member’s loans. The remainder may have been stock brought in by Mr. R. A. from his previous business.



Nevertheless, there remains some doubt on the loan decrease observed in 2004, which seems to have responded to the accountant's need to balance the balance sheet (especially after the high profit announced) rather than a reality. In any case, the accountant himself had described the 2004 balance sheet as a rough exercise "just for the bank". But one may wonder whether the previous years' amounts are more reliable, especially considering the contradiction between Mr. J.S.'s inability to invest 50 thousand Rand, according to Mr. R. A., and his apparent constant member's loan of R74 789, as shown in the accounts.

## **b. Instalment finance**

In 2000 and 2001, the business has used an instalment credit to finance the purchase of its delivery van. This facility, like the overdraft facility, was granted at a time when the business was just 2 years old and had just been registered as a CC. It was hence still in a phase with a statistically high risk of failure.

As explained above, according to the bank file, the instalment credit facility amounted to R40 000, but the members chose to use only a portion of it, since the vehicle they bought cost them R30 000 (unfortunately Mr. R. A. did not indicate which portion of this was debt-financed). They also chose to repay the credit within 24 months.

The short maturity, the partial utilisation and the built-in security (possibility for the bank to repossess the vehicle if not paid up) reduced the risk for the bank, and explained the relatively low risk premium of 2% above Prime rate.

## **The importance of collateral**

For the two facilities granted in 2000 (overdraft and ISA), the bank's collateral requirement has been relatively high.

According to the bank file in May 2001, the security requirements<sup>36</sup> for an overdraft of 100 Thousand Rand and an instalment sale credit of 40 thousand Rand, was as follows:

- 2 mortgage bonds for a total of R336 000
- house owners' insurance
- unlimited suretyships of 2 owners
- variation agreement R140 000 (?)
- 2 life insurance policies @ 2 x R140 000
- Total: R756 000 + unlimited suretyships

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<sup>36</sup> The data available do not enable to recognise whether the bank has positively obtained from the members a legal cession of all these securities for its benefit (the note in the bank file may have been a simple listing of possible security options).

If one assumes that the collateral was meant primarily to secure the overdraft, then the extent of coverage for the bank would be over 750%, not including the unlimited suretyships of both owners. This seems exaggeratingly high, but it must be admitted that the limit of R100 000 is relatively high for a business that has just registered and has no credit record within the bank.

One may then wonder how the bank has reacted to the departure of the second member, which suddenly deprived the bank from approximately half its sureties. This may be the reason for the possible revision of the overdraft limit, although Mr. R. A. disputes that there has been such a decrease. On the other hand, the fact that the instalment debt has been repaid faster than scheduled (it was entirely settled before February 2002), and the quality of the relationship between the bank and its client, may have helped to reduce the bank's risk estimation and hence have eased the prolongation of the overdraft facility in spite of a loss of security.

### **c. Finance requested to purchase property**

At the time of my last interview with Mr. R. A., the business was preparing to approach the bank again to negotiate a long-term facility to enable the purchase of property.

Mr. R. A. did not indicate how much he was requesting, since he was still busy calculating his needs – but it makes no doubt that, even if residential property is cheaper than industrial property, the amount needed would be substantial, even more since the building would request significant renovations and adjustments to be used for industrial purposes. In addition, Mr. A. D. had indicated that the purpose of a move to new premises would be to enable an upgrade of the manufacturing capacity, which means that there would also be a need for equipment finance.

Given the business's meagre equity base and the absence of profits up to now, as well as the departure of one member which could be interpreted as a weakness, it is probable that the negotiation with the bank would be difficult.

### **d. Contacts with the bank**

From my questions to both the administrative officer and the member it seems that the business had a reasonably good, but arms length relationship with the bank.

For day-to-day banking, Mr. A. D. uses internet banking, which means that the contacts with the bank staff are rather few and anonymous. Occasional contacts take place when customers phone in for references.

Mr. R. A. was the main person keeping the relationship with the bank, but he did not seem to be particularly engaged in the relationship. He mentioned that he has contacts with them on the phone and meets them from time to time if there is a need, but is not concerned with his standing with the establishment. He could not

confirm, for example, whether there was an annual contact on publication of the annual financial statements, or generally whether accounts were sent through for monitoring.

A possible explanation for this apparent lack of interest or involvement is that Mr. J. S. has actually been the main person looking after the bank's relationship with the business. Indeed, Mr. R. A. admitted that he had previously been banking with another institution, and moved to this new bank because of his partner's good standing with them. This may explain why the CC has been able to obtain substantial financing, in particular a fairly high overdraft facility, in the very year of its establishment as a CC.

This would also explain why the departure of Mr. J. S. has required some arrangements with the bank, although Mr. R. A. was rather vague about it. In addition to the loss of collateral already mentioned, the bank may have lost its usual contact person in the business. But Mr. R. A. assured that there had been no problem and that he was generally in good terms with his bank.

Whether this generally good relationship with the bank would suffice to obtain a large credit for the acquisition of property, is questionable. Visibly the member chose to "boost" his chances by presenting a (partially distorted) set of financials for 2004, which shows a high profit and hence an improvement of the equity base.

### **e. Concluding words: financing strategy**

Overall, compared with other cases, the business has adopted a phased financing approach, relying primarily on its members initially while establishing itself as a credible business.

The only use of debt finance up to now was for the financing of vehicles (and computers) on instalment, which have been promptly repaid, as well as to make up for the lack of supplier credit in the early stage – a few years on, the facilities seem to be only partly used. Mr. R. A. confirmed that it was important for him to start prudently, as he did not want to "fall along the sideways" like so many other overly audacious entrepreneurs.

Both Mr. A. D. and Mr. R. A. told me that, in their opinion, the business has a good standing with the bank and will be able to access larger sums of capital when needed.

While the data confirm that the business has been managed prudently, it must be noted that the firm has not yet been able to build up equity. Its operations were only slightly profitable, and overhead costs lead to successive small losses, which have eroded the members' investment. One may also wonder how the bank will interpret the "escalation" of the latest months, with the separation of both partners and the major investment in new premises. This decision to buy property may seem somewhat precipitated, since Mr. A. D., in my first interviews, had told me that the major move would not be before the following

year.

Nevertheless, the few years of relationship building without major incident will supposedly positively influence the bank's decision on Mr. R. A.'s bid for the establishment of a major production factory.

## 7. Financial ratios

### Cost structure

It is difficult to obtain a clear picture from the business's cost structure since the profitability of operations has varied from one year to the next.

If one excludes the members' remuneration, which is not fixed but rather depends on the profits for the year, and if one admits that the 2004 income statement includes all relevant costs (although we have seen that at least R170K have been "omitted"), the cost structure would be as follows:

Table 33.6 – CS3's cost structure

	<b>Low (2002)</b>	<b>High (2004)</b>	<b>High revised</b>	<b>Mean (revised)</b>
variable costs	80%	83%	83%	
fixed costs (higher and lower estimation)	191 000	210 000	380 000	
members' salaries	110 000	180 000	180 000	
breakeven (to cover fixed costs only)	955 000	1 235 294	2 235 294	1 595 147
<b>breakeven (to cover members' salaries)</b>	<b>1 505 000</b>	<b>2 294 118</b>	<b>3 294 118</b>	<b>2 399 559</b>
latest known turnover	2 856 588	2 856 588	2 856 588	2 856 588
margin over breakeven (fixed costs only)	199%	131%	28%	79%
margin/deficit (including members' salaries)	90%	25%	-13%	19%

It appears that costs are mainly variable, corresponding to cost of sales, salaries, and motor vehicle expenses. With such a low margin on variable costs, the breakeven point is highly sensitive to the level of fixed costs.

Therefore, for the purpose of this calculation, several approaches were taken for fixed costs. In the first line, the fixed costs were included as calculated from the financial statements, with 2002 presenting the lower estimation (2000 would have been even lower but it was not considered since this was less than a full year and the business at that time was sensibly smaller), and 2004 providing the higher estimation. These costs are mainly made of the rent and telephone and fax costs, as well as other administrative costs. In an additional column the 2004 estimation was majored by the assumption that at least R170 000 have not been properly reflected in the financial statements (corresponding to bad debts as well

as the indemnification of the former member). This approach leads to an almost doubled level of fixed costs, which is not entirely satisfying for a general cost analysis since the added costs are partly extraordinary items.

In an additional step, the members' salaries were added to the fixed costs thus obtained. Again, especially in the high (unrevised) estimation, this inclusion almost doubles the fixed costs. Again, it is not entirely satisfying since the business does not treat the remuneration of its members as a fixed item but rather as a pre-tax distribution of profit. Especially in the high (revised) estimation one may assume that if the additional R 170 000 of costs had been recorded in the accounts, Mr. R. A. would not have paid himself such a high salary, which is more than three times higher than his remuneration in the previous two years.

Although not entirely satisfying, those estimations give a range of breakeven points between 0,95 and 2,2 million Rand excluding members' remuneration, or between 1,5 and 3,3 million Rand including it. Except for the highest estimation, which is actually too high for the reasons presented above, one can say that the 2004 turnover, at 2,86 million Rand, is comfortably above breakeven. In other words, the efforts of Mr. R. A. to increase the sales of its business have paid out and have brought him into the profitability zone.

Of course, the increase of staff (especially the engagement of a sales representative in 2004) and the move to new, larger premises with the acquisition of new equipment, will cause an increase in the fixed costs (especially related to financing and asset depreciations), pushing the breakeven point up. It cannot be said whether the turnover will be increased accordingly.

## Interest coverage

At this stage, interest costs are relatively limited, so that there is no concern with interest coverage. Especially in the more profitable year of 2004, the interest costs are almost 30 times covered by the EBITDA. Even after revision of the operating profit to account for non-recorded, and partly exceptional, costs, the interest coverage is above 5.

*Table 33.7 – CS3's interest coverage calculation*

	2002	2003	2004	2004 (revised)
EBIT	5 336	4 689	186 089	16 089
EBITDA	26 913	23 211	195 848	35 848
Interest paid	5 932	6 181	6 606	6 606
<b>coverage ratio</b>	<b>4,5</b>	<b>3,8</b>	<b>29,6</b>	<b>5,4</b>

Again, the contraction of new credits for the acquisition of premises and new equipment will significantly increase financial charges and there is no guarantee that the interest coverage will remain satisfying.

## Equity ratio

The equity ratio, including members' loan as a form of quasi-equity, is generally high since the business has hardly any external debts (except supplier credit and overdraft). This is visible in Table 33.8.

*Table 33.8 – CS3's equity ratio calculation*

	(as in statements)			(revised)
	Feb' 2002	Feb'2003	Feb'2004	2004
Member's interest	100	100	100	100
Accumulated profits or losses	-2 294	-3 786	179 483	122 988
Quasi-equity (mb loan)	142 374	142 374	44 734	67 585
Member's capital	140 180	138 688	224 317	190 673
Total Assets	211 508	147 020	265 645	425 710
<b>Equity ratio</b>	<b>66%</b>	<b>94%</b>	<b>84%</b>	<b>45%</b>

However, since the supplier credit and possibly also the overdraft are likely to be improperly reflected in the balance sheets, the estimation of the equity ratio is biased. Further problems come from the 2004 balance sheet, in which the accumulated profit is somewhat misrepresented: firstly, the losses accumulated in previous years, which should have reduced the 2004 retained income, have disappeared; in addition, no tax provision has been made on the 2004 profit, which, in any case, is quite questionable. Finally, the decrease in Mr. R. A.'s member's loan is not explained.

If one were to assume that, in 2004, the accounts payable are close to R141 000 and the overdraft close to R41 000 (see above), and if one were to grossly correct the accumulated profit by incorporating previous losses and subtracting a tax provision, while leaving Mr. R. A.'s member's loan at the level of previous years, then correcting total assets accordingly (to reflect higher accounts receivable and inventory), the equity ratio would be significantly lower (45%). The effect would be similar in previous years.

Nevertheless, for a South African SME, even this lower equity ratio is not bad. The business remains essentially equity-funded, with little interest-bearing debt.

Again, the intended purchase of new premises will significantly change the picture, increasing the share of debt. Assuming that Mr. R. A. requests a mortgage loan of R500 000 for the property and an equipment loan of R150 000 for the machinery, the equity ratio would drop from 45% (2004 revised) to  $[190\ 673 / (425\ 710 + 650\ 000) = 17.7\%]$  (2005 plan).

## Debt maturity

Apart from the member's loan, there is currently no long-term debt, so that the ratio of current liabilities to total assets is the complement to the equity ratio above.

*Table 33.9 – CS3's debt maturity*

	(as in statements)			(revised)
	2002	2003	2004	2004
current liabilities	71 328	8 332	41 328	234 709
total assets	211 508	147 020	265 645	425 710
<b>Current debt / Total Assets</b>	<b>34%</b>	<b>6%</b>	<b>16%</b>	<b>55%</b>

For the revised estimation in 2004, the current liabilities have been assumed to be made of trade creditors for R141 000 (see estimation above), overdraft for R41 000 as well as a tax liability for 30% of the 2004 profit, after deduction of previous losses.

Although this revision gives a far higher ratio of current debt to total assets, it does not mean that the debt maturity is inappropriate, since the short-term debt is entirely used to finance short-term assets.

## Working capital cycle

Again, there is here a need to distinguish between the figures appearing in the financial statements, and those assumed to be real according to the interviews.

*Table 33.10 – CS3's working capital cycle*

in days of turnover	(accounts)			(interviews)
	2002	2003	2004	2004
Purchases: Supplier Credit (average)	19	2	7	25
Inventory	23	14	10	25
Production cycle (assumed)	1	1	1	1
Sales: Customer credit	0	0	4	25
Total need for working capital	5	13	8	26
Theoretical average overdraft utilisation assuming Prime+2% (in Rand)	R37 006	R34 339	R41 288	
overdraft utilisation (in days)	8	5	5	

From the financial statements emerges a picture of relatively low supplier credit (except in February 2002) balanced by low advances to customers, so that the

need for working capital results primarily from the inventory, which turns over relatively quickly.

From the interviews, it would seem that trade credit, both on the supplier and customer side, are significantly higher than reflected in the balance sheets, but this has only little impact on the need for working capital since the two balance each other reasonably well (usually a 30 days credit). On the other hand, Mr. R. A. suggested in the interviews that he was trying to keep his stock high in order to reduce the cost of his supplies, and he mentioned a target value of inventory at R200 000, which corresponds to approximately 25 days of turnover. If this were true, this would create a more significant need for working capital, than what the financials show. But this statement of Mr. R. A. contradicts answers given by Mr. A. D.

The estimation of average overdraft utilisation (based on interest charges) suggests that the need for working capital is not actually as high as suggested in the “revised” calculation. This probably hints to a lower inventory than pretended by Mr. R. A.

In any case the working capital cycle is relatively balanced and needs are well covered by the overdraft facility.

## **Variability of ratios**

The business seems to follow a stepwise growth with strategic / structural changes once every few years, followed by a few years of relative stability to recover from the move.

Indeed, the financials betray important changes between December 2000 and February 2002, consistent with interview data: move to new premises generating a higher rent, acquisition of a vehicle enhancing the delivery capacity, increase of the retail activity causing a sudden drop in the gross margin.

Thereafter, the business has been relatively stable between 2002 and 2004. The nominal turnover growth has been surprisingly regular at 26% per annum between 2000 and 2004, while at the same time the gross margin was slowly improved (supposedly thanks to an improved relationship with suppliers). Meanwhile, some overhead costs were reduced (financing costs and depreciation). In the year ended in February 2004 the growth has been sufficient to reach breakeven.

2004 also marks the beginning of a new move, with the departure of one member causing some reductions in the equity, while the (intended) large investment in premises and equipment will create new fixed costs that will need to be absorbed by accordingly high turnover growth.



## **Business value**

In order to assess the cost of the broken partnership with Mr. J. S. to the business, it is interesting to compare the amount of indemnification (R100 000) with the supposed value of the business.

As already mentioned, the indemnity promised to Mr. J. S. represents approximately 70% of the firm's book (net asset) value in 2003. This may be justified if the business can be considered as having good prospects for growth and profit, which can be attributed to Mr. J. S.'s time as a partner. To verify this possibility, a discounted cash flow calculation was carried out based on some assumptions on cash flow growth.

Forecasting future cash flows is difficult based on the business's history. In spite of sustained turnover growth, the annual operating cash flows up to 2003 have declined rather than increased. Considering this history, it would be speculative to predict more than a 10% increase in cash flows for the following years (eternal growth). It may even be more appropriate to plan with a 0% growth.

In light of this, two estimations were calculated – a pessimistic evaluation based on constant cash flows equal to the 2003 cash flow; and a more optimistic one assuming an eternal 10% growth based on the (revised) 2004 cash flow (after correction for the R170 000 of costs not accounted for). The discount rate used was 35% - corresponding to the average required rate of return of venture capital funds in South Africa in 2001 (source: Taylor, 2001 p. 97). The values resulting from this exercise have been again corrected for the accumulated losses up to February 2003 and for the unequal amounts of members' loans, and led to an appropriate indemnification of the departing member situated between R26 049 and R 90 477 (see Table 33.11).

This result suggests that, even based on the value of future cash flows, the indemnity of R100 000 which Mr. R. A. agreed to pay to J. S. was high. In other words, the equity provided by Mr. J. S. for three years has been expensive capital for the business.

*Table 33.11 – Discounted cash flow valuation for CS3*

	“pessimistic”	“optimistic”
Last cash flow incorporated	2003	2004 revised
Assumed CF growth, 'eternal'	0%	10%
Discounted value of future Cash Flows	48 657	67 031
Accumulated losses in Feb 03	-3 786	-3 786
<b>Net value of business</b>	<b>44 871</b>	<b>63 245</b>
Value of non-interest bearing debt in Feb 2003	-142 374	-31 891
Value of equity in Feb 2001	-97 503	31 354
Value of 50% equity stake	-48 751	15 677
Value of Mr. B.S.'s member loan in 2001	74 800	74 800
<b>Correct indemnification for Mr. B. S.</b>	<b>26 049</b>	<b>90 477</b>

## 8. Final reflections

In spite of its absence of profits, CS3 must be regarded as a relatively successful enterprise, which has built up a sound reputation on the market, and grown significantly while avoiding the most frequent threats of cash shortages and excessive debt. Its relative success can be attributed to a number of factors:

- The support of the owner's family, especially in the early stages, though subcontracting, selling a vehicle at a discount, etc.
- The owner's good knowledge of the field, especially the clients, which enabled him to obtain arrangements (e.g. with regard to delivery);
- the owner's good business intuition, probably gained from early exposure to small business (family)
- community arrangements enabling the owner to start-up without major initial investment, hence reducing the initial financial burden.

During those years of building up strong operations, the financial management has remained relatively weak. In fact, the owner and the administrative officer displayed relatively limited financial awareness: the level of stock was dictated from the availability of space more than by costs; the choice of supplier was determined by the price more than by the availability of supplier credit; the sales representative and additional staff was engaged without doing a budget; the owner did not know the exact limit of his overdraft or its cost. The relation of the owner to his bank seemed to be relatively hands-off. This situation may have arisen from a task distribution between Mr. R.A. and his previous partner, Mr. J.S., in which the latter was looking more closely after the firm's finances. The breakdown of the partnership may leave the business vulnerable.

In this context, it can seem worrying that the owner adopted an aggressive growth strategy, with a more proactive marketing driven by a new sales representative. Two major customer defaults have already sent warning signals

about the necessity to manage growth prudently. Nevertheless, the business remains on an aggressive course, planning to contract debt to start an ambitious manufacturing unit on new premises. This strategy creates multiple risks:

- Legal risks came from the property rezoning,
- Operating risks would arise from the construction work, the actual move, the need to adjust human capital to the new fixed capital, and the uncertainty regarding the markets for the new manufacturing output;
- The main financial risks could be summarised in a drop of the equity ratio (from 45% to probably less than 20%), an increase in fixed costs which was likely to ruin, at least temporarily, the profitability of operations; and an escalation of financial costs. Due to the limited financial awareness of the manager it was uncertain whether he would manage these risks correctly.
- Under this light, the owner's zero-profit strategy as well as his tendency to draw a high salary when the performance is good, which were perfectly acceptable in the context of the firm up to now, may need to be revised in the new circumstance of major expansion.

Data was insufficient to conclude whether the business would be able to cope with these risks.

## Annexure 34 – Narrative of Case Studies 4a and 4b

### Township-based ‘tendering’ businesses

An illustration of the hopeless struggle of survivalist entrepreneurs lacking both skills and resources, and operating in a spirit that differs from the commercial/capitalist logic

#### 1. Business Short Portrait:

Business Code Name: CS4 a + b	Form of registration: CC
Member’s initials: Mr. M. and Mrs. S.	
Member owns 100% of capital	
Member’s ethnic background: African	
Member is also manager	
Sector of activity:	
- Primary activity: SIC 9 (Cleaning)	
- Secondary activity: SIC 5 (painting, renovating, tiling)	
Product or Service: Industrial and home cleaning, painting and renovating, tiling, gardening, construction, woodwork, carpet-laying, etc.	
Business concept: independent	Market: Mainly government, a bit private
Start-up date CS4a: 1998	Start-up date CS4b: 2003
Current status: dormant	Current status: active
Staff members: 2 + Casuals	Annual turnover: CS4a started with 350K, but then was reduced
- Managers: 2	CS4b has under 200K
- Permanent employees: 0	Gross fixed assets: taken together, R 15 thousand
- Casual staff: 3 to 20	=> Size category: micro
Main sources of finance:	
- Hire Purchase, micro-lenders	
- (Trade credit and Bank Overdraft are minimal)	

#### 2. The case study procedure

The close corporation (CS4a) was found on a listing of black-owned businesses. I was specifically looking for African-owned incorporated businesses, and therefore contacted Mr. M. It was Mrs. S. who answered the phone, but both easily accepted to participate. At the time of selecting the case, I wasn’t aware of

the fact that they now owned two entities, the older one (CS4a) having effectively become dormant, and that the two entrepreneurs were facing considerable difficulties.

I also did not appreciate that, for both CS4a and CS4b, the registration as a close corporation was image-related, “for the tender documents”. Faced with the absence of financial statements and the *de facto* informal character of the CCs, I considered dropping the case, but decided to keep it as an antidote, as it were, to the sample’s bias – and as an illustration of the specific types of obstacles encountered by the smallest African micro-entreprises.

The case study was essentially based on 2 interviews of the members. Unfortunately, unlike the other case studies, the interviews were not conducted on site, at the owners’ choice. They justified this choice by the argument that it would be complicated for me to find them in Khayelitsha, but when I insisted that I would prefer to meet with them in their premises, they declined to give me a physical address or explain me the way, insisting that they would come to me instead.

The reason for this was not clear to me: it could have been the legacy of apartheid, raising the expectation that white people should not bother to travel to “black people’s townships”. A white lady visiting would also not remain unnoticed by their neighbours and this may have been embarrassing, just as they could have been embarrassed to let me see their (supposedly poor) house and living conditions. Although these reasons alone would have been sufficient, there is still a possibility that the choice of a meeting place outside the business premises was meant at keeping some distance, or even at knowing where I was in order to come back to me at a later stage.

Other sources were a document presenting the business, not dated but supposedly prepared in 2002, as well as a short enquiry among suppliers of cleaning machine suppliers.

### **3. The business owners**

#### **Background**

Although they do not carry the same surname, Mr. M. and Mrs. S. are spouses, respectively 55 and 45 years old. They stay with their children in a house in Khayelitsha. Their background is typical of black people of their generation, i.e. rather poor. They have received poor formal school training in the Transkei, Mrs. S. went as far as Standard 10 but did not complete it, while Mr. M. went to a technical school in the Transkei where he learned woodwork.

Following their schooling, they have never had a proper employment, nor have they received other convincing formal education. Mrs. S. has followed two training courses, one in computer literacy and another one in team leading. Meanwhile, Mr. M. has done backyard works in the townships, helping building precarious shelters. He was later “appointed”, as he put it, to run a sheltered

workshop for the disabled, in furniture making, but this occupation was not really paying him a salary. He also followed supervision courses.

After being unemployed for a long time, they decided that Mr. M. would start a business (CS4a). According to the document presenting Mr. M's business, he appointed his wife Mrs. S. as a "manager". Later, when Mr. M found himself unable to acquire new contracts, it was decided that Mrs. S. would start her own business (CS4b).

## **Character**

Mr. M. appeared in the first place as a craftsman, a practical and pragmatic person. Smallish and rather frail, he spoke rather softly and seemed to choose his words to convey a professional impression. Meanwhile, Mrs. S. could have been a caricature of an African "mama", tall and large, moving slowly, but talkative with a pinch of aggressiveness in her tone.

It soon became clear that Mr. M. and Mrs. S. were keen to talk to me about their problems, because they were hoping for, at least, some advice – or at best, some material help. They asked several times for my knowledge in various areas, especially in tender processes and access to finance. Even after I gave them a few indications and told them that apart from that I could not offer much help, they remained seated and eventually Mrs. S. asked again "if maybe [I] could help with finance" – and while I was wondering how she had meant it, she added: "If you know how to talk you could go and talk to people to help us" (needless to say, a vane attempt).

In fact, it seemed to me that this expectation was not only directed to me – it felt rather like a general attitude: they were following the principle that the way out of trouble should be to obtain help from others – and that others actually owed them such help. Especially Mrs. S. frequently had an accusing tone when reporting about the lack of support received from other agencies: "We've been to Khula, we've been to Khethani Business Finance, even DTI, they all don't help you, I have lost a lot of confidence", and "The moneylenders, they talk nice but they are very cruel, they are killing you".

## **Personal Finance**

It is difficult to ascertain the exact financial situation of Mr. M. and Mrs. S, as indications are sometimes contradictory. For example, Mr. M. lamented several times about having to feed their children, as if even the satisfaction of these basic needs were not always guaranteed.

On the other hand, several indications on the lifestyle of Mrs. S. and Mr. M. would mean that they belong to the better off in Khayelitsha, although it seems that they cannot really afford this relatively onerous lifestyle.

Mrs. S's answer on my question on property gives a first indication of the mismatch between lifestyle and financial resources. In 1989, the couple chose to

buy a house; they were granted a loan. (It is not exactly clear how the bank approved the loan since, according to responses given to other questions, neither wife nor husband has ever been formally employed). After a while, since both of them were unemployed, they turned unable to repay the loan, so that the bank repossessed the house, which they are now renting.

They own a large car, which (from the outside) looks reasonably good although Mrs. S. was lamenting that this car was giving them “lots of problem”, she couldn’t wait to replace it, for example the windows can only be opened with the help of a spanner. They also chose to send their children to private school – a decision which, it would seem, one does not take when one is effectively struggling to survive.

They have a bank account, a funeral cover, and are part of a rotating savings scheme.

On the question of whether they have debts, Mrs. S. replied negatively – probably meaning that they had no debt with formal financial institutions, for other comments make it difficult to believe that the household is entirely self-financed and up-to-date with the payment of its costs and bills. Mrs. S. did admit that they have defaulted on their debts twice (once on the house, and once on a Telkom bill), each time for amounts “less than 3 000 Rand”. (As far as the house is concerned, she probably means that the annuity that they defaulted on was under 3000 Rand, as it would be difficult to believe that the total value of the loan outstanding would have been so low).

## **4. How the business started**

### **Start-up date**

Mr. M’s Close Corporation (CS4a) was registered in July 1997, although he had been (informally) involved in renovation and repairs of buildings since 1994. Mrs. S’ business (CS4b), meanwhile, was only registered in 2003.

### **Initial investment**

Asked about the approximate value of the assets that he started with, Mr. M. could not give me a clear response. He initially (first interview) mentioned that he had only a few tools and mops, then (second interview) added substantial equipment like a circular saw, a drill, a sander and a router, for a value of approximately R 3 500. However it is not clear which of these assets have been there since the beginning.

Mrs. S’s business, meanwhile, holds substantial assets, although details given in the second interview were inconsistent with previous answers. In the first interview she had mentioned that the business owned 2 vacuum-cleaners, worth R2000, and 2 sewing machines, worth R8000.

In the second interview she focused on two industrial buffing machines, which she acquired (new) in February 2004 (that is, a few weeks before my first interview on 9 March). At first, she suggested that the buffing machines had a value of R 5 500 each, and came to complement the two vacuum cleaners for a value of R 1500 each. Adding these values to the R8 000 initially proposed as a value for the sewing machines, would give a gross value of fixed assets of R22 000 altogether.

But later in the interview she admitted that she had acquired the buffing machines together with the vacuum cleaners, for a total cost of R11 000, including R3 000 worth of chemicals (which would mean that the gross value of those four cleaning machines would be only R8 000). A short telephonic enquiry among suppliers was undertaken to probe the possible value of the equipment, and suggested that, while vacuum cleaners exist in a wide range and are supplied everywhere, industrial buffing machines are only supplied by a handful of enterprises and usually cost over R6000 each.

In addition, prompted to give more details on the sewing machines, Mrs. S. replied that she had paid R 5 000 for the two (a more credible amount considering that they were second-hand machines and presumably not the most sophisticated kind). This gives a total gross value of fixed assets of R13 000, significantly less than the R22 000 initially proposed.

The interviews also revealed at some other stage that the couple owns a photocopy and fax machine, which was bought for the purposes of the tenders.

## **Financing of the equipment**

Mr. M. financed all his business tools with his initial savings and, later on, with cash flows from his operations. He mentioned that, having a bit of cash out of the business, he had just acquired a new drill to replace the old one, which was not working well. He confirmed that this was his usual way to deal with cash surpluses: whenever the business generates a bit of money, he would use it to improve his equipment.

(This practice was confirmed by other interviews with township entrepreneurs, for example a lady running a Bed & Breakfast in Khayelitsha told me that whenever she got some cash, she would immediately spend it to improve her home – this urge to spend the money will be discussed later).

On the other hand, Mrs. S. bought her equipment in two ways. The sewing machines were bought several years ago, second-hand, from Mrs. S's own savings. She added that she was participating in a ROCSA scheme (Rotating Credit and Savings Association), which gave her, at regular time intervals, the possibility to spend accumulated money to acquire certain goods. At the time, she chose to buy sewing machines, although she then admitted that "the sewing machines have never worked out". When I asked her whether these machines were now in use, she said that she had lent them to her sister-in-law, who was trying to earn a living with them. Hence, these assets were utilized in a sensible



way inside the family, but not directly generating income for the purposes of the business.

As to the vacuum-cleaners and the buffing machines, they had been bought on credit. "I am still paying them", said Mrs. S. The process for obtaining credit, as she described it, was the following: Mrs. S. registered her business in 2003 and applied for some tenders. When, in February 2004, she was awarded a cleaning contract, she went to the supplier of machines and "showed him the contract". The supplier of machines did not ask for any further information, "he trusted me", and gave her three months to pay the R11 000 in full. Supposedly, both parties relied on the expectation that, if Mrs. S. was to start working on 1 March, she would get her first payment by 15 April, and would then be able to repay the machines in full. They did not seem to be aware that the payment for the first month of trading would be used for working capital and would not leave enough surplus for the repayment of equipment debt.

At the date of the second interview, at the end of May 2004, Mrs. S. had repaid only R5 000, hence had R6 000 outstanding and overdue. She immediately added that she was "worried", because there was a possibility that she would get another cleaning contract, to start early July, in which case she would need to purchase additional cleaning machines (since the machines bought at the beginning of the year would still be in use for the present contract). "But, she added, he won't give me a credit because I haven't repaid the R6 000". It struck me that she was thinking of the next credit before commenting on her plans to repay the current one. When I asked whether she had such plans, she responded with a vague "yes, I have plans, but you know it never works out that way". She was not able to give a date by which she thinks she would repay the debt, in fact it did not seem to preoccupy her much. She indicated that "it is not that debt alone, there are many other things, the school fees that we must pay, etc", as if the existence of other costs would exempt her from having to repay her debts.

I enquired whether the supplier of the machines might repossess them if they were not paid. Mrs. S. confirmed that he had threatened to do so, which is why she has now taken the machines away from the Simonstown site, into her house in Khayelitsha, hoping that he will not find her in her house. This had consequences on her ability to carry out her cleaning contract: because of petrol costs, she would only bring the machines to the site once a week, and back in the evening, so the cleaning was happening only once per week instead of every day as stipulated in the contract. She admitted that this would, at some stage, lead to problems with her client, but for the moment the client was not aware of the problems so she was continuing this practice.

## **Working capital**

In addition to the equipment finance mentioned, the businesses have had to source working capital before starting a new contract. Both husband and wife were largely unprepared for this financing need, hence did not have a proper strategy to deal with it. They both insisted that buying materials, consumables

etc was always difficult. Even at the time of our interviews, having experienced it, they did not seem to fully understand the concept or to appreciate that it was a normal and common situation for small businesses.

To deal with his need for working capital, Mr. M. apparently chose to tap the easiest source of finance, namely supplier credit: he bought his consumables on credit, as often as he could. Some suppliers indeed occasionally granted him one month credit. However, this turned to be a costly option. According to Mr. M., “if you buy something for R200, after a month you have to pay R250” to which Mrs. S. added “or even R300”. This indicates interest rates of 25% to 50% per month. Converted (linearly<sup>37</sup>) to annual rates, the interest rates would be 300 to 600% p.a. These rates are consistent with the ones found in the informal township microlending sector (see Coetzee & Grant 2000:69<sup>38</sup>).

As to Mrs. S., she was adamant that she would pay cash as often as possible (because she would not like to have debts!), but, having insufficient own resources, she had to turn to moneylenders. They charged similar interest rates.

The moneylender will be the object of a separate section under “financial management” below.

## 5. Business model and operations

### Business model

The activity of the two businesses does not fit into the usual sectoral classifications, as it includes a great variety of low-skilled services. The best description of the businesses’ activity would probably come from a statement of Mrs. S. in her first interview, when she explained that:

“After having been unemployed for so many years, we decided to go into *that tendering job*”.

Tendering was indeed one of the only consistent features in the jobs performed by the two businesses. The other feature would be that they were low-skilled services, typically the kind of services that African people have been expected to perform for white people in the apartheid dispensation.

On the question of whether they would select some specific tenders out of those they found in the newspaper, they gave contradictory answers. Mr. M. suggested that they would “choose what is good for us”, to which Mrs. S. added “but since there is very little work, we will just *tender whatever*”.

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<sup>37</sup> A compound interest rate from month to month is unlikely since township trade credit is believed to be very unsophisticated

<sup>38</sup> “The 25-30,000 informal township lenders continue to operate as they always have, charging effective interest rates in the 360-600 percent range for relatively small loans.”

Mr. M's business profile describes the enterprise as a "Specialist (sic!) in cleaning train coaches, platforms, offices, houses, windows, painting, carpet cleaning, building alterations, deep cleaning and sanitizing, joiners and cabinet making". Although extensive, this list does not include gardening or general woodwork, which Mr. M. also mentioned in his interview.

Mrs. S's business potentially performs the same activities, to which she added catering, although it is quite a different business. She did not mention any textile / sewing-related work, although she had indicated that the business owns two sewing machines.

This lack of focus on product was not a single case, it was found in other businesses contacted during the research project. For example, a Mfuleni-based business described its activity as "catering, cleaning, supply of office stationery, clerical jobs and other works", a Gugulethu-based business was involved in "cupboards, tiling, flooring and other works" while a business from the GEM sample indicated as activity: "construction services/palisade fencing/stationery supply/protective clothing"

## **Two corporations for one business**

In fact, although I tried in my interviews to distinguish between the two enterprises, the limits between the two, as well as between business and personal accounts, were actually fluid. Mr. M. confirmed that, each time they wanted to apply for a tender, they would submit two applications (one under each company name) to increase their chances. It appeared that the newest business, formally owned by Mrs. S., was the only one winning tenders at present, possibly because of "affirmative procurement" practices which increasingly tried to source contracts in priority to female-owned companies. It may also be that Mr. M.'s business had built a negative reputation in its previous contracts, hence does not win tenders, while Mrs. S's business was still free from such reputation.

For example, the two entrepreneurs mentioned that they had been busy with renovation and painting works for various government buildings – it was essentially Mr. M.'s work to organize these contracts, but it is likely that putting Mrs. S's name on the tender application would favour them since most other tender applications in the construction field would classically come from male owners.

(It is also possible that the choice of keeping surnames different, although they presented themselves as being husband and wife, was meant to hide the connection between the two businesses or, between Mrs. S, owner of the contracting business, and Mr. M., project supervisor).

## **Assets**

Consistent with the fact that the two corporations were actually one business, the equipment described above was used wherever it was needed. For example,

although the paint brushes and rollers, drill, saw, and other tools, were formally mentioned as being owned by CS4a (Mr. M's business), they were obviously used for the renovation and painting works mentioned above, although these were carried out under Mrs. S's business name (CS4b).

From that point of view, although Mr. M's corporation was no longer actively trading, its equipment was still in use.

On the other side, as mentioned, the expensive machines of Mrs. S's business were under-used because of the need to "hide them" from the supplier. It is even possible that these machines were suffering from excessive transport, with a risk of reducing the lifetime of these machines.

## **Management style and philosophy**

Mr. M. and Mrs. S. are managers "on the move": since they work on several sites in parallel, they are often called to commute from one to the next, which can be at great distances. Their cellular telephone is rarely used for its purpose, namely accompanying them wherever they need to be, since it also stands for inexistent landlines in the various premises. This explains why I have had difficulties in accessing them on the phone: they had left their telephone at a site but were not present there. Also, appointments have had to be rescheduled several times, with Mrs. S. explaining that: "We can never plan, we get a call and then we must be here, then must be there".

It seems that this commuting from one site to the next, trying to solve problems experienced by the teams working on the various contracts, and other logistic work, is indeed the role that the entrepreneurs assigned to themselves – in addition to the job-hunting. Even in the advice that they asked from me, I saw that they were not concerned about thinking anew about their business, but only about continuing the same linear pattern of activity: looking for tenders in newspaper (or even better, looking for private jobs), filling in the tender documents and forms (at that stage, they felt a need to understand the process better, to know under which circumstances tenders are awarded), organising the logistics, especially acquiring equipment, and driving around.

Their comments also showed that their hands-on involvement in their businesses was limited. For example, when Mr. M's enterprise was engaged in cleaning trains, he and his wife (the two 'supervisors' listed on the business profile) were not regularly on the sites while the cleaning teams were operating (at night). Rather, Mr. M. would receive phone calls from his clients complaining that his cleaners were absent or too few, in which case he had to go and find casual workers to replace them immediately. The distance between, for example, his home in Khayelitsha and the working site in Cape Town station, the difficulty of communicating in the absence of appropriate cell phone equipment and budget, as well as the low morale of staff, with a high level of absenteeism, made it difficult for Mr. M. to control the quality of work.

However, Mr. M. did not seem to think about it as a challenge that would require

his intelligent intervention, for example by selecting staff members, training them about the consequences of absenteeism and creating appropriate incentives. Rather, he would see it as an immutable fact which his clients did not have enough understanding for. “You can’t be there all the time, petrol is so expensive”.

(More reflections on management style will be found in Section 8. Approach to business).

## **Market, Tender process and Competition**

Mr. M and Mrs. S’s market is made of national, provincial or local government institutions, as well as parastatals and, occasionally, private persons. Typical jobs that they have carried out were the renovating or cleaning of trains, government buildings and schools.

Although they would like to work for private clients as well (especially because they perceive it as a less competitive market), they do not have a strategy to access such jobs. The public tenders are easy to identify in the newspapers. They apply for app. 10 tenders a month (each time lodging two applications, one for each CC) and win only a few tenders every year (in the case of Mrs. S’s business – none for Mr. M’s business). They added that they “just take what comes”.

The tendering process itself is a relatively extensive one, which often takes several months. First, Mr. M and Mrs. S. find potential jobs advertised in newspapers. They must then go and collect tender documents, and are later invited for site viewing. After that, they are usually given a week or two to prepare the long tender questionnaire. They have never been asked to provide additional documents, like financial information: all information needed would be asked in the questionnaire. After submission of the applications, they typically do not hear any further news for a long time, up to several months. Occasionally, a fax comes to inform them, as Mrs. S. put it, that “we are in selection but we must sign more papers”. She obviously did not appreciate the exact meaning of the papers that she had to sign, and showed an example of them to me. It was a letter informing her that the process has been delayed, and asking her whether she would agree to an extended period for the contract.

Even when all papers are duly signed and faxed back, a long period of time usually elapses without any feedback from the potential client. Mrs. S. must then resort to the telephone to check the status of the decision, and hear, either, that it is still in the process, or that the contract has been awarded. When she is the lucky winner of the contract, she receives notice approximately two weeks before the job starts.

The lack of transparency about the tender awarding process probably explained the unease of Mr. M and Mrs. S. in defining a strategy to cope with the competition, which is intense in all sectors they are involved in (cleaning services, building repairs and renovations, catering). In both interviews, Mr. M and Mrs. S. confirmed that the competition was a major threat to their business.

For cleaning services, for example, the yellow pages lists 14 companies under industrial cleaning services and as many as 68 under office and other cleaning. There are presumably many more competitors, which are not listed in the yellow pages (Mrs. S's business for example is not listed). Indeed, they do not need a listing since they are acquiring their business by tender and not by advertising.

Mr. M suggested that his contract with Metro-Rail, which was the biggest contract his enterprise has received, was not renewed because of new entrants who quoted very low prices. "You can't work proper business with these prices, the competition is too strong", he commented.

Unlike all other entrepreneurs encountered, though, the couple could not articulate a convincing strategy to deal with the competition, apart from striving to keep their prices low. They felt unsure about the tender awarding process and could not identify which factors, apart from the price, would determine their access to jobs.

### **Costing, Pricing and Credit Policy**

Before writing a quote on a tender application, Mr. M. and Mrs. S. would attempt to estimate their costs. They would budget the workers' salaries, the equipment and materials, the transport and petrol, then add a margin as profit: 5 or 10%, they said, adding "but eventually we don't get the profit, there are always more costs". Especially the transport costs were usually higher than anticipated.

Mr. M. mentioned that in principle he was obliged to include insurance to cover the risk of accidents by their workers, adding "but then it becomes too expensive so we often don't do the insurance". He did not make it clear whether he would omit the insurance costs in his quote to be more competitive (it is rather unlikely that this would make a difference to the client, since the cost was only R2000 per year), or if he would include it in the quote but not actually take the cover on (a more credible interpretation).

A peculiar aspect of the "tendering business" was the nature of the relationship between the business and its client. Even after the business had been selected among many, and the contract signed, the relationship was still nowhere near a normal client-supplier partnership. Mr. M. suggested that "when the client sees that you don't have enough money, they try to make things difficult for you". "They want to penalize you". Asked for details, he mentioned that inspectors would, for example, make dirt after the place had been cleaned, and generally adopt a racist behaviour. Instead of working positively towards the same goal (clean trains or premises), they are grateful for the opportunity to reprimand their subcontractors.

It is barely surprising then, that the entrepreneurs' attitude to their clients was equally bad. The example of Mrs. S. omitting to inform her client that she was no longer cleaning his premises every day because of the need to hide the machinery in her home, is a blatant illustration of this. It is not impossible that

Mr. M., at some stage in his relationship with Metrorail, adopted a similar behaviour, and this would suffice to explain why his enterprise has not received any further tenders since then. Such assumption could not however be verified. The reference person indicated in Mr. M's "business profile" for the Metrorail job, was not listed in the Metrorail staff directory (he may have left the company).

## **Profitability and Members' remuneration**

In the absence of written financial information, it is difficult to ascertain the level of profitability of the businesses. Asked whether they were doing any profit, or earning anything beyond their costs, both entrepreneurs said that they never saw any profits coming in. They added that they never paid themselves a salary (although Mrs. S. added that "now that we have seen that it is how people do it, so in future we will pay ourselves a salary too").

But it seems that by answering so, they had a perception of profit and salary as some liquid money that is left over, and goes to rest on a bank account because it can't be better used elsewhere.

In reality, the stated absence of profits or remuneration had to be pondered by the following considerations:

- Although they did not pay themselves a salary, Mr. M and Mrs. S. would "automatically" (as they put it), use business funds to cover private expenses. They suggested, for example, that the business was necessary to enable them to feed their children or pay the school fees. There is therefore some form of informal remuneration taking place.
- They also gave indications that they were able to buy new equipment out of the business's cash (e.g. the drill). Of course, one can wonder whether the funds spent were ultimately the business's own (i.e. profit), or owed to the various creditors.

To ascertain the income potential of the businesses more precisely, I asked for Mr. M's monthly income and expenses in his previous contract with MetroRail, and simulated an income statement as follows.

Table 34.1 shows the pro-forma monthly income statement as reconstituted through the interview:

*Table 34.1- Reconstituted annual income statement for 1998 – Metrorail contract*

	Monthly	annual	
Turnover	35 000	420 000	(this was Mr. M's best year)
Wages and salaries			
- permanent staff	20 000	240 000	(not including members' salaries)
- casual staff	500	6 000	(guess - when permanent staff is sick or absent)
Unemployment Insurance Fund	2%	4 920	
Chemicals and consumables	2 500	30 000	
Petrol	2 000	24 000	(for the supervision of workers)
Telephone	500	6 000	
Insurance		2 000	(to the extent that it was indeed being paid)
Torches and batteries		1 000	
Overalls		1 500	
<b>(Operating) Profit</b>		<b>104 580</b>	
<b>Theoretic Profit margin</b>		<b>25%</b>	
<i>Possible other costs: rent, stationary, finance costs, depreciation, etc</i>		?	<i>(interviewees could not give details)</i>

At first, the theoretic profit margin of 25% resulting from this simulation appears surprisingly high. The table seems to indicate that the businesses were indeed able to earn over 100 thousand Rand per year for Mr. M. and Mrs. S's private needs (or for the purchase of additional equipment for the business). If so, the businesses would no longer qualify as the "survivalist businesses", which the interviews had suggested.

However, it is clear that this simulation is too optimistic, for the following reasons:

- This calculation is based on Mr. M.'s first year of working with MetroRail. This, however, was his best year – after earning a monthly R35 000 in the first year, his sales went down to 20 and later 17 thousand Rand in the second year, and 12 thousand Rand in the third year.
- The income statement is not complete, although Mr. M. confirmed that he had included all costs that he could think of. Especially, the calculation does not include any financial costs although they may have been very high. The following sections estimate interest costs. Mr. M. was also not able to quantify costs for the general administration of his business, like stationary, tendering costs, depreciation of his assets, etc. These additional costs may turn the profit figure calculated into a loss.



- It is also possible that the business had expenses that were not used for any economical purpose. For example, Mrs. S. mentioned that she was renting a small house for R480/month, with the intention of using it as a spaza shop. Since the shop was not actually in operation, the rent could be considered as additional “deadweight costs”.
- On the other hand, Mr. M. was so keen to prove me that his work was not generating any decent profit, that he may have slightly inflated his cost indications. This, however, cannot be verified.

## **6. Financial management**

As close corporations, both businesses are bound to some legal requirements; however, their financial administration is almost inexistent. The CC registration, it seems, is just used to create the illusion of a professionally managed enterprise. Or as another Gugulethu-based informal entrepreneur said, “you need to be registered otherwise they take advantage of you”.

### **Sales and Cost Capture and Monitoring**

The keeping of records is rudimentary. Due to the nature of the business, there is no need for the usual sales records – but Mr. M and Mrs. S keep their contracts as well as the slips of their payments (in a shoebox-type filing). They also keep receipts of the purchases they do and “pile them together”. Lastly, they record the wages paid to their workers in a staff register.

They indicated that they saw no other records to keep: they had no accounts payable since they were paying cash as much as they could. They could also not afford to keep stock, hence there was no need for a stock record.

There is also no record of the business funds being used for private purposes, and inversely. Mr. M. suggested that they did not actually distinguish between the two accounts: “when you have a need, you automatically use the money from the business”. On the other hand, the equipment listed as business assets could just as well be regarded as private assets. The sewing machines, for example, were purchased prior to the registration of Mrs. S’s CC.

### **Accounting and setting up of financial statements**

Prior to setting up the first interview with the couple, I asked Mrs. S. telephonically, in accordance with the case study procedure, whether they would agree to give me an access to the financial statements of their businesses. She answered positively.

However, during the first interview, it became clear that none of the businesses had any financial statements to provide, Mrs S.’s because her business was still too young, Mr. M’s because he considered that he could not afford the cost of accountants.

### **Mr. M's business**

Mr. M. argued as follows:

*“When you are very small, you start things on your own, because you don't know how it goes. Then you have problems, you look for people to help. I had an accountant, but it costs you a lot of money, so you leave that one, you take another one. But eventually you don't get right people to do things good for you”*

At that stage, however, he was indicating that he had partial accounting, and that he was striving to put order into these accounts.

*“Yes, I have statements but they are not complete statements.” “Now I have no work but I try to put my books straight”.*

On the following interview, after he was asked several times to show me what his rudimentary accounts would look like, he produced a ‘business profile’, that contained no accounting information apart from the size of the jobs that he had been contracted to do in the past. On the question of whether he had ever been doing tax filings, he answered: “No, I send the tax my papers and that is all”. It is probable that he had not been paying tax at all. He indicated that the businesses were not VAT registered, which was in contradiction to his business profile, which indicated a VAT registration number.

Mr. M's business profile also included the references of an accounting officer, in line with the requirements for CCs, however this accountant was not listed in the telephone directory.

### **Mrs. S.'s business**

Similarly, when registering her CC, Mrs. S must have appointed an accounting officer. However, it was probable that her accounting would also soon be inexistent. Mrs. S suggested that “[she] would like to have someone to help [her] keep [her] books in order, because [she] do[es] not have the skills. But [she] can't pay for it”. It is unlikely that, after closing her first year of operation, Mrs. S. will produce any kind of financial statements on her business.

## **Working capital and Cash management**

Working capital finance seems to have been the most fatal issue for Mr. M's business. His wife pretended to have learnt lessons from his misfortune: “I have learnt from my husband not to rely on credit. Now I pay cash as often as I can”.

### **Mr. M's business**

Mr. M., otherwise reserved, got very talkative about the issue of working capital, related to the tender process. He indicated that it had been very difficult for him

to cope with it. In the one to three weeks that elapsed between the signature of the contract and the start of the job, he had to organize everything, buy the equipment and the materials, hire workers, etc. – even if he may not have had the funds for that. He was resenting that the client did not give any help for start-up finance.

This was only one part of the problem, because after the first month of work, when he was able to write his first invoice, he would again face more costs for the payment of his workers and the purchase of consumables for the second month. The client usually took one more month to pay, sometimes more.

In business terms this meant that, in addition to equipment finance, the business had a need for 2 months of working capital. Presumably, Mr. M. went into this business with very little initial capital. It is possible that he was able to borrow from friends and family on an interest-free basis, but this was unlikely to be sufficient. If he had to borrow the balance at an interest of 30% per month, the interest costs would have considerably eroded his profit, hence his repayment capacity. This would have exacerbated his debt, with a risk of him being caught in a spiral of debt.

To illustrate this, a simulation was run with two different scenarios, as illustrated in Table 34.2. Although speculative, these two simulations show that, if the business starts its first job with no or hardly any working capital, the costs of finance will force it to fail. The profit is not sufficient to cover the exorbitant interest charges, so that – even if the client pays a constant contribution as agreed – the business is obliged to take on a loan whose amount increases every month to pay for the interest.

Based on the reconstituted annual financial statement simulated in Table 34.1, if one assumes average monthly interest charges of R9 800, the annual costs would be R117 600, which would more than use up the operating profit of R104 580.

If, on the other hand, the business starts with an interest-free capital of R3 500 (scenario 2), this will be just enough to reduce financial charges so that they can be covered by monthly profits. In that case, the working capital loan rolls over at a level of app. R26 000, bringing monthly interest costs of R8 100, or R97 200 for the year, slightly lower than the operating profit. However, even this scenario applies only for as long as the clients' payments are on time and are kept on the same level. In the case of Mr. M's Metrorail contract, the extent of the job was revised down after the first year, presumably bringing the business's turnover under breakeven and condemning it to failure.

*Table 34.2 – Simulation of interest costs for CS4a*

Mr. M.'s best past Metrorail contract	<b>Scenario 1:</b> <b>Initial own or interest-free capital = R500</b>	<b>Scenario 2:</b> <b>Initial own or interest-free capital = R3500</b>
Day –7 (i.e. 7 days before starting the job) Cash out = 5250 <sup>39</sup>	<b>Loan 1</b> = R4750 for 2,25 months (until first payment) to cover upfront expenses	<b>Loan 1</b> = R1750 for 2,25 months
Day 28 (end of first month) Cash out = 25 500 <sup>40</sup>	<b>Loan 2</b> = R25 500 for 1 month, to cover costs of first month and upfront expenses of 2 <sup>nd</sup> month	<b>Loan 2</b> = R25 500
Day 60 (end of second month: first contractual payment of R35 000) Cash out = 25 910 <sup>41</sup> + financial costs	<b>Interest charges</b> on loan 1 and 2 @ 30% per month: R10 856  To repay these two loans and the interest, and cover the expenses of the second month, business must contract a new loan for 1 month: <b>Loan 3</b> = R 32 016	<b>Interest charges</b> on loan 1 and 2 = R8831  <b>Loan 3</b> = 26 991
Day 90 (second contractual payment) Cash out = 25 910 + financial costs	<b>Interest charges</b> on loan 3: R9 605 <b>Loan 4</b> = R 32 531	<b>Interest charges</b> on loan 3: R8 097 <b>Loan 4</b> = R 25 999
Etc.		
Estimated Interest charges per year	R117 600	R97 200

In addition to this reality, which rationally condemns the under-resourced business to failure by the interplay of low profit margins and high interest costs, it is possible that some management mistakes have aggravated the situation of Mr. M.

Indeed, the scenarios above are based on the assumption that clients' payments are entirely allocated to reimbursement of old debts and corresponding interest charges, and that loans are always contracted only to cover operating expenses. If Mr. M. has occasionally diverted part of the cash inflows to other purposes, such as the purchase of new business equipment, or for private purposes, e.g. in

<sup>39</sup> Composed of: small tools and overalls prior to starting job: R2500; materials for 1st month: R2500; petrol: R250.

<sup>40</sup> Composed of: Wages for first month: R20500, Petrol: R2000, Telephone: R500, Consumables for 2nd month: R2500

<sup>41</sup> Same as Day 28 plus UIF contribution for 1<sup>st</sup> month, R410

connection with the children's school fees. In this case, the debt spiral would have been accelerated.

### **Mrs. S's business**

Mrs. S. was adamant that she learned from Mr. M.'s failures by avoiding the use of supplier credit. However, it is probable that her learning curve remained wishful thinking, since she was not exempted from the need to keep a high level of working capital, nor did she have other alternatives than debt. In addition, other than Mr. M., she was involved in activities that required substantial equipment investments upfront, which she could even less afford.

Again, a simulation was run – this time based on a prospective contract of Mrs. S. The job was to start on 1 July – so she expected notification around the 15 June.

The management of working capital for Mrs. S. in this contract would be slightly less difficult than for Mr. M. above, because she would have the benefit of being paid 15 days after setting up the invoice, instead of 30 days or more for Mr. M.

However, her situation is made more difficult by the fact that she needs R16 500 for equipment finance. She is hoping to cover this need by a 2 months supplier credit as last time – a hope which is unlikely to materialise since she has defaulted on her first loan. Even if she was successful, the need to repay the loan after 2 months, even with no interest, would bring her back to where her husband had been: it would create a need for cash almost as high as one month's operating costs.

As a result, she would have a rolling over need of working capital that would fluctuate between app. R20 000 at the middle of every month, and R 40 000 at the end of the month. She is unlikely to be able to finance this need cheaply. Assuming a 30% p.m. interest rate, she would have interest charges of R8 500 to R10 000 per month.

Asked whether she was aware of that need for rolling over capital, she replied: "Yes, I am aware, but I cannot find that money, that is my problem". She was nevertheless hoping that she would be granted the contract.

Table 34.3 – CS4b's interest cost simulation

Mrs. S. prospective cleaning contract	<b>Scenario 1:</b> <b>Initial own or interest-free capital = R500</b>	<b>Scenario 2:</b> <b>Initial own or interest-free capital = R3500</b>
Day -7 (i.e. 7 days before starting the job) Cash out = 21 000 <sup>42</sup>	<b>Loan 1</b> = R16 500 for equipment (supposedly interest-free) <b>Loan 2</b> = R4 000 for upfront expenses for $\frac{3}{4}$ month	<b>Loan 1</b> = R16 500 for equipment <b>Loan 2</b> = R1 000 for upfront expenses
Day 30 (end of first month) Cash out = 18 900 <sup>43</sup>	<b>Loan 3</b> = R18 900 for $\frac{1}{2}$ month	<b>Loan 3</b> = R18 900
Day 45: first contractual payment of <b>R 20 790</b>	<b>Interest charges</b> on loan 2 and 3 @ 30% per month: R3 735 <b>Loan 4</b> = R22 345 for 1 month	<b>Interest charges</b> on loan 2 and 3: R3 060 <b>Loan 4</b> = R18 670
Day 60 (end of second month) Cash out = 18900	To cover the expenses of the second month, business must contract a new loan for 1 month: <b>Loan 5</b> = R18 900, i.e. total amount outstanding = R41 145	<b>Loan 5</b> = R18 900, i.e. total amount outstanding = R37 570
Day 75 (second contractual payment) <b>R 20 790</b>	<b>Interest charges</b> on loan 4 and 5: R9 539 <b>Loan 4</b> = R20 455	<b>Interest charges</b> on loan 4 and 5: R8 436 <b>Loan 4</b> = R16 780
Etc.		
Estimated Interest charges per year	R102 000	R120 000

## Ongoing access to finance and relationship with creditors

### Mr. M

From general statements made in the interviews, it seems that Mr. M. had no proper strategy about securing finance for his contracts. This probably came from being unprepared for the need for finance and having no time. This explains why he chose supplier credit as the most straightforward source.

Although he gave clear indications that this mode of financing did not work well for him, he did not give further details about how he dealt with the problems that

<sup>42</sup> Composed of: machinery and equipment : R15 000, uniforms R1 500, chemicals : R3 000, petrol : R1 000, telephone : R500.

<sup>43</sup> Composed of: Wages for first month : R14 400, Costs for 2nd month : R4 500

came up. One may only speculate that suppliers put pressure on him to repay debts and refused to grant further credit, and that he may have been obliged to turn to other solutions, in particular, delay staff payments.

## **Mrs. S**

Building on her husband's experience, Mrs. S. chose not to make any use of supplier credit. She decided to prefer pure moneylenders. However, her experience was also not conclusive:

- Formal Microlenders:

Mrs. S. reported about her attempts to draw on funds from formal microlenders ("the ones in the City"). "They are difficult. Because for example if you have a judgment against your name, even if the amount is under R3 000, they don't want to give you. Like me, my name is in the Credit Bureaus for under R3 000, they don't want to know".

- Informal (township) moneylenders:

In her first interview, Mrs. M. was still optimistic about township microlenders. "They trust me, they understand where I come from". On the question of the procedure to be granted a micro-loan from a township lender, she just casually replied that she "had to fill-in the forms".

At that stage, she only complained about the exorbitant interest costs that she had to pay. "If I ask for R100 for a month, I will pay back R25 or 30 interest at the end of the month". This is close to the interest rates practiced by the suppliers.

In the second interview, though, she proved to be far less optimistic about the process of borrowing from moneylenders.

*"They are very cruel. They take advantage of you. They know that you are desperate. So they wait until the 11<sup>th</sup> hour, when you are very desperate, and then they make you sign papers, you don't know what you sign. They are very, very cruel, they want to kill you".*

This radical shift in her view about the informal moneylenders within a month visibly corresponds to the borrowing cycle. From being at the receiving end, Mrs. S. suddenly found herself unable to repay and probably found that the procedures of these lenders to recover owed funds were as unscrupulous as the loan-granting process was easy.

## **Government agencies**

At some stage, Mrs. S. expressed a wish about what government policy should do, which betrayed her naivety:

*"They should lend me enough money so that I could fill all my gaps, and then I would have only one person, I would talk to you".*

## 7. Tentative Financial ratios

Calculating financial ratios is speculative since there are no financial statements for any of the businesses. However, a simulation of these ratios gives interesting insights; it shows that the two businesses cumulate all financial problems. The working capital cycle will not be treated again here since it has been reviewed in detail in the previous section.

### Cost structure

The first problem is a high level of costs, or in other words an insufficient margin. There are two main reasons for this: the high competition of tenders, and the presumed high levels of overhead costs, especially finance costs, of which the entrepreneurs are not fully aware and which are therefore not properly reflected in the offers made to tenders.

*Table 34.4 – Estimated Cost Structure for Mr. M's business (contract with MetroRail)*

<b>CS4a</b>	<b>Low</b>	<b>High</b>	<b>Mean</b>
Variable costs (wages, UIF, consumables, petrol)	72,6%	72,6%	72,6%
Fixed costs (telephone, insurance, small equipment, protective clothing)	10 500	10 500	10 500
Finance costs (estimated)	97 200	117 600	107 400
Possible other costs: rent, stationary, depreciations, etc	800	3 000	1 900
Breakeven	395 985	478 467	437 226
	Year 1		Year 3
Actual Turnover	420 000		144 000
Break-even (average, with adjusted financial costs) <sup>44</sup>	437 226		199 033
Deficit to mean breakeven	-4%		-28%

In this simulation, it appears that the margin on variable costs, which would suffice if finance was available free of charge, is too low to cover the high

<sup>44</sup> For the breakeven calculation, it would have been incorrect to treat finance costs as absolute fixed costs, since these costs are related to the working capital, hence decrease when turnover decreases. However, expressing interest charges as variable costs would bring the level of variable costs to 96% (low estimation) or 101% of turnover, in which case a breakeven analysis becomes meaningless. Therefore, financial costs were re-estimated for Year 3 (which has the lowest turnover) following the same logic as for Year 1, showing that the decrease of financial costs was less than proportional to the turnover decrease. Hence the deficit to breakeven is aggravated.



presumed financial costs.

This causes in almost every scenario a loss, which was estimated as follows:

*Table 34.5 – Estimation of CS4a's profit or loss*

	Year 1			Year 3		
	Best case	Worst case	Mean	Best case	Worst case	Mean
Profit / Loss	6 580	-16 020	-4 720	-12 086	-21 886	-16 986
In % of turnover	2%	-4%	-1%	-8%	-15%	-12%

For Mr. M., dealing with the problem of costs involved several difficulties. The possibilities to cut costs are often restrained by contractual clauses, especially as far as labour costs are concerned: as Mr. M. emphasised, government contracts often stipulate the number of employees and their wages. Therefore, businesses can only cut other costs, such as drop the workers' insurance (although it is presumably also stipulated in the contract), buy less expensive chemicals (although, as Mr. M. mentioned, the brand of chemical to be used is also fixed in the contract).

An additional problem is the possibility of deadweight costs. This possibility could not be exhaustively studied in the two interviews, but Mrs. S.'s mention that she has been renting a house for several months (in the hope of setting up a spaza shop at some later stage), indicates that the couple does not have a real understanding for the real necessity of costs and their adequate timing. Decisions such as this one could unnecessarily exacerbate the businesses' cost problem.

It then seems that the position of Mrs. S.'s business in respect of costs is not better than the one experienced by her husband earlier.

## Interest coverage

Again, calculations are hypothetic since all elements, and especially interest charges, are estimated. Nevertheless, it is clear that the business has an interest coverage problem.

*Table 34.6 – Estimated interest coverage for CS4a (Year 1 and 3)*

	Year 1		Year 3	
	Low	High	Low	High
Operating profit	104 580	104 580	27 714	27 714
Interest charges	97 200	117 600	39 000	47 800
<b>coverage ratio</b>	<b>1,1</b>	<b>0,9</b>	<b>0,7</b>	<b>0,6</b>

Under the assumptions made, it would seem that only in the first year and under the low estimation of interest costs (that is with a start-up capital of R3500), the operating profit would have sufficed to cover interest charges (ignoring all other

possible costs, such as rent, depreciations, etc). In the higher estimation, there is already a deficit of 11% to cover finance charges, and in the simulation that was run for Year 3, where the turnover is far lower, the deficit is even larger.

Again, even though Mrs. S. has attempted to escape from this debt trap by avoiding supplier credit, and if she has managed to obtain a (so-called) interest-free equipment loan, the circumstances of her business have forced her to turn to moneylenders, so there is every reason to believe that her business will suffer from the same deficits regarding interest coverage.

## Equity ratio

To estimate the equity ratio, it is necessary to validate assumptions on the initial investment made by entrepreneurs – which Mr. M. and Mrs. S. could not indicate clearly.

Table 34.7 – CS4a's equity ratio simulation, depending on initial investment

	High	Low
<b>Assumed initial investment</b>	R3 500	R500
<b>Initial Equity Ratio</b>		
Equity Yr 1	3 500	500
Debt 3 months	25 999	32 531
Equity ratio (middle of Year 1)	11,9%	1,5%
<b>Equity Ratio End of Yr 3</b>		
Initial contribution	3 500	500
Profit or loss Yr 1	6 580	-16 020
Loss Yr 2	-2 753	-18 953
Loss Yr 3	-12 086	-21 886
Debt end of yr 3 (stand alone)	12 000	15 000
Plus debt carried over from previous years	6 500	24 398
Total Equity	-4 759	-56 359
Total Debt	18 500	39 398
Equity ratio (End of Year 3)	-34,6%	<i>Not meaningful</i>

Sources: simulations based on statements made by Mr. M.

As the table shows, the multiplication of debts to secure working capital has been such that the equity ratio has probably already reached critical levels as early as after the first three months of trading. Even assuming an initial member's contribution of R3 500, the equity ratio after three months would be under 12%. In the case of an initial investment of R500 only, the equity ratio would have been only 1,5%.

After three years of business with MetroRail, with turnover decreasing and

deficits aggravating, there is almost no chance that anything remained of the initial equity. In the pessimistic scenario, the accumulated losses may even have been over R50 000, in complete disproportion to the initial investment. In that case, an equity ratio is not meaningful anymore since the losses accumulated are even higher than the debts that might have been secured. Even in the optimistic scenario, the equity ratio is far under 0 at almost -35%.

One may wonder if these estimations are correct, since they seem in conflict with a statement by Mr. M., who indicated that he has occasionally bought further tools and equipment, based on cash surpluses generated by his business. If these surpluses correspond to profits, then it would mean that the business has been able to raise its asset value by accumulating some equity. However, it is more likely that the cash flow has been diverted from creditors for the purpose of enabling occasional new investments, even if the business could not really afford them. In other words, it seems to have been Mr. M's strategy, knowing that he was caught in a spiral of debt which he was not able to repay, to rather default consciously on his debts and use the cash flow for his own benefit.

### **Debt maturity mismatch**

In addition to the level of debt, the problem of the maturity is worrying. Mr. M. and Mrs. S. have been unable to secure long-term finance, and Mrs. S. has had to finance even her equipment through short-term funds.

Even with the strongest financial discipline and with the best luck, Mrs. S. could never have been able to repay her equipment loan within 3 months or even within 12 months. In fact, assuming that she had been able to realise the expected profit of R1 890/month as soon as month 3 (implicitly ignoring financial and other overhead costs), assuming that the profit in the first profitable 2 months would have been used to constitute a "fund" to cover working capital needs, and further assuming that from the third month the monthly profit would have been used by half for the remuneration of the member and by half for the repayment of the equipment loan, she would still have required 22,5 months to repay the machinery.

Considering financial and probably other costs, it is already clear that her profit will not materialise and she will have to default on her equipment credit. Mismanagement of course aggravates the situation.

### **Variability / evolution of profile**

If the two businesses may have seemed courageous and attractive initially, winning tenders because of the institutions' will to encourage black micro entrepreneurship, they seem to be both condemned to a linear degradation of their profile in all respects, although this may not yet be visible for Mrs. S's business, which is still able to win contracts.

Instead of experience and references, it seems that the two businesses can only

accumulate losses, new credits and new defaults. All ratios have rapidly “turned red”. Maybe even more serious is the presumed accumulation of bad reputation, at least in the cleaning sector: the history shows that Mr. M’s business has lost all his contracts and Mrs. S., having deceived her client with regard to the presence of machines on the site, is unlikely to be recommended or even engaged by the client again. There may be more hope in the building renovation area, where Mr. M. is still occasionally granted jobs (under Mrs. S.’s business name).

The only appearance of improvement which they seem to safeguard is with regard to their equipment, as they still manage to replace tools and acquire new ones – although this is at the cost of more defaults on debts.

## **8. Approach to business**

In the two interviews, it became increasingly clear that Mr. M. and Mrs. S.’s approach to business was a decisive element explaining the businesses’ failures. Documenting this approach properly would no doubt require more qualified and focused investigations, but the case study would miss an important point if it wasn’t at least attempting to tackle this complex issue.

The discussions that took place during the semi-structured interviews invariably ended with the same unspoken conclusion: that business was not going well, that the entrepreneurs were in trouble. Each time, I tried to understand the entrepreneurs’ strategy, the way out. I was hoping for (and unconsciously trying to provoke) a realistic but courageous statement acknowledging the flaws in the current concept, and looking for the hard ways to redress the situation.

Invariably, two groups of equally naïve comments came: one highly optimistic (“we have to keep going and hope that little by little things will get better”), the other one pessimistic (“nobody helps us, those people they are very cruel”). Never did Mr. M. or Mrs. S. acknowledge that their business model was condemned to fail.

### **The entrepreneur’s social status**

A factor that possibly blurs the perceptions of Mr. M. and Mrs. S. about their business performance is the satisfaction with their social status as entrepreneurs. To some extent this status involves some altruist considerations: Both entrepreneurs were talkative about their desire to help the community by giving jobs, training people, etc.

The fact that they do employ neighbours or relatives, however precarious this employment may be, probably procures them at least respect, if not privileges within a community in dire need of job opportunities.

This impression of success reflected by the community’s perception causes Mr. M. and Mrs. S. to nurture even more unrealistic dreams. They confirmed that they see their businesses as a first phase by which they would accumulate skills and capital in order to later realise their dreams. Mrs. S had the biggest visions,

seeing herself owning a big factory and employing about 50 people whom she would train and nurture and “supply them with machines”, while running a spaza shop with a telephone (an activity which she perceived as very lucrative), to provide additional income. Mr. M. suggested that his dream was to invest in a large-scale wood workshop, where he could go back to the work he was trained for, while providing jobs to the community.

Such a fantasy seems difficult to believe in a context where, economically speaking, the two enterprises are effectively destroying value, and the skills/experience gained in the first failure have helped little to prevent the distress of the second. But one may wonder how long the community’s sympathy will last in a context where the number and amounts of debts that are not honoured increases every month.

## **The passive attitude in business**

Unlike many other entrepreneurs who have invested much personal creativity and involvement into their firms, the attachment of Mr. M. and Mrs. S. to their businesses seems to come only from resignation and a lack of alternative projects. A sentence frequently repeated by Mr. M. illustrates this attitude:

“Yes, this is no good, but what can we do, it is better than folding hands when children must go to school.”

In fact, the perception of their role in the business was submissive and linear (procedural). This may be a legacy from the apartheid time, where black people were expected (and trained) to be executors rather than thinkers.

Other empty sentences from Mr. M. showed that his ambition was quantitative rather than qualitative: “As long as you have something to do, work is going on” or “Business has to grow”.

Therefore, as described in the previous section “management style and philosophy”, both husband and wife seemed not to be involved directly in their businesses, but rather filling in forms, organising, driving around, “supervising” as written on their document. They certainly did not show any concern for the customer’s satisfaction – a paradox in entrepreneurship.

Another consequence of their focus on doing their “homework” properly was their tendency to incriminate other people for their lack of success. If in spite of all their efforts they are in distress, then someone is “cruel” or cheating them. The various formal and informal financial institutions, credit bureaus, as well as government-based SME support schemes and even the clients themselves were alternatively blamed for the difficulties encountered.

Conversely, the passive attitude – and the fact of being usually confronted with negative reactions to their pleas – may also have generated an absence of critical thinking about offers made to them. In particular, it is probable that Mr. M. did not think much about the cost and conditions of the credit that suppliers were offering him – or about possible alternative ways of covering his need for

working capital. Similarly, although she was determined to avoid the trap of supplier credit which her husband had been victim of, it is probable that Mrs. S. did not think long before accepting the two-months credit offer made by the vendor of cleaning machines. If she had given it enough thought, she would have known that 2 months would be far too little time for her to generate sufficient cash flow to repay the machines in full. If she had planned it correctly, she may have been able to seek alternative and more appropriate financial support, for example from NGOs supporting female micro-entrepreneurs. Instead, in accepting the vendor's credit, as well as in signing microfinance agreements, she seems to have obeyed to the wisdom of "Whatever you get, take it, otherwise you may end up with nothing" – a wisdom that brings disillusion.

## 9. Final reflections

The purpose of this last section is to reflect on internal (personal/financial) and external (structural/political) factors contributing to the failure of the two businesses presented. The aim of this exercise is not so much to identify a "culprit" for the situation observed, than to highlight some specific contextual factors which are particular to these township businesses, and may not be immediately present to the mind of readers used to "first world" SMEs. Lastly, we seek clues about the representativeness of these two cases.

### Internal problems

#### Literacy problem

The first obvious issue that hindered a sound and thoughtful management of the businesses was the deficient literacy of both entrepreneurs. Although they had had a basic schooling and had learnt to read and write in English, they did not cope with the formal language of business correspondence, tender documents, and probably other documents like the possible credit documents provided by the moneylenders.

The impression gained in the interviews was that, when confronted with such documents, their reactions were guided by the context rather than the content. Although anecdotal, the episode of the fax illustrated this fact: while the fax was merely asking about their availability in a context of modified dates of the job tendered for, their comments showed that they had no clear understanding of the content, but they knew they *had* to sign it, in order for the process to "go on".

While the blind signing of this particular fax was of little practical consequence, the same fact has had dramatic consequences in other circumstances, especially in connection with microcredits. In particular, Mrs. S. was not aware of the commitments that she was taking on by signing – and realised only later the drawbacks for her.

A further issue in the regard was the lacking financial literacy<sup>45</sup>. The intuitive understanding of Mr. M. and Mrs. S. for financial matters was limited, it seemed, to the most basic concepts. They were aware of the concepts of income and expenses (or rather cash in and cash out), and were able to fund a basic costing / pricing calculation on these. They also understood the concept of interest and knew the price of borrowing money, but this cost was not sufficiently present to their mind since they forgot to include it into their cost calculations for tenders.

They also did not seem to be aware that the level of debt that one can afford to take on had to be kept in proportion to ones' own assets or income, and that the fact of taking on a substantial debt meant exposing oneself to the personal risks of insolvency (risk of losing personal property).

Lastly and most dramatically, they seemed unable to carry out any rational planning, especially cash planning, and, although Mr. M. had been confronted with it early on, they still did not seem to have a proper grasp of the fact that in a business like theirs, working capital is a permanent, rolling-over need.

### **Financial needs**

Financially speaking, working capital was, indeed, the key factor of failure for Mr. M. The jobs he was fulfilling had a low barrier to entry, as far as required equipment was concerned. But, as many entrepreneurs, Mr. M. was unprepared for the need for working capital. The lack of back-up resources in a poverty-stricken community compelled him to use expensive credits which his business could not pay for.

Mrs. S. thought she was learning from him, and apparently made alternative arrangements for her working capital needs – unfortunately she did not give many details about these arrangements. Sadly, she did not realise that the business she was engaging in was more capital intensive, and that she had to contract substantial debts to build up the equipment. Hence, ironically, she who had “learnt not to rely on credit” was the most indebted of the two!

It is sometimes argued that obtaining equipment finance is easier than working capital (GEM 2002), especially for entrepreneurs who cannot provide collateral. One may indeed assume that, in spite of her negative credit records, a new female entrepreneur like Mrs. S. may have been able to secure some long-term support for the purchase of machinery – or else, she may have been able to make other arrangements, such as leasing. But Mrs. S., unaware of possibilities and incapable of critical financial planning, did not draw any benefits from these apparently more favourable prospects, and got caught in the trap of debt even more rapidly and dramatically than her husband had been.

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<sup>45</sup> The National Foundation for Education Research in the UK have defined financial literacy as: “the ability to make informed judgements and to take effective decisions regarding the use and management of money.” (1992, quoted by Coetzee et al, 2004, p. 7)

## Financial behaviour generally

Beside a lack of literacy and a lack of resources to cope with the financial needs of their enterprises, both entrepreneurs seem to have had an inappropriate general behaviour in relation to their finance:

- Engaging in expenses that are not currently useful, only in prevision of future needs (e.g. renting a house with the plan of converting it to a spaza shop, “later”);
- Not keeping any reserves, but rather spending as soon as cash comes in (e.g. purchase of a new drill instead of settling debts).
- Hiding rather than seeking amicable arrangements with creditors (especially the vendor of cleaning machines)

The former two types of behaviour, which are related, seem to respond to an urging need to spend any cash that comes in, rather than keep it. This urge may be caused by (a) the lack of a supportive infrastructure for savings, especially access to and cost of bank accounts, (b) a fear that physically keeping the cash (in the pocket or under the bed) may not pay off, either because of robberies or because of the pressure of family and the every day environment to spend the cash, or (c) the attraction of marketing / awareness of what is missing, making the entrepreneurs permanently unsatisfied with what they have, as opposed to the psychological satisfaction procured by spending money, which gives the illusion of being rich.

The latter behaviour was probably caused by despair, as Mrs. S. saw no possibility for her to repay the debt. However, it would have been more appropriate to seek (if need be with the support of a legal advisor) a rescheduling of the credit to approximately 2 years, which is a more reasonable time for the payment of such equipment. But this behaviour seems to be typical of poor people’s psychology, as commented on in different contexts:

*“When every possibility of efficient handling on the present is excluded, what is left is cheating, tricking out the present reality and all its interdictions, in a very costly way since it is rarely effective. This is how it goes almost always and everywhere with the life of the poorest in the richest societies.”<sup>46</sup>*

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<sup>46</sup> Abdelmalek Sayad, 1995, pp. 97-98 (Un Nanterre algérien, terre de bidonvilles – Editions Autrement, Série Monde/Français d’Ailleurs, Peuple d’ici, HS n° 85, Paris, 1995) – freely translated from French.



## **External factors hindering Mr. M. and Mrs. S.'s success**

### **Reckless lending?**

The first question is whether they have been victims of reckless lending, either on the part of suppliers of materials (for Mr. M.), the supplier of equipment (for Mrs. S) or the moneylenders.

Suppliers and moneylenders charged very high interest rates, but this is current practice in informal areas and seems to reflect at least partly the risk of lending (high default rates) as well as the proportionately high administrative costs incurred in lending very small amounts. High interest rates are tolerated, under certain conditions, for microcredits in the revised Usury Act. The interest rates can thus be regarded as acceptable, but other practices of these lenders may correspond to reckless lending. This includes lending to highly indebted individuals, providing insufficient information to borrowers, implementing recovery procedures that disregard the usual legal frameworks. Unfortunately, the data available are insufficient for a definitive conclusion on these aspects.

Another question is how to judge the behaviour of the vendor of cleaning machines, who has offered a 2 months credit to Mrs. S. for an expensive package of equipment, while it was rather unlikely that she would have been able to repay it so quickly. Was the credit period standard in the supplier's dealings with large institutional customers? Has this vendor undertaken any check of the business's credentials before offering the credit and if so, has he consciously profited of the naivete of Mrs. S., in the hope of repossessing the equipment after receiving a partial payment? Or was he just as naïve as she was? Has the vendor actually offered Mrs. S. the choice between a longer credit (possibly for 2 years) and a prompter repayment, with her deciding for the second option in order to obtain a discount?

### **Flaws in Tender process**

While the data do not suffice to pinpoint inappropriate behaviour of lenders, who are private parties with their own interests, the public tender process – which has the explicit aim of supporting black economic empowerment – clearly needs improvements. The following aspects are flaws which make business particularly difficult for black emerging enterprises:

- Delays and lack of communication during the tender procedure;
- Selection of candidates only on the basis of written forms, while an interview would help to recognise to what extent the entrepreneurs were really prepared for the challenges of business;
- Lack of information to unsuccessful candidates when their application is rejected;

- Very short notice to successful candidates before starting the job, giving the entrepreneurs little time to get organised;
- Splitting the contracts into tiny jobs, which can no longer be made profitably (especially for the MetroRail contract, which after the first year was so reduced that it was impossible for Mr. M. to cover his costs);
- Lack of a partnership approach between client and supplier – even mutual respect is not guaranteed;
- And last but not least, absence of financial support, while a deposit upfront would help the entrepreneurs to cover their initial expenses and would avoid difficulties to organise working capital.

For public actors there is certainly a potential to have a better efficiency in their procurement policies by adopting a more partnership-like relationship with their contractors, providing them with an optional mentorship programme and especially paying them promptly (or even upfront) to lower their need for working capital.

### **General issues related to township infrastructure**

In addition to the factors above, Mr. M. and Mrs. S. have been victims of a series of general issues that are specific to township enterprises and affect the business climate in these areas:

- poor town planning (long distances to drive, deficiencies of public transport);
- lack of a proper infrastructure in the townships (telephone, banking infrastructure, business premises, etc.)
- lack of safety.

An additional factor, which is not specific to townships but tends to be even stronger there, is the lack of awareness about the availability of supports. For example, businesses should know where they could find legal help, business training or mentors, or other forms of advice.

### **Generalisation**

The last question that needs to be addressed is whether these two cases are typical of township businesses, or rather an extreme exception.

A first caution is to operate a clear distinction between “African (black) businesses” in general, and “township businesses” in particular. Black entrepreneurs who are able to establish their firms in developed urban areas, are not usually faced with the challenges that confront township entrepreneurs. Especially if they are young and come from the middle class, they are likely to have a better initial training, better back up resources and a better access to SME support services, than older, poorly trained and impoverished township

entrepreneurs. In other words, there are certainly many African micro businesses that are well managed.

Looking specifically at township businesses, it would also be inappropriate to suggest that all of them follow the pattern described in these two case studies. There are certainly strong variations especially in the character of entrepreneurs, and we found that a number of them prefer to restrict their growth, and even remain dormant for long periods of time, rather than contracting debt to engage in unaffordable jobs.

Nevertheless, both the internal (literacy and backup resources) and the external factors listed above, that have contributed to the difficulties of the two enterprises, are frequent in township environments. Therefore, it would not be surprising to find similar situations in many other businesses, with other entrepreneurs but in similar circumstances. There are plethora reports of specialised institutions (such as the MFRC) to illustrate the spread of over-indebtedness in poor communities, including small business owners.

Another indicator of the frequency of debt-trapped individuals is found in the records of credit bureaus relative to delinquent debt. In 2004, Credit bureau Transunion ITC had 17 million “credit active” names on its database, with adverse credit reports on 15%, or about 2,5 million, of these.<sup>47</sup> It can be hoped that increasing efforts of various government and financial sectors institutions, as well as NGOs, to increase financial literacy and borrower protection, will bear fruits and prevent a further escalation of these statistics.

If they do not, the much-praised empowerment-focused procurement policies of public institutions will not help the likes of Mr. M. and Mrs. S. to develop successful businesses. The only consolation in the case of Mr. M. and Mrs. S. is that their businesses have enabled the couple to pay their children a better education than the one they have received, so that one can hope that the next generation will grow out of their parents’ distress. But this is a distant, slow and rather speculative outcome for the cost of the procurement policy.

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<sup>47</sup> Mail & Guardian, 11 May 2004, in “Delinquent debt tops R40bn”

## Annexure 35 – Narrative of Case Study 5

### Operator offering Township Tours

A seasonal business with a highly committed owner, which, after initial losses, has grown tremendously to become a key player in its niche, but has avoided bank debt for its operations.

#### 1. Business Short Portrait:

Business Code Name: CS5	Form of registration: CC
Member's initials: Mr. A. J.	
Member owns 100% of capital (since he bought the share of his former partner Mr. B. S.)	
Member's ethnic background: coloured	
Member is also manager	
Sector of activity:	
Primary activity: SIC 7122 (Safaris and sightseeing bus tours)	
Product or Service: Township tours, other tours, airport transfers	
Business concept: independent – but starting other related company which will supply business to the older one	
Start-up date: 1998	
Current status: active	
Staff members:	Annual turnover: R 1.1 million
- Managers: 1	Total assets : R 434 thousand
- Permanent employees: 13	=> Size category: very small
- Casual staff: 1	
Main sources of finance:	
- Initially loans from friends and bank loan of father	
- Vehicle finance	
- Member's loan	

#### 2. Case study procedure

In the process of searching suitable candidates for case studies, it appeared that many black entrepreneurs were likely to fall into the category 'unconstrained', especially because they had few fixed assets. This raised the thought of seeking more capital-intensive black entrepreneurs by targeting the township tourism

sector, which appeared likely to combine high black ownership as well as substantial asset bases (vehicles).

Following this thought, brochures of operators were collected at Cape Town tourism. Mr. A.J., the owner of CS5, was the first entrepreneur contacted and asked for his willingness to participate in the study. He immediately accepted. Since it was the beginning of winter, hence a quiet season in the tourism industry, he was able to offer two long interviews in addition to further brochures and his financial statements.

The study is based on the following sources:

- 1 pre-telephonic interview
- 2 on-site interviews of the member
- financial statements for the years ended 28 Feb 2001, 02, 03 (with comparative figures for 2000)
- 1 short interview of the “general manager” or head of administration
- brochures
- e-mail correspondence with the member (and accountant?)

### **3. The business owner**

#### **Background**

Mr. A. J. is in his early 40s. He holds a degree as well as a Higher Education Diploma, and worked as a teacher for 5 years before starting his business. As he put it, he “hated teaching so much, that [he] had to do something else, but [he] didn’t quite know what”.

In 1997, a friend of him suggested that he could try to get involved in tourism, which was just beginning to develop after several decades of isolation but seemed a promising field. To Mr. A. J., it was clear that if he was to engage in tourism, it would be to show travellers the “real” South Africa, in its cultural diversity and riches.

Mr. A.J. then took a tour guide course and registered as a tour guide with SA tourism. The tour guide training of the time left him unsatisfied, because it was too strongly focused on European history and culture, while he was eager to show to European travellers the non-European component of South Africa. Once a registered tour guide, he found two partners ready to support him, and felt ready to go into business.

#### **The partnership**

Interestingly, Mr. A.J. also had difficulties with his initial partners. Like in Mr. R.A.’s case (Case Study 3), this was not mentioned in the first interview. At the time, he had only briefly mentioned that he had been in partnership in 1997 and

then started a CC on his own in 1998. After reading contradictory evidence in the financial statements, I came back to this issue in the second interview and obtained a more detailed account.

Mr. A. J. did his first steps in the tourism industry in partnership with two young men. The first attempts were not very successful, as the partners were all inexperienced and “trying around”. This first partnership was dissolved after 1 year.

After this first year, Mr. A. J. remained with one of the partners, Mr. B. S., and they registered a CC. Unlike Mr. A. J, who was conducting the business operations on a full-time basis, his partner was essentially meant as a “sleeping partner”, bringing in some capital and his formal business skills (he held an MBA). Mr. B.S.’s initial contribution was rather small, though, his member’s loan remaining constant throughout the period at R6 000. In addition, Mr. B.S. contributed only little time since he was employed elsewhere. Formally, the two partners were equal, each owning 50% of the capital.

The arrangement was that Mr. B. S. would look after the administration of the business. The problem was, according to Mr. A. J., that his partner was “seriously risk averse” – possibly because he had little control over the firm’s trajectory. Mr. A. J. said that his partner was even reluctant to engage in simple steps like acquiring a credit card payment facility. While for Mr. A.J. enabling clients to pay with their credit card was a key to customer service and hence growing turnover, for his partner it was a risk since it would create additional costs. As a result, Mr. A. J. soon felt that his partner’s analytical works were putting a brake on his own efforts to grow his venture (“by the time he had finished his analyses, opportunities were gone”).

As years passed, the imbalance between the two partners grew, with Mr. A. J. identifying himself more and more with the business, which he was managing on a full-time basis, and financing more and more out of his own pocket since he was withholding his own salary payments in order to maintain enough liquidity in the enterprise. Meanwhile, the involvement of Mr. B. S. remained unchanged, that is, marginal. The tensions became worse when the business reached breakeven. Mr. A. J. still resents this difficult time, because he felt that he had done the most sacrifices in the first few years (working until late at night, without taking a salary). When the business started to work well, his partner suddenly wanted his share.

The conflict ended with a termination of the partnership in 2001, but this was a difficult process, which is still keeping Mr. A. J. busy. As he put it, he “wanted him out, at any cost – and it has been a great cost”. The partner asked to be indemnified on the basis of Discounted Cash Flows, based on earnings projections that he did himself. Mr. A. J., lacking the financial acumen and desperate to end the partnership, agreed to these conditions and signed, in his terms, “this ridiculous deal”, committing himself to paying R115 000. (Considering that his partner had brought only R6000 in initially, and had not worked full-time for the business, this was a really high price indeed).

In retrospect, Mr. A. J. considers this partnership as his “mistake no 1”. He now preaches the principle that, in a partnership, both parties have to be equally committed, share the same passion or simply the need to earn a living as soon as possible. As to the indemnity, he still has not paid it and is considering consulting an attorney to see if there is a “way out of this deal”.

## **Character**

Mr. A. J. is another charismatic entrepreneur. Extremely friendly and quite open throughout, he was also intelligent and, it seems, knowledgeable about the history of Southern Africa. His enthusiasm about the inspection of new sites betrayed his curiosity and passion.

To realise his dream, he has visibly had to work hard – “getting up early in the morning and staying out there until 10 o’clock pm”. He said he is always irritated to hear people saying that “there is no work”, because in his view there is always much work to do – maybe it will not pay you immediately, but it is worthwhile nonetheless “so long as you set the foundations of something that will bring you further”. This belief drove him and made him hold through the difficult times of his business.

In Mr. A. J’s personality transpired as much aggressiveness as prudence. From his comments, it seems that he used to be far more aggressive and “bullied” in the early stages of the business. Nowadays, he admits having lost some of the drive – partly because the need to earn his keep is not so urging any more, partly because the experience accumulated helps him anticipate risks. One of the visible elements of prudence was his aversion to debt, even now – after having established himself as a key player in his field.

He also appeared cost-conscious, sometimes at the extreme, seeking every opportunity to avoid paying certain costs. For example, he mentioned his reluctance to pay the commission owed to intermediaries, like hotels and guesthouses, who orient their clients to his company. He tried to invent new calculation schemes aimed at reducing the level of commissions, but his accountant warned that this would not be acceptable and he had to admit that as long as he got business from these intermediaries, he could do nothing but to pay these commissions. There were other anecdotes which betrayed some naivety in the drive to avoid costs.

He also seemed sensible and, in a way, humble. When talking about his financial management, for example, he showed a good intuitive understanding of the mechanisms at stake (although he would confuse, for example, debtors and creditors), but he was not ashamed to ask me basic questions. “I have no idea” was a phrase that came frequently in our conversation, although the following comments made clear that he actually was reasonably aware of the issues. There was often an undertone in his statements suggesting that, in spite of his success, it may well change and he was not immune against insolvency.

In six years, he has come a long way but still considers himself “a worker rather

than a boss”, and is conscious of the need to share the benefits of his success with the community that he comes from. He therefore co-founded the Tourism Community Development Trust, and is involved in many other community-based projects.

### **Involvement in other projects**

His generosity and enterprising spirit made him get involved in a number of other projects and ventures. Apart from the Tourism Community Development Trust, he indicated that he lent money to many other start-up entrepreneurs who were in the situation in which he had been initially – he estimates that in total he has lent about R50 000 – but is not sure to recover that money.

He also became involved in two other business ventures: on one hand, he has been involved as a director of a Johannesburg-based venture whose ambition was to market hand-held audio guides to South African tourist sites – but the system has not worked, there has been little interest in the product and the business is now “in a standstill” – the Johannesburg entrepreneur is currently looking for a buyer for the technology. “All I lost there was time and effort, but I feel sorry for my partner because he has lost a lot of money”.

In addition, in 2001 Mr. A. J. was part of a partnership which founded a tourism related retail company. However, in 2003 Mr. A. J. sold his share in this company, in order to generate cash which was pumped into his newest project, started in 2003.

The newest company started by Mr. A. J., in partnership with a friend, is an inbound tourism company, which means that it operates one level up from the other CC. While the CC is a “ground handler”, which operates only locally with its own vehicles, the inbound company could be seen as a tourism wholesaler, contracting directly with the foreign groups/clients and arranging their entire stay in the region, subcontracting local tours to other ground handlers (they would use the sister CC as a Cape Town operator, but use third party subcontractors in all other regions where the client would go).

But apart from the latter project, which Mr. A. J. places many hopes on, he is mainly attached to his first business, which he has put much effort in. He has had the opportunity to sell his CC to big groups, but he has always refused, not seeing himself in a corporate environment. He mentions a friend and competitor who, after being caught in a shooting during a township tour and having feared for his life, has accepted such an offer. “But for me, they will have to shoot 200 times at me before I sell!”, says Mr. A. J., adding that the only reason that could make him sell would be if his newer business was becoming so successful that he would need to concentrate 100% on it.

### **Personal Finance**

Mr. A.J’s home, from which his business operates, is a good illustration of the



financial situation of its owner. It is situated in Grassy Park, at the South end of the Cape flats, in one of the most attractive parts of a generally poor-reputation area. It is a surprisingly big estate, composed of a relatively large house, with another building at the back hosting the business... as well as a bar and a “party room”. The garden itself is large enough to host without crowding at least 4 minibus-type vehicles, a swimming pool, a swing, a picnic table, and some lawn. The property belongs to Mr. A. J., although he has not yet fully repaid the bond.

Mr. A. J. privately owns one car (driven by his wife, while he uses business vehicles as needed), and the “odd life insurance policy” – but no significant financial investments: “This is my investment”, he says, pointing at the business.

His personal debts are limited to his bond, the credit on his wife’s car, as well as his own credit card. He has never defaulted on a debt, adding (probably more out of humility than real worry) that “it might change”.

While his property placed him above the average black entrepreneur, he indicated that he has never had to use it as a collateral for the business – because, in fact, he had never used bank finance other than for the purchase of vehicles. However, a factor that played in his favour was the availability of cash among his friends and relatives.

## **4. How the business started**

### **Initial investment**

Not surprisingly, the first major asset bought by Mr. A. J. was a vehicle. However, at that stage he made his “mistake no 2” by choosing an inadequate vehicle (a stationwagon), for he was too unaware of the market requirements. He bought that vehicle for R15 000. Unfortunately, he soon realised that the vehicle was not suitable for his needs and ended up not using it much, rather working as a guide (subcontractor) for other agencies and driving with their vehicles.

After one year, he sold the stationwagon and bought a microbus.

### **Business financing scheme**

In the pre-selection interview that I did with Mr. A. J. over the telephone, he had indicated that finance had been an “absolute problem; in fact, I’ve given up on finance”, which had made me think that he was self-rationing his growth considerably because of his lack of success in seeking finance.

The interviews showed that the reality was quite different. Initially, he was so pessimistic about his chances to get a bank credit that he did not even try. As he told me, he was unemployed at the time, and did not have any contacts to “bank people”, so he would have little chance. More generally, he felt that for a poor black entrepreneur in the late 1990s, it would have been unheard of to ask for a

bank credit; “black entrepreneurship was such a crazy thing”, there was no established policy framework as there is nowadays.

Mr. A. J. was initially quite vague about the way he covered his financing needs –indicating that he “borrowed from Peter, John and Michael”.

In the second interview he admitted that, for the purchase of the first vehicle, he used a credit that was granted by the bank to his father. This was by no means an ideal solution, because, as a result of that, the vehicle was technically owned by his father, which created some problems for the business. Also, that financial construction meant that, although the payments for the vehicle were actually coming from the business, the CC could not build up a credit record with the bank. The father’s credit hence supposedly covered most of the need for initial equipment finance.

As to working capital needs, Mr. A.J. borrowed from a circle of acquaintances and relatives. He illustrated the process as follows: “If I needed, say, 15 thousand Rand, I would target people whom I knew had some money, among the friends and relatives, and I would ask them to lend me two thousand or five thousand, until I had the entire sum. I would organise the repayments gradually, I would say to the first one “I’ll pay you after 6 months”, and to the next one “I’ll pay you after 9 months”, etc”. He decided about the repayment dates instinctively, adding that he “had no idea whether he would have cash to repay on the day that the money was due”. But he did honour all his debts.

## **Access to finance**

This period, searching for finance and striving to establish the foundations of the business without any income coming in, was a very difficult time (“one of the worst times of my life”).

But Mr. A. J. had decided to start this project and would not go back. He knew that he would not get any support from outside. As he commented: “People expect money from the government, but that just doesn’t happen – there are so many forms to fill in, even for me as a teacher this was too much – so how would the less educated people be able to cope with that?”. As to banks, apart from the historic divide between black entrepreneurs and financial institutions, Mr. A. J. felt that they were too expensive, and he could not afford the finance charges.

This family and friends’ network was the key to Mr. A. J’s start-up finance. Since the money came from people who knew and trusted him, he could obtain the funds without a formal procedure. It would have been difficult for him at this stage to provide anything like a business plan. The ‘social collateral’ replaced the financial sureties that he did not have. He was also exempted from the interest payments, which sometimes put a strain on the profitability of start-ups. Supposedly, this financing choice also gave him some flexibility in the repayment schedule, although Mr. A. J. was adamant that he “always paid back when [he] needed – but it was sometimes more difficult than other times”.

## **5. Business model and operations**

### **Business model**

Mr. A. J. defines his business as “cultural tourism”. Initially the focus has been township tours, but he has learnt to diversify to include other destinations, however always with a historical/cultural focus (Robben Island, District Six, but also the Winelands and other places). In addition, Mr. A.J. offers airport transfers and general touring - a lucrative side activity.

Apart from the “routine” scheduled tours (which happen every day at fixed hours, when a bus picks up tourists from hotels and defined spots), the business also offers special events on demand, like theme tours. He gave the example of an incentive trip that brought people from a hair product company to South Africa last year – for the group, Mr. A. J. organised a tour through the “hairstylist’s route”, visiting different township hairstylists, African hair-plaiting stands in town, etc. He would also organise African evenings, with marimba bands.

The business is currently run by a team of eight permanent employees: three of them are guides, and paid on a variable fee basis, three are drivers, he has recently increased his administrative staff to three, and the other two employees are responsible for cleaning and vehicle maintenance, with one of them occasionally stepping in as a driver as well. He also works with freelance guides in season to create additional capacity.

The business is highly seasonal. In spite of efforts in the industry to promote the “secret season”, there is still little activity during the winter months. Mr. A. J. estimates that 90 to 95% of turnover happens between October and May.

### **Assets and premises**

#### **Vehicles**

For local tour operators, a key criterion is to “have wheels”. Indeed, the 6 motor vehicles (minibus size) represent 93% of the gross value of fixed assets in Feb 2003. The remaining assets are computers and furniture.

The decision of how many vehicles to own is not an easy one: although they are used at full capacity in season, in winter most of the vehicles stand still, bringing no income but generating finance charges and a strain on the cash flow. Therefore, Mr. A. J. prefers to work with a limited number of vehicles, and charter out other people’s combis or outsource excessive business in season, to keep the financial flexibility.

## **Premises**

When he started his business, Mr. A. J. felt the need to rent premises outside his home. He settled in a modern office block in central Cape Town for 2 years, 1998-99. Considering the limited earning capacity of the business in the first few years, this decision was expensive: he paid R2 000/month for about 20 square meters. The income statement for the year ended February 2000 indeed mentions costs for “rent, water and electricity” of R26 000. This cost certainly was a burden for the early working capital management.

In spite of the costs, Mr A. J. felt that the decision was correct, because it gave him a profile initially. As he put it, the tourism sector is a “glamour industry”, what you sell in the first place is an “image”, and he knew that he would not have enough credibility in the early stages if he was operating from home.

After two years, having established himself as a credible market player, he could afford to move his office back to his home. After the first year when the business paid no rent, Mr. A. J. decided that the enterprise could now afford to contribute to the house’s costs, and draws a rent to finance his bond. According to the income statement for the years closed February 2002 and 2003, the rent (including electricity and water) has been in the region of R17-18 thousand per year.

Apart from the office room where the administration takes place, and the parking which is important to keep his vehicles safe, Mr. A. J. occasionally uses the facilities that he built into his home (the swimming pool, bar, etc) to socialise with clients or partners, e.g. inviting them for a “braai” over the week-end.

## **Management style and philosophy**

Mr. A. J. is adamant that an entrepreneur should be involved with the business: “don’t be a boss” is his general advice to young people asking for his advice on starting a business, “act like a worker, not like an MD”. In spite of his involvement, he feels that he can no longer know and follow all the details of the business, like which company has booked a tour when.

Initially, Mr. A. J. was, in his own terms, an “entrepreneur” more than a “manager”. This involved a visionary attitude and a readiness to take on risks. He was guided by the industry’s potential and his focus was to get the building blocks in place to get where he wanted to be. He was not scared to take hard short-term decisions if he felt that they would pay off on the long run. His device then was: “OK we’re gonna take a knock now but in 3-4 years it is going to be worthwhile”.

After six years, this has changed a bit. As he put it, he is “grappling with the lifecycle”. The South African tourism industry seems to have reached a plateau, and this also applies to his company. This situation calls for a change in management style, to focus more on the quality of the routine: “We need to

defend our jobs on the basis of merit more than on the basis of being the *flavour of the month*.”

To some extent, this situation worries him: “you lose the motivation and the drive, you have to reinvent yourself”.

Accordingly, Mr. A. J. seemed to hesitate between managing and enterprising.

He admitted that, up until recently, he had not put enough effort into the administration of his business. As he says, “I have been spoiled because I have a good team”. But, having reached a low-growth phase, he can for the first time afford to spend some time analysing his operations and seeking some potential for optimisation. His major intervention in this regard was to put in place a new accounting and information system under ‘Pastel’, for which he was, at the time of the case study, training his staff. He expected a lot from this new tool, in particular the possibility to gain better insights on cost-reducing options.

On the other hand, Mr. A. J. still saw his major role as “growing the brand, keeping the profile, getting more clients”. He felt mainly responsible for maintaining the market share, which required constant effort on his part. For example, last year, he engaged on a rebranding exercise, changing the company’s logo and improving its brochure.

Visibly, Mr. A. J. remained an entrepreneur as much as a manager: eager to step out of the routine, seek new projects, set up new targets to achieve in the next 3-4 years: “reinvent himself”.

This balance between the short-term managing and the long-term enterprising, which he was trying to strike, was probably the right way to address his ultimate concern, which was, as he put it, “sustainability”.

## **Market and Competition**

### **Clients**

The township tour operators work for both corporate and private clients. Apart from the direct bookings, which are rather rare, business is usually provided by two sources: local intermediaries and national or international agencies. The local intermediaries include partners in the accommodation sector (hotels, B&Bs, guesthouses), as well as Cape Town Tourism, and similar places frequented by tourists. They earn a commission, varying between 5% and 20%, for each client that they bring.

Agencies are usually large tourism agencies in South Africa (such as Springbok or Welcome) and occasionally abroad. Tourism fairs overseas are particularly useful to make contact with foreign agencies, but Mr. A. J. cannot afford them regularly.

Mr. A. J. talked with little passion of the local intermediaries, whom tour operators tend to call the “mafia”. According to him, they are not interested in

the client's satisfaction but merely in their commission; and it requires the tour operator heavy presence to make sure that they are still advertising his company, exhibiting his brochures, etc. While this regular presence is easy for small tour providers, who are not so busy and have much time to "hang out here and there", it becomes difficult for SMEs that are too involved. Mr. A. J. took the example of Cape Town Tourism: when his business was still small, he was visiting them regularly and had a good personal contact to the consultants – but now that he is bound in his office, he cannot afford to spend time there and they therefore tend to refer tourists to other small operators.

Meanwhile, the agencies usually bring the larger deals but do not work on an exclusivity basis. At best they would consider Mr. A. J's business their "preferred partner".

## **Competition**

Over the years, the township touring market has become more and more competitive, with numerous very small operators and a few big ones. However, the relation with most of the competitors is reasonably good. They work together, passing business over when they do not have the capacity to handle all groups.

A result of this open relationship is that there is much transparency in the service, price structure and even internal details of the various providers.

When Mr. A. J. started his business, he was one of the first entrants in the township tour market. In 1997 there were two other companies involved in township touring, one of which is no longer in existence. He always had a good relationship with the other companies: he even learnt most of the business by working as a freelance guide for one of them, which also enabled him to earn some extra income.

But he knew that his company would have a different approach from his competitors: at the time, the other companies were essentially offering visits to specific community projects within the township (such as, a home for unmarried mothers) and not to "normal" residential areas. The reason for this choice was probably that at the time, these "enclaves" felt safer than wandering through the open streets. Mr. A. J., though, decided to be bolder, his aim was to visit the very people that live in the townships. In this he was a pioneer.

Year after year other companies began to offer similar township tours, and the weight of the competition became stronger. For part, competitors are other micro or small entrepreneurs from a similar background. But a new development at the time of the case study (2004) was that the larger tourism groups started to enter the market, either by buying small operators (e.g. the Thebe group bought Southern Trips), or by setting up their own operations (Rainbow, African Eagle, Springbok). These are more dangerous competitors since their financial strength enables them to squeeze small players out.

Nevertheless, Mr. A. J. still “wants to believe (sic) that he is one of the leading companies”, with a good brand and a reputation of delivering. That is his main competitive strategy, “making sure that after their tour people are so incredibly happy that they would not even think of going somewhere else”. He also relies on his current size to provide some stability, whereas the younger micro operators are at risk in winter.

## **Costing, Pricing and Credit Policy**

### **Pricing**

As a result of the competition and the regular information flow between the market players, the pricing is essentially market-driven. Mr. A. J. knows what his competitors charge, on average, for each type of tours, so he sets his prices accordingly. Up to now, he has tried to come at the top 40% of the price range, not willing to work at a discount. He mentioned that his clients occasionally try to bargain, citing one competitor who offers the same tour for R220 instead of his R290 – but he then cautions the clients against these dumped prices, arguing that his price reflects the value of the service.

This coming season, though, Mr. A. J.’s intention is to keep prices constant although most competitors are going to increase their prices by 10 to 15%. This will place him in the lower half of the price range, but he hopes that it will help him to regain lost market shares. In explaining this decision, he refers to “classical” marketing case studies like Nike/Reebok, and hopes that “the market will judge [them] according to [their] reputation and not according to [their] rates”.

### **Costing**

Since the pricing has not been driven by cost, the business has not up to now had a pressing need for a rigorous costing system. In fact, at the time of the case study, Mr. A. J. did not know exactly what a day tour costed him. He was however planning to put such a costing in place, in order to manage his bottom-line more properly, as well as to deal with specific questions. For example, he had been requested by SARS to separate the transport component of his service, which is non-VAT-able, from the service component, which should bear VAT. He also wanted to reduce costs, especially telephone (cell phone), insurance and stationery.

With the new accounting software in place, he hoped to have a more proper costing available during the course of the year (2004).

### **Credit policy**

The business did not have a credit policy: in principle all business was cash

business. Small customers, such as the individual tourists joining the routine tours from their hotel or guesthouse, paid on the day of the tour. Larger customers were invoiced at the end of each month, and usually took 7 days to pay. Considering delays in invoicing, this may represent an average credit period of 21 days (2 weeks until invoicing + 1 week for settlement) for corporate clients, and 0 for private clients, that is – assuming a 50/50 split – an average credit period of about 10 days.

However, especially in winter, large agencies choose to stretch their settlement for 3 or 4 weeks. Added to the average 2 weeks up to the invoicing, this may represent up to 5 or 6 weeks of credit. Mr. A. J. was visibly genuinely worried about this situation, because while he waited for the settlement of his invoices, he became unable to keep his bank balance positive. The routine calls of the banks, reminding him that his bank balance was negative, made him nervous and he urged his staff to pressure his debtors. The administrative manager of the business confirmed that it was always a stressful situation for them.

## **Profitability and Member's remuneration**

### **Profitability**

Asked in the first interview whether the business was profitable, Mr. A. J. answered: “yes, it kind of is” adding “I don’t live uncomfortably, and more importantly, I’ve created employment for other people”. As for other emerging businesses, he had a more “social” reading of the concept of profit.

The financial statements confirmed that, after losses in the years up to 2001, the business turned profitable in 2002 and doubled its profit in February 2003. But 2003 has been the first year in which he was able to completely absorb accumulated losses, so that the profit history remained modest.

### **Member's remuneration**

Initially, Mr. A.J. had to make personal sacrifices. He afforded himself only a meagre salary in the first 2 years, which he reinvested in the business (member's loan) rather than expending it. Even in 2000 he paid himself only 28 thousand Rand for the year. “The main worry was being able to pay for my staff and for the vehicle – as to me, I would take whatever money I really needed, but not more”. For all that time, he survived on his savings from his previous job as teacher, as well as his earnings as a freelance tour guide in 1997-98.

Since the business has come closer to breakeven, the situation has become easier but Mr. A. J. is still not interested in drawing large amounts of money out of the business. He indicated that he paid himself a monthly salary of R5000<sup>48</sup>, adding

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<sup>48</sup> In 2003, though, the financial statements show a member's remuneration of R102 500 (he is the sole member), significantly more than R5 000 per month. This may have been an attempt



that the business covered a part of his private expenses as well: it paid for his vehicle (Mr. A. J. occasionally used one of the firm vehicles for his own purposes), the petrol, and the bond (the business paid a rent for using a part of the house). Mr. A. J. was not interested in taking further dividends: his main worry, as he put it, was “to be able to invest while maintaining the business on a positive cash flow footing”.

*Table 35.1 – CS5’s member remuneration, 2000-2003*

	Feb-00	Feb-01	Feb-02	Feb-03
Members’ salaries (in R)	28 000	40 000	55 000	102 500

*Source: Income statements*

### **Need to cut costs**

Although the business did not seem to be in cash distress, Mr. A. J. appeared truly concerned, almost obsessed, about this objective: keeping sufficient cash flows to be able to invest further. Since the growth potential had become limited, his new strategy was to cut costs. He explained, when I met him on a Monday, that “his mission for this week” was to run through the administrative processes with his office employees, to identify cost-cutting potentials.

It is not entirely clear what caused this obsession: it may simply be the drive of the entrepreneur to “always do better”, to quickly take advantage of the new accounting system in place, combined with Mr. A. J.’s fundamental nervousness in winter because of the slower payments of customers.

It may also be that, by the middle of 2004, he had found out the result of his financial year 2003-2004, which may have been less profitable than the previous year – but this could not be verified. Lastly, it was probable that the ambitions of Mr. A. J. in starting up the new business had created an urgent need for investments and that Mr. A. J. had realised that the older SME’s cash flow would not suffice to support the new business as much as he would like it to.

### **The impact of the new business**

Since 2003, the close corporation has had to bear the impact of the creation of a new tourism company, started in partnership with a (women) entrepreneur who also owns her own business. The business model of this new start-up can be simplistically described as a tourism wholesaler specialising in cultural tourism, and contracting local operators in Africa for the actual performance of their tours.

Mr. A. J. has easily acknowledged that a major source of finance for this new

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to reduce the tax burden for the company, or to distribute a part of the cash in order to make it available for investments into the new business.

venture has been the older business, adding that his partner also brought in some capital from her own enterprise. This support materialised in the following dimensions:

- Whenever possible, the cash needed for the new business was taken out of the older enterprise<sup>49</sup>;
- The old company also supported its sister by providing human resources (especially the time of its member);
- The tour operator enabled its new sister to utilise its vehicles. In some cases, the older business has even had to bear some costs, hiring a new vehicle while the business's own sprinter was being used by the new company.

Unfortunately, the February 2003 statements do not yet reflect any form of support from the tour operator to the new company, and the interviews alone could not provide sufficient data to quantify the burden that this represented for the older business – up to now, and for the future. Mr. A. J. had offered to find out from his accountant the exact amount of the intercompany loan, but did not come back to me.

## 6. Financial management

### General remarks

Mr. A. J. considered financial management as the weakness of the business. This was true in the sense that the financial system was poor, but on the other hand, risks were compensated by the intuitive prudence of the owner and his staff, especially, his extreme debt aversion.

Mr. A. J.'s relationship to financial management is thus paradox: initially, he had consciously decided to limit the place of financial analysis because he needed to seize the opportunities promptly in order to get off the ground. But for all that time he had a feeling of not being in control and tried to compensate this by a prudent attitude. For example, although he had often been urged by his banker to contract an overdraft facility, he has not done so yet, worried that "it can become a crunch".

He admitted that he is "scared" about the lack of control: "As you grow, you forget about financial management, that can kill you. You need to keep control, to account for the money you spend".

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<sup>49</sup> Technically, Mr. A. J. has supposedly written off his member's loan to the older business (which amounted to R28K in February 2003), in order to invest it into the new venture – thus depriving the older operator from a fundamental source of liquidity. It is even possible that, beyond the amount of the older member's loan, the older business has granted a loan to its sister.

Mr. A. J. believed that he took many bad decisions as a result of not knowing exactly where he was. He admitted that he spent too much money, instead of keeping cash in the business for difficult times to come.

A particular difficulty in the sector was how to utilise the high levels of cash that are generated during the season: one needs to balance between the need to invest to grow the business, and the need to put money aside for the winter – and without a good information system this balance is difficult to find.

Luckily Mr. A. J. has benefited from the support of a mentor that helped him straighten up the financial administration. The one-year mentorship was part of the services provided by SATSA (the SA Travel Service Association, supposedly in partnership with Government) to its members, and Mr. A. J. could choose the area where he had the greatest need – he chose financial management. This mentorship gave the impulse necessary to reorganise the financial administration.

He was looking forward to the exciting new possibilities that would open up once the Pastel system is fully operational: he would be able to get management reports, review the performance of each vehicle, the profitability of each client account, etc.

## **Sales and Cost Capture and Monitoring**

### **Forecasting**

Mr. A. J. has hardly ever done any budgets and forecasts. In particular, he did not write up a formal business plan when starting up. “When I saw what it took to make a business plan I thought, that is going to take me weeks of sitting and writing. I’ve got better things to do.”, he explained. While he felt that the analyses made sense, he was mostly reluctant to the “school exercise” of putting together a nicely written document which nobody would need since he was already convinced that he would not ask for a business loan from the bank at that stage. So he tried to “pick” the most important issues from the business planning process, and to mentally go through the steps required: “I have done it all, I’ve looked at the market, I’ve looked at my company, at the resources”. He did not however venture into forecasting because he felt that he could not guess what future would bring.

The circumstances forced him to prepare a business plan a year later, when he bought his second vehicle. But he has never repeated that exercise or tried to compare his forecasts of the time with his actual achievement.

### **Capture and Monitoring of sales**

On my first telephonic pre-selection interview with Mr. A. J., he gave me a symptomatic answer to my question about his annual turnover: “I have no idea”.

While I insisted that at that stage I needed an order of magnitude rather than a precise answer, he still could not answer, asked his staff to look for the figure, and it took approximately 10 minutes for them to come back to me with an answer: R1,2 million.

The business's sales history, as read in the consecutive financial statements for the last four years (see Table 35.2), partly explains the confusion of Mr. A. J.: between February 2001 and 2003 the turnover has been almost multiplied by 4. In a later interview I touched on this tremendous growth and the entrepreneur commented: "Yes, there was a year when we just shot. I was amazed when John [the accountant] told me that I had doubled my turnover, because I don't see it, you know".

*Table 35.2 – CS5's turnover growth, 2000-2003*

	Feb-00	Feb-01	Feb-02	Feb-03
Annual turnover (in R)	325 423	334 072	620 980	1 271 290

*Source: Income statements*

Indeed, incredible as it may seem for a business with more than R1 million of turnover, the enterprise does not currently have an encompassing sales record. As the head of administration explained to me, large customers are normally invoiced once a month; invoices are neatly filed and checked against the payment – but there is no attempt to add up the invoices for a month or a quarter. As to the plethora of cash customers, they are not captured anywhere: the only way to track cash business is to consult the "booking schedule" to count, day after day, the number of participants to each type of tour. The head of administration confirmed to me that this is what the accountant works with to establish the annual turnover.

An additional factor causing confusion is that the business is seasonal: Mr. A. J. estimates that 75 to 85% of the annual turnover is earned in the 6 ½ months between October and mid-December on one hand, February and May on the other hand. The December-January period and the winter months are far quieter. This means that the staff can also not rely on monthly figures to obtain an estimate for the year's turnover.

Under these circumstances, one understands Mr. A. J.'s "amazement" at his growth, since he has no way to anticipate the annual turnover figures. However, the current work on Pastel should enable more accurate and regular monitoring of sales in future.

## **Cost**

Costs are a little easier to track than sales. Mr. A. J. looks at his bank and credit card statements to see the expenses/deductions (probably more closely in winter, when the bank balance is tighter). Therefore, he knows intuitively that certain costs are too high. For example, he finds that he spends a lot for cellular phones,

and is considering investing in a network communication system in order to keep his drivers connected at lower cost.

He also mentioned stationery: he wants to review possibilities to move towards a paperless office (e.g. sending faxes directly from the computer, without printing). The more sophisticated bookkeeping software will hopefully help to reduce the need for paper, ink, photocopies, etc.

### **Separation of personal and business accounts**

Mr. A. J. admitted that in some cases he spent the business's money for his own private comfort, for example doing alterations to his house. He took the example of the bar that had been built into his "party room", and gave the following account: "one day I looked in my cash box and I saw that there was R10 000 there, so I thought, OK, then I can spend R5 000 for a bar – because you know, in my stupid mind this was my money".

He has also occasionally taken money out of the cash box to go and eat out. He called this the "spaza mentality", like the owner of a spaza shop would take sugar from her shop to sweeten her coffee if she has no sugar in her own kitchen. Although he acknowledged that this was bad practice, it must be noted that this lack of separation of accounts went in both directions. He would often buy materials (e.g. stationery) for the business from his own credit card, and omit to claim it back.

He added that he was aware that this was a flaw in his management, and he was slowly learning to be more accountable and draw a line between personal and business accounts. Apparently the impetus came from his accountant, who suggested to Mr. A. J. that his money would "grow faster if it were in the bank". By now, whenever he used money from the business, he would write it down so that the amount could be offset against his member's loan.

### **Accounting and setting up of financial statements**

#### **Co-operation with the accountant**

It seemed that Mr. A. J. had a very good accountant, whose office was close to his own (15 minutes). Unlike other business owners who see their accounting officer only once a year and feel that he does not understand their business, Mr. A. J. tended to work in close co-operation with his accountant, consulting him regularly for financial matters – but he did complain about the costs involved.

In 2003, the cost for the establishment of financial statements was R12 000<sup>50</sup>.

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<sup>50</sup> Source: Interview. The financial statements show that the total accounting costs for the year were in the region of R 17 800.

Mr. A. J. tried to negotiate the cost with his accountant, who answered that a substantial part of the cost came from having to seek and collate many bits of information from many various sources (see above: sales capture) instead of reading business figures directly from one record. Indeed, it would seem that the accounting process as it was at the time of the case study was not only time intensive, but also presented risks with regard to reliability of results.

As to the reliability of accounts, Mr. A. J. was confident that they were good, because “[his] brief to John [the accountant] is to draw the financial statements not for the bank, but for [us]”. He was aware of the loss of reliability of financial statements when used for loan applications.

The process of entering bookkeeping data into Pastel, which was under way at the time of the case study, was expected to bring significant changes in the accounting process. The company would be able to do most of the accounting in-house. Mr. A. J.’s staff has already learnt to do the PAYE, UIF and similar returns in-house, and were learning to do the VAT-filings. Ultimately the accountant would only compile the financial statements and tax returns.

Mr. A. J. hoped that this process would enable cutting costs, although the mere cost of the Pastel license was as high as the cost of his financial statements for 2003 (R12 000), not including the training, working hours, stationery etc.

### **Tax optimisation strategy**

Asked whether he was trying to reduce his tax burden, Mr. A. J. answered that he was willing to do so (“Trevor and me, we are not good friends”), and that the lady who helped installing pastel was giving tax advice as well. However, his further comments showed that he was far from having a convincing strategy in this regard. In any case, the business had only started paying tax in 2003, having accumulated substantial losses in the past.

Ironically, when I asked how he would go about saving taxes, he mentioned that he was trying to “reduce gaps between his turnover and the bottom line, in order to increase the profit” (something which precisely has the effect of augmenting the tax burden). He mainly insisted on reducing administrative costs. There is therefore little risk that he inflated his costs to reduce his taxable income.

### **Accounting transparency score**

Quantitative score	14,0	/ 20
Formal Quality Score	21,5	/ 30
Transparency Score	38,9	/ 50
Suspicion of manipulation	0	
<b>Total score</b>	<b>74,4</b>	<b>/ 100</b>

### Main issues:

The accounts were formally well structured and well presented.

The main problem was that the accounts did not give a clear idea of working capital and cash. Especially, accounts payable were quite high but fluctuating; cash was not always as high as it should be in summer; and it seemed that the average cash situation over the year was quite tight (or badly managed).

Apart from that, the high growth and lack of stability on the cost side made the business less predictable than a creditor would wish.

## **Working capital and Cash management**

Working capital and cash flow were the main genuine worries of Mr. A. J.. While he had established a strong customer base and was able to operate profitably, he still battled to keep his bank accounts balanced, especially in winter.

These difficulties seemed not too severe, though, since he had never been unable to pay salaries at the end of the month – except for his own salary, which he readily held back if necessary, because, as he said, the cash problems were caused by his own fault, he did not manage the money well.

### **Physical management and bookkeeping of cash**

Technically speaking, the management of cash was poor indeed. Up to the set up of the Pastel system, the controls over cash movements had been almost non-existent. The business did not have a cash flow book. Mr. A. J. admitted that, in season, he sometimes counted the cash himself and realised that he has R20 000 or 30 000 there.

There were several problems associated with this absence of cash management:

- Lack of knowledge about the amounts of cash available, hence risk of uninformed decision-making (as well as accounting risk);
- Potential risks involved with physically keeping high amounts of cash within the business (although he fully trusts his staff);
- Temptation for the owner to spend some of the money for his own account;
- Loss of interest earnings; also, if the money was banked, the bank would possibly have a better judgement on the business.

Mr. A. J. was aware of these issues. His accountant had also suggested that “his money would grow better if it were in the bank” and Mr. A. J. admitted that he would need to change the business’s habits. By the time we had the second interview, he had done a first step by inaugurating a cash book.

## **Working capital cycle**

Mr. A. J. described the working capital cycle as highly seasonal. In summer, clients paid cash and, as he said, there was always a comfortable cash surplus in the business. On the other hand, the winters were more difficult, especially the end of months, four months per year. This fact is general to the industry, where there is a saying that “If you last two winters, you are in business”.

Mr. A. J. described the reason for this difficulty as a classical mismatch between the dates of payments of customer (debtors) and supplier (creditors). As he described it, in winter, everybody in the tourism industry tends to have cash flow problems, so the big agencies hold their payments back to the smaller agencies, who “hold back” to the tour operators (occasionally pretending that they haven’t received the invoice), so that it sometimes take up to 3-4 weeks to be paid. Meanwhile, his small business was, as he put it, “at the bottom of the chain”, there was no one whom he can “hold back” in the same way as his clients did. In the interim, the business had to cover its own costs, especially pay the salaries to its employees at the end of the month; substantial costs, like the petrol card, were deducted from his bank account automatically once a month, he had no control over it. In these circumstances it was difficult to keep his bank balance positive.

A critical check of financial data required correcting some of Mr. A.J.’s statements. Compared with other sectors of the economy, Mr. A. J. was operating in a sector where payments were relatively prompt, and even immediate during most of the year. The few weeks of delay that he experienced four months a year are not comparable to the systematic 2 months delay that Mr. M. and Mrs. S. (Case Study 4) had to cope with, for example. In addition, Mr. A. J. luckily did not experience any bad debts in the 6 years of operation.

On the creditor side, representing Mr. A. J.’s business as being “at the bottom of the chain” was not exactly correct. He did have significant levers and was able to delay certain payments: commissions to his freelance guides, telephone bill, insurance, vehicle finance. In fact, the balance sheets show that even in summer (February), the accounts payable are surprisingly high: between February 2000 and February 2002, they had been fluctuating between 10 and 18,5% of turnover, it is only in February 2003 that they have come back to a more normal level of 3,6% of turnover – but this is possibly caused by a temporary high level of cash caused by the sale of a vehicle.

If the accounts payable are already as high in summer, then there is certainly little room for manoeuvre in winter.

## **Cash-flow and cash balance**

The causes of Mr. A. J.’s cash problems, then, were less the unequal power play in the supply chain, than the firm’s lack of back up for cases of late payments. This in turn came from the habit to spend money as it comes in, instead of saving. Indeed, the (reconstituted) cash flow statements show that operating cash



flows had been positive at least since 2001, but the investing activities had usually consumed most of these cash flows, only partly covered by an increase in financing remedies.

*Table 35.3 – CS5’s reconstituted cash flow statement (summarised)*

In Rand	2001	2002	2003
Initial Cash balance	11 791	-161	20 777
Cash flow from operating activities	44 352	118 113	180 996
Cash flow from investing activities	-124 537	-51 217	-162 892
Cash flow from financing activities	68 232	-43 161	125 041
Final cash balance <sup>51</sup>	-161	20 777	161 636

Table 35.3 shows that the investing activities have only been moderated in 2002, probably in order to redress the negative cash balance of the previous year. On the other hand, a review of the cash balances in February 2000 to 2003 show that, for summer months, the surpluses were rather low at R11 791 (2000), -R161 (2001), and R20 777 (2002). Only in February 2003 was the cash situation much better (R161 636), but this may have been a temporary situation (the result of the recent sale of a vehicle).

## Overdraft

Strategically, the business had chosen to invest regularly in order to increase and upgrade its fleet of vehicles. The drawback was that it deprived the business from a cash reserve, so that there was a need for an alternative source of cash in winter months.

The most straightforward source would be a bank overdraft. With its relatively large asset base and its credit history, Mr. A. J. could easily convince his bank to provide such a facility – and in fact Mr. A. J.’s account manager has often urged him to sign up such a facility. But the entrepreneur, during our first interview, mentioned that he was reluctant to doing this step, for fear of a “credit crunch”.

During our first interview we discussed the possibility of an overdraft in further detail. Mr. A. J. admitted that he might actually decide to take up such a facility, in which case he would ask for R15-20 000, which was approximately the highest need that he had during those winter months. Up to now, when the business’s bank balance reached an (unauthorised) overdraft of R20 000, the bank called in to check the reasons for this process; but they never put too much pressure on Mr. A. J., they seemed to understand that this situation was only temporary.

<sup>51</sup> The initial cash balance and various elements of cash flow do not necessarily exactly add up to the final cash balance, suggesting possible minor mistakes in reconstituting the cash flow statement. However, the extent of the mistakes does not invalidate the conclusions.

By the time we had our second interview, Mr. A. J. announced that he had finally contracted an overdraft facility for R28 000, which was “more than [he] needed”, but was the amount offered by the bank after reviewing his profile.

## **Ongoing access to finance and Relationship with creditors**

### **Vehicle finance**

With the exception of his first vehicle (the stationwagon) which was bought under his father’s name, all other vehicles were bought on credit under the business’s name. The purchase of the first microbus was the occasion for Mr. A. J. to write his first (and last) business plan at the request of the bank.

In six years, Mr. A. J.’s business had bought eight or nine vehicles, thus building up a reputation with the vehicle finance branch of his bank. This reputation had substantially facilitated the process: “they don’t bat an eyelid”. He just needed to phone the bank, giving the details of the vehicle that he had selected for purchase, indicating the deposit that he wanted to pay upfront and the number of years for which he wanted the credit. After a few days, the credit document would be ready and bank representatives would even come to his premises to have him sign it. This was far easier than in the early days, obviously because the bank sees him as a good risk.

According to information found in the financial statements, Mr. A. J. would tend to pay a 25% deposit and use bank credit to finance the remaining portion<sup>52</sup>. Initially he tried to buy the vehicles over 3 years, so that, once paid-off, it would “become an asset”. But he realised that “a vehicle never becomes an asset”: by the time it is paid off, it has to be replaced. So his new strategy is to stretch the repayment period over the whole lifetime of the vehicle (4-5 years), almost as if he was renting the vehicle. Although the longer period of credit increases the finance charges, it has the advantage of lowering the cash burden in winter months.

Considering that the interest rate on equipment finance is usually lower<sup>53</sup> than interest charged on overdraft, the choice of longer vehicle credit periods seems to be a good strategy.

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<sup>52</sup>In February 2001, the notes to the balance sheet shows an Instalment Sale Agreement for R182 237 (including deferred finance charges), secured over fixed assets to the value of R237 556. Similarly, in 2003 the ISA is R296 889, secured over fixed assets amounting to R387 399.

<sup>53</sup> According to financial statements, the interest rate for the instalment sale agreements is assumed to be approximately prime +1.5% (14.4 to 18.4%). We have no data on the rate charged for the overdraft.

## Relationship with the bank

Mr. A. J. had a good relationship with his bank account manager; they were in frequent telephonic contact, and a further element causing the good relation was that they had children in the same age, who played cricket together.

However, Mr. A. J. did not want to rely too heavily on this good relationship, arguing that banks have changed, they are more centralised, the decisions are taken in the Head Office in Pretoria. Nevertheless, he admits that it is an advantage to have a dedicated partner in the bank, commenting that “[his bank manager] goes that extra mile for [him]”.

## 7. Financial ratios

The following sections present some key financial ratios for the last three years. Although 4 years were available, the comments below concern essentially the years 2001-2003, because the year 2000 corresponds to a different “era” of the business, when it was still building up and operating from its offices in central Cape Town. It is only since 2001 that the business started to take its current profile.

### Cost structure

Independently from its growth, Mr. A. J.’s business has not remained static with a stable structure of fixed and variable costs. Instead, the variable costs have fluctuated significantly from one year to the next, while the fixed costs have increased in plateaux as the asset base and the administrative capacity of the business have expanded.

*Table 35.4 - Cost structure and breakeven calculation*

	<b>low</b>	<b>high</b>	<b>mean</b>
variable costs	49%	61%	
fixed costs (higher and lower estimation)	182 700	258 350	
breakeven (range)	354 757	657 379	506 068
latest known turnover	1 271 290	1 271 290	1 271 290
<b>margin over breakeven</b>	<b>258%</b>	<b>93%</b>	<b>151%</b>

The main factor contributing to the fluctuations of variable costs have been the tour expenses, which amounted to 21% of turnover in Feb 02, but 34% in Feb 2003. Mr. A. J. explained that this came from a general increase in tourism-related costs in 2003-04, which have not (yet) been reflected in the operators’ prices:

- Guide fees (market-related) have increased in 2003, possibly due to the general situation of the tourism industry, which has reached a plateau, so that the players are getting more concerned about their sustainability and increase their prices. Mr. A. J. is currently busy putting one of his three guides “on salary” instead of fee, which will spread the cost throughout the year.
- Entry fees have increased considerably in the last 2 years, partly due to the renovation and opening of new projects (the new District Six Museum, or the Robben Island Museum)
- Also, a number of intermediaries (mostly hotels and guesthouses as well as some agencies) have increased their commissions to 20%, while some of them were only asking for 15% in the past.
- Also, an increasing proportion of clients pay their tour with credit card – in which case 5% of the transaction value goes to the credit card company.

Meanwhile, fixed costs have also increased as a result of investments in administrative staff, computers and vehicles. In three years, the fixed costs have almost doubled from R131K to R258K<sup>54</sup>, especially the result of (a) increased administrative salaries; (b) increased bank, accounting and computer expenses; (c) finance charges and depreciations linked to the expansion of the fleet.

Under the current fixed and variable cost situation, then, the breakeven point (prior to member’s salary) would be in the region of R657K. Luckily, the increased fixed costs have enabled a more-than-proportional growth in turnover, which by 2003 was almost double the breakeven point, at 1,27 million Rand.

Hence, despite the heavier cost structure, there is no doubt that the increase in turnover has enabled economies of scale, which have been beneficial to the business’s profit.

Unfortunately, the 2004 results were not available to verify whether growth and profits have been maintained. It is therefore difficult to elaborate a judgement on the strategy of Mr. A. J. not to increase its prices in the 2004-05 season, in order to regain market share – this decision may reduce the margin on variable costs and thus put pressure on the profits (and cash flow), but it may also strengthen the firm’s position if the turnover has been declining in 2003-04.

## **Interest coverage**

Since the improvement of its profitability, the business has been able to cover its finance costs without problems. In 2003, the earnings before interest, tax and depreciations were almost 8 times the level of financial costs (finance charges and interest).

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<sup>54</sup> Not including the member’s salary, which also went up from R28K to R102,5K.

*Table 35.5 – Interest coverage, 2001-2003*

	<b>Feb 2001</b>	<b>Feb 2002</b>	<b>Feb 2003</b>
EBIT	3 106	71 506	171 234
EBITDA	40 531	128 070	234 395
Interest paid (incl. Finance charges)	12 234	20 784	30 042
<b>coverage ratio (EBITDA)</b>	<b>3,3</b>	<b>6,2</b>	<b>7,8</b>

## Equity ratio

As usual in businesses started up by previously disadvantaged individuals, and in spite of the contribution of a second (dormant) partner, the initial equity base (including members' loans) has been slim (supposedly R12 000). Luckily, the managing member has been able to increase his member's loan in the first few years, giving the business the necessary base for growth.

*Table 35.6 – CS5's equity ratio, 2000-2003*

	<b>Feb-00</b>	<b>Feb -01</b>	<b>Feb -02</b>	<b>Feb -03</b>
Strict equity	-44 291	-53 419	-2 697	111 905
Member's loan	51 284	31 891	27 001	28 787
Equity including member's loan	<b>6 993</b>	<b>-21 528</b>	<b>24 304</b>	<b>140 692</b>
Total assets	90 918	179 682	200 703	434 114
Equity ratio: Member's funds to total assets	7,7%	-12,0%	12,1%	32,4%

Nevertheless, the early losses and the need of the manager to tap on his member's loan for lack of another source of income have caused the business to be technically insolvent after a few years. Luckily, his creditors (the vehicle finance company on one hand, and short-term creditors on the other) did not force him to bankruptcy.

This enabled Mr. A. J. to reach the critical size to turn his profit figures around and absorb past losses, so that he was able to build up his equity back to normal levels. A total equity ratio of 32% remains low, though, and limits the firm's further growth potential.

## Debt maturity

The debt levels are the mirror image of the equity ratio, with the particularity that the business, compared with the average SME, is not overly reliant on short-term debt. The majority of borrowed funds comes from instalment sale agreements, a source that is relatively well secured by the value of the vehicles purchased.

Short-term debt did remain significant nevertheless, even in summer months, although the need for working capital is rather low during the season. This

means that the business effectively uses a variety of creditors (supposedly freelance guides, insurance, telephone) to provide liquidity for the business. If one admits that a part of this liquidity is actually used for the cash portion of vehicle investments, one could conclude that the business does to some extent use short-term capital to pay for long-term assets. However, this is not caused by necessity (with its good track record the business could probably buy its vehicles with a lower cash portion) but probably by a cost consideration (the short-term creditors supposedly don't charge interest).

*Table 35.7 – Long and Short-term debt*

	<b>Feb -01</b>	<b>Feb -02</b>	<b>Feb -03</b>
Long term debt (Installment sale)	139 302	101 031	224 286
in % of total assets	78%	50%	52%
Short Term Debt (various creditors, overdraft)	61 908	75 368	45 546
in % of total assets	34%	38%	10%

## Working capital cycle

Because of the seasonal character of the business, it is problematic to base the study of the working capital cycle exclusively on balance sheet data from February, i.e. from the best season.

In addition, in a service sector like tourism, the debtor-creditor-chain does not necessarily correspond to a classic supplier-customer relationship. While the firm's debtors are supposedly mainly made of actual clients, creditors are presumably related to the business administration (insurance, telephone, etc) rather than the production cycle. Therefore, it is difficult to express the short-term credit in days since one cannot really relate these credits to the cost of sales, but rather to some administrative costs.

Subject to these two words of caution, the analysis of the working capital cycle does confirm that in summer, there is no concern with working capital. Technically, the need for working capital is even negative, which confirms that the business has an excess of short-term credits which it is using for other (equipment) purposes.

*Table 35.8 – CS5's working capital cycle*

(in days of turnover)	<b>Feb -01</b>	<b>Feb -02</b>	<b>Feb -03</b>
Various Creditors	67	44	13
Inventory	n/a	n/a	n/a
Production cycle	0	0	0
Sales: Customer credit	20	14	4
<b>Total need for working capital</b>	<b>-46,5</b>	<b>-29,7</b>	<b>-8,7</b>

The trouble of this arrangement is that it is not easily reversible, so that when the need for working capital increases in winter (longer delays of customers in settling their invoices), the short-term resources of the business are not accessible because bound in investments. This causes the cash difficulties of the business.

However, the February 2003 balance sheet shows a significantly lower level of short-term debts. If this reflects a long-term trend to better manage the liquidity, it is positive since it opens more room for manoeuvre in winter; however, this improvement may also come from a temporary improvement of liquidity following the sale of a vehicle.

## Variability of ratios

As a high growth business (average growth of last two years is almost 100%), the business does not have very stable financial ratios. In spite of the reduction in cost of sales, the turnover growth has generated an improvement of margins, hence the accumulation of profits and a reversing of the equity ratio. Concurrently, the liquidity improved and short-term debts decreased.

*Table 35.9 – Volatility of CS5's key ratios*

Indicator studied	Feb 2001 to 2003	
Average Turnover growth	95,1% p.a.	
Cost of sales	from 24 to 34%	
Operating margin	from 24% to 29%	(due to cost of sales)
Net profit ratio	from -3% to +11%	(due to economies of scale)
Equity ratio	from -12% to +32%	(due to improvement of profit history)
Short-term debt / Total assets	from 10% to 38%	(reason unclear - could be a general reduction of debt or a temporary increase in cash)
Total need for working capital	from -9 to -47 days	

## Value of the business

Although this is not normally a part of the analytical framework for these case studies, in this particular case an estimation of the enterprise value was of particular interest since Mr. A. J. in 2001 bought out his former partner for a discounted cash flow value calculated by this partner.

The discounted cash flow value in Early 2001 was estimated according to two points of view: firstly, with the knowledge of the time, then with the benefit of newest knowledge. Both values were calculated using a discount rate of 35%, corresponding to average required rate of return of VC funds in SA in 2001 (Taylor 2001: 97).

In 2001 Mr. A. J.'s business was only about to emerge from three years of consecutive losses. Even if it had gain some credibility on the market, when measured by the net profit it was not yet a financial success. However, with substantial depreciations, the operative cash flows were positive and growing.

For the estimation of the discounted cash flow value (1) in 2001, the growth of cash flows was assumed to be continuous at 25% per year (a growth rate that is hardly sustainable on a very long term, but a conservative assumption for the first few years for a young business in a booming sector – between 2000 and 2001 the cash flow growth was 56%). Under those assumptions the value of future cash flows would be R 282 970 for 100%.

Table 35.10 - Operating cash flows for 2000-2003

	Feb-00	Feb-01	2002	2003
Net profit	-7 885	-9 128	53 519	114 602
Depreciation	25 970	37 425	56 564	63 161
Operating CF	18 085	28 297	110 083	177 763
		56%		

Table 35.11- Value calculation

	“ex ante”	“ex post”	after correcting for non-interest bearing debt	
			“ex ante”	“ex post”
Based on Cash Flow knowledge up to year	2001	2003	2001	2003
Assumed ‘eternal’ growth rate of cash flows	25%	10%	25%	10%
Present (2001) value of future Cash Flows	282 970	498 920	282 970	498 920
Accumulated losses in Feb 01	-53 519	-53 519	-53 519	-53 519
Net value of business	229 451	445 401	229 451	445 401
<i>Value of non-interest bearing debt in Feb 2001</i>			-31 891	-31 891
<i>Value of equity in Feb 2001</i>			197 560	413 510
<b>Value of 50% equity stake</b>	<b>114 726</b>	<b>222 701</b>	98 780	206 755
Value of B.S.’s member loan in 2001			6 000	6 000
<b>Fair indemnification for B. S.</b>			<b>104 780</b>	<b>212 755</b>

Considering this calculation, it is not surprising that Mr. B. S. has asked for R115 000 of indemnification. The net value of Discounted Cash Flows in 2001 under the assumptions chosen (25% growth starting from the 2001 operating cash flow, and 35% discount rate, i.e. second column in Table 35.10) is almost



exactly 230 000 for 100% or R115 000 for 50%.

One could even argue that this calculation is advantageous for the remaining member Mr. A. J., since ex post – that is, with the knowledge of the tremendous growth and profitability improvement which the business has experienced after 2001 – the value would be even higher at R222 701 for 50%. This argument would merely serve as a consolation as it would of course not be correct to give Mr. B. S. the benefit of an improvement of profits after his departure.

A more correct calculation however would take into account the various levels of financial involvement of the two members. Even though formally they each owned 50% of the equity, Mr. A. J.'s loan was higher than his partner's and as such he should be entitled to a larger part of the overall business value.

Assuming, as is usual in the financial sector, that the net value of equity can be obtained by subtracting the nominal value of debt from the total business value resulting from DCF, the correct indemnification would go down to R104 780.

From the statements made by Mr. A. J. in the interviews, it would seem that even this corrected amount would seem too high for him. Intuitively, there are two issues that can be disputed in this regard. The first is whether it is correct to indemnify a partner on the basis of high future operating cash flows, when the book value of the business is negative and when the net cash balance, after all necessary investing activities, is tight. To Mr. A. J. this seemed a contradiction, yet it is the very sense of young business valuation, since the value of emerging firms typically lies in their future rather than in their present.

The other issue is whether the partner effectively has a right on 50% of this value, considering his limited overall contribution. Firstly, his nominal capital input (equity + loan) is, at R 6 100, only 23% of the total contribution of the two members (equity + loan). Secondly, he has hardly been involved in management, so the business does not owe its growth and cash flows to him. Unfortunately for Mr. A. J., the ownership rights on the value of a CC legally result from the shares of members to capital *stricto sensu*, regardless of the levels of members' loans or management involvement.

Mr. A. J.'s disappointment reminds of the mixed feelings that business owners have with venture capital, when they experience investors exiting with a profit that seems high compared with both their initial capital investment, and the amount of effort put into the business. However, this high return in successful investments is the very essence of venture capital and compensates for the high investment risk characteristic of that segment. In a way, Mr. B. S.'s investment in Mr. A. J.'s business was also a form of (informal) venture capital, with the difference that there has not been a formal request from the main owner and hence no awareness on his part as to the bond that would link him to this partner and the financial cost that this would involve.

## 8. Final reflections

From all enterprises reviewed in case studies, CS5 was the most successful, in spite of a trajectory that has not always been smooth. It has gone through several years of writing losses and battling with a tense cash flow.

The reasons for this success include the generally good performance of the tourism sector over the period, especially in the niche of township tourism, and the competitive advantage of Mr. A.J., who was among the first ones to move into this niche. This strategically favourable move was not just the result of luck, as the data have shown the entrepreneur's 'visionary' character, which seems likely to carry him further forward: when he noticed that the tourism market was becoming saturated, he looked early for other developments.

Mr. A.J. has done mistakes, though, like engaging into a wrong partnership, buying the wrong vehicle, managing the firm's financial resources as if they were his own. But – unlike the owners of CS4a+b, who seem blind to the flaws of their businesses – he has had the insight of acknowledging his errors and correcting the course.

Maybe the humility of the owner and his keenness to learn and improve himself, combined with a strong business intuition, have been keys to his success. When he decided to move into the tourism business, he had no knowledge of the field, but followed a course and training. In the initial phase, he also did not hesitate to work as a subcontractor for his competitors, from which he gained the thorough market knowledge that was required to achieve the turnover growth he needed.

Later, he asked a mentor to give him specific support with regard to financial management. He also recognised the need to maintain the co-operation with his accounting officer, in spite of the cost. These interventions enabled him to gradually strengthen his business's deficient financial management.

It may come as a surprise that a firm of this size (with annual sales exceeding R1 million) operated without a business plan, without a sales record, with the owner being unable to name the turnover's order of magnitude – yet always being able to repay its vehicle finance loans and to pay its wages and salaries on schedule. Most probably, the owner's personality gained him support by banks, customers and other partners, including the friends and relatives who initially agreed to support the venture.

## Annexure 36 – Narrative of Case Study 6

### Packaging business specialised in wooden crates

An illustration of a growing business constrained by equipment and working capital finance, the support to a related business, and family conflicts

#### 1. Business Short Portrait

Business Code Name: CS6	Form of registration: CC
Ethnic background: white (Afrikaans)	
Members:	
<ul style="list-style-type: none"> <li>- Mr. Wynand D., owner-manager, holds 90% of capital (initially 45%)</li> <li>- Mrs. H. J., owns 10% of capital, now dormant member (initially “helping out” in the business’s administration)</li> <li>- previous member: Mr. Kobus D., sold his 45% stake, now starting his own business</li> </ul>	
Related company: Black empowerment company	
Members: all employees	
Sector of activity:	
<ul style="list-style-type: none"> <li>- Primary activity: SIC 8895 (packaging: crating)</li> <li>- Secondary activity: SIC 7419(transport / shipping)</li> </ul>	
Product or Service: packing items that need to be exported or shipped overseas: artwork, furniture, antiques, machinery etc => wrapped, packed in wooden crates or containers	
Business concept: independent (family)	Market: Mainly corporate, a bit private
Start-up date: 1991	
Current status: active	
Staff members: 11	Annual turnover: R 1,43 million
- Managers: 2 initially, now only 1	Gross fixed assets : R 300 thousand
- Permanent employees: 2	Total assets: R594 thousand
- Casual staff: 9	
=> Size category: small	
Main sources of finance:	
- Member’s loan	- Instalment credit
- Trade credit	- Bank Overdraft

## 2. Case study procedure

In the search for financially constrained businesses, after having secured a case study on an asset-intensive business (CS5), I wished to find a constrained services business. The packaging services industry seemed to potentially match the expectations, so I consulted the yellow pages and phoned businesses.

In my first telephonic contact with the business I spoke to the minority shareholder (Mrs. H. J.), who confirmed the firm's financial constraints and agreed to participate in the study. I was probably lucky to have had my first contact with her, because her son (who later became the majority shareholder) would probably not have been approachable. Even the mother, in a later period, may not have been willing to talk about the business.

During the course of the study, indeed, (between first and second interview), a conflict erupted between the main shareholders, causing one of the main members to quit, and the minority member (mother) becoming dormant after being involved in the administration.

Accordingly, the case study was based on the following sources:

- telephonic pre-interview and on-site interview of the minority shareholder (mother),
- financial statements for 2002(01) and 2004(03), including preliminary financials for 2004
- on-site interview of the main member (son)

## 3. The business owners

The business is a family enterprise: the founding member Mr. D. died shortly after having started it. The enterprise was then taken over by one of his sons, Kobus, together with the mother Mrs. J. (who got re-married). The other son Wynand later joined.

I did not have an opportunity to meet Kobus: my first interview was with Mrs. J., at a time when the business was owned jointly by two brothers and their mother; a month later, Kobus had sold his share and Wynand, who gave me the second interview, was trying to run it on his own.

### Background

Mr. D., father of Kobus and Wynand, has spent most of his life working in the transport sector. This has caused him to travel a lot through Southern Africa, spending many years in Botswana, as well as Zimbabwe. When they came back to South Africa, where they originally came from, Mr. D. decided to start this packing/crating business.

When Mr. D. passed away, Kobus and his mother took over but it seems that they were quite unprepared for that. Mrs. J. had been involved in secretarial work

from the start but knew little of business management. According to her, Kobus had had “no further education”, his background being limited to working as a worker in a company involved in equipment repairs and service: his mother described his work as “fixing tools”.

The brother Wynand, who joined the business later, had been trained as a personnel manager but had later been employed as a buyer for plastic companies. This activity gave him some commercial sense.

## **Character**

A woman in her sixties, Mrs. J. was smart and polite, attached to the business out of loyalty for her late husband, and hoping that her grandsons would still make a living out of it. As a mother, she seemed proud of her sons but somehow worried for them, feeling helpless in the harsh environment that they were evolving in, disappointed about the difficulties that they were facing, especially with regard to finance, as if she had wished more compassion from the bank. Had she wished a more glamorous business? Possibly, because she was frustrated that they were unable to buy industrial property or a new forklift – wishes that her son Wynand dismissed as unnecessary and a waste of money.

Her son Wynand, an Afrikaner in his thirties, was rather intimidating, tall and large, with a stern look and an unfriendly voice. On my first visit to the site, I was introduced to him but he stood rigid, at a distance, and did not return my greeting. On the second visit, he granted me an interview in his own office, promptly pushing away the fishing magazines that were covering his desk. He seemed authoritative, nervous and impulsive.

When asked to explain what had caused his brother to sell his share in the business and the mother to withdraw as a dormant shareholder, he mentioned as the first reason his own personality, calling himself “a dominating and rude bastard”. In our discussions, he showed a strong resentment against his brother and contempt for his mother. This emotional background certainly introduced distortions into his statements about the business. In particular, when telling the business’s history, he tended to blame his brother for most problems, as if pretending that there would have been no problems if he had been in control of everything. The truth however was probably not as black and white as his discourse.

Nevertheless, there is little doubt that Wynand’s business sense was superior to his mother’s; while to her the business was a family dream, he was unemotional and cost conscious, and saw no need for expenses that she was fantasising about. Having said that, the time spent with Wynand did not give me a clear impression as to whether he was hard-working (he did not reply to the phone, just standing, smoking and occasionally giving injunctions to his staff).

## **Personal Finance**

According to the indications given by Mrs. J., the family was not particularly wealthy, both sons having not been able to accumulate much savings. Mrs. J. owned a car and some investments in the region of R200 thousand Rand, but no further assets, except the house in which her mother lived, which was in a retirement village and had not much value. (She lived on her second husband's property).

The sons had only recently bought their houses, Kobus taking a home loan in 2001 and Wynand in 2002. They both did not own any private vehicle (using the business bakkies for their own purposes) nor any significant financial investments.

## **3. History of the business**

I collected only little information on the start-up phase since the founding member was not available for interview. The interviewees naturally spoke more of the period that they knew well. It was interesting, though, that the account given by Wynand was quite different from Mrs. J's report, and probably biased.

### **Initial investment**

The business was started when the family came back from Botswana in 1991. Mrs. J. surmised that the initial investment was in the region of R45 000, essentially for the purchase of an old forklift and some manual tools (handsaws and hammers). It was financed on the family's own savings.

### **Expansion and Financing scheme**

Mrs. J. was not very specific about the trajectory of the enterprise but suggested that it had expanded slowly, adding new equipment, staff and vehicles, and moving four times to new premises to cater for the increased need for space. The vehicles and computers were bought on credit, and in addition the bank granted an overdraft facility, initially at R60 000, later increased to R100 000 as the business grew.

According to Wynand, when he was asked to join in 1998, the business was nearly bankrupt, "it would not have survived 3 months". At the stage, Wynand refused to take a stake in the business, preferring to work as an employee. The problem of the enterprise at the time was, in Wynand's terms, that "there were no customers". The enterprise had no salesforce and no marketing strategy, and turnover was too small.

Wynand spent four months trying to find customers, partly by targeting some potential clients, partly just by "walking into people's businesses" – supposedly

a rather aggressive marketing campaign. He set himself monthly turnover targets, and the targets kept growing, as he was indeed bringing new business in. As business came in, he had to increase the working capacity: this happened gradually and the process generated many inefficiencies. For each addition of staff or equipment, the business “needed months to recover”, i.e. come back to a positive cash flow footing.

At the time, they were operating from a warehouse so small that, when large orders came in, there was no space to work from inside: they had to take all the materials and equipment out to the yard in the morning, work outside, and bring everything back into the warehouse for the night – a process that took much time. To avoid these inefficiencies, they occasionally subcontracted some of the work, a process which reduced their margin but enabled them to immediately satisfy their clients’ requests while they were busy building up the capacity.

In the account given by Wynand, it would seem that by the end of 2003 the progress was considerable: the business’s capacity was sufficient to serve large clients without having to subcontract, and the economies of scale finally brought profitability, making up for past losses. The addition of equipment enabled to reduce the number of employees although the turnover was still growing (substituting capital for labour). Two comparisons would give an idea of the extent of growth that was reached: “in one month of 2002 we had more turnover than in the whole year of 1998” and “in one hour now, I build more crates than we used to do in one day”.

According to Wynand, in 2003 there was no major cash flow constraint: clients were generally paying promptly, and the vehicle finance instalments could always be paid on time. It seemed as though they had solved all their problems.

## **The black empowerment company**

In 2003 the management decided to set up a black empowerment company that would compete in tender applications. All staff members of the company that were present at the time became joint owners of this company, with Wynand holding 20% of the shares. Mrs. J. had presented this company as a profit-sharing initiative, although Wynand made it clear that the purpose was to access tenders that would not otherwise be granted to his company. He expected a big 6-months contract to come in soon.

Effectively, it was not entirely clear yet where the limit would be set between this black empowerment company and the main business. The new black-owned enterprise had neither material resources nor contacts in the arena, so it would be highly dependent on the older white-owned one, which would buy the wood, make the equipment available, etc. Wynand suggested that when the contract would be there, the members of the BEE company would have to decide how many people to employ, these people would have to work at night or on the week-ends, and when the money would come in they would have to first refund him for his expenses, and then they would need to decide what to do with the rest

of the money, adding that there would certainly be heavy discussions about that.

## **The conflict between the brothers**

The discord started when Kobus, who had been in the business since his father's death, decided to start another (food-related) business, in partnership with his mother. As the salesperson told me, "he got tired of crating", but according to Wynand he was mainly tired of working with his brother. I could not get any details about this new venture, which Wynand dismissed as being boring and uncreative.

Kobus' new project had an impact on the crating business in the sense that, as is usual, the older sister company's cash resources were used to finance the younger sister company. Indeed, the February 2004 draft balance sheet reflects a long-term loan of approximately R15 000 (interest free and with no fixed terms of repayment) from the older to the newer business. Wynand suggested that by June 2004 the amount was closer to R80 000 and he had little hope of it being repaid.

Drawing R80 000 out of the crating business precisely during the winter time, when cash has always been tight, has put a tremendous pressure on the cash flow of Wynand's business. He feels close to bankruptcy but will try to struggle through for the next 6 months, hoping that he will recover – if not, he will have to take more drastic measures.

Meanwhile, the divorce between the two brothers has enabled Wynand to "close the tap" and prevent his brother from pumping more money out of the crating business. The brothers agreed, though, that Wynand's business would still have to pay off the bakkie which will now be used by Kobus in his own business: a way of indemnifying his brother, which leaves the crating business "short of a vehicle".

## **Critical summary**

The account of the business's history given by Wynand can be summarised in three periods: from start-up in 1991 until 1998, the business evolved slowly towards bankruptcy for lack of customers. In the five years following Wynand's involvement (1998-2003), he built up a client base and brought the business back to profitability and cash flow sustainability. But since early 2004, his brother's new ambitions pumped the liquidity out of the business and brought them back to near-bankruptcy. In Wynand's crude terms, "it took 5 years to build it up and 6 months to fuck it up".

This account is probably biased – but the financial statements support most of it. In particular, the income statements indicate a sustained, although irregular, turnover growth and the appearance of first profits between 2002 and 2004. Furthermore, the balance sheets do reflect a significant improvement in the cash situation in 2003 (in Feb 2003 the overdraft is down to R11 000, and in the



following 12 months the interest payments have been far lower than in the past) – although, as the following analysis will show, this evolution was far from being sustainable.

## **Access to finance**

When I had my first telephonic pre-interview with Mrs. J., she insisted that access to finance has been a permanent difficulty for the family, both in terms of equipment and working capital.

When the business was started, the equity was enough to cover the modest initial asset base (which Mrs. J. estimated to be in the region of R45 000), but the firm has had to grow and upgrade its assets. However, the growth of equity was limited by the absence of profits and the lack of savings among the two brothers. As the mother put it, both brothers had “no money to throw at the business”. Luckily Mrs. J. could grant a substantial member’s loan (close to R140 000 in 2002, covering the accumulated losses); the loans of the other members were more modest.

Beyond this, the capacity growth therefore had to be financed partly by equipment credit, partly by overdraft: the cash inflows from operations were not kept for working capital purposes, but immediately intercepted for investments. Indeed, Mrs. J. suggested that they keep no cash in bank – whenever there was cash it would be invested in fixed assets, such as the computers or saws.

Considering this strategy for the financing of equipment, it is not surprising that the family found it most difficult to secure working capital. Luckily, Mrs. J.’s investments enabled the brothers to secure an overdraft – and this is probably the reason why she has remained a shareholder after the conflict: Wynand needs her collateral.

## **4. Business model and operations**

### **Business model**

The financial statements define the nature of business as “Transport, shipping and forwarding; warehousing and packing of goods”. Asked to confirm this, Wynand indicated that their involvement in transport and shipping was rather marginal, while the core of the business was in packaging, especially crating.

When confronted with shipping requests, the business generally refers private clients to their partner freight companies, which also represent the largest part of their customer base. Hence, there is a two-way flow of business.

The core of the business is the packaging (and in some cases, storing) of goods that need particular protection, such as artwork or valuable furniture – especially in connection with (commercial) export or (private) relocations of households to

overseas destinations. Tourism has always been a driver to their business, with foreign visitors buying art or furniture, which they want to have transported safely to their home country. The items are thus packed in robust wooden crates and are ready for transport.

Compared with more standardised packaging firms, the crating work remains relatively labour intensive (due to the special care required by the goods to be packed and the case by case handling of them). However, the business has been able to significantly improve productivity by acquiring performing machinery. At the time of the last interview there were only seven people still involved in the wrapping, packing, and carrying of goods. Another two men had higher responsibilities of driving and supervising the teams. All those employees were employed on a casual basis. The only two permanent employees were the administrative staff (including selling). The total staff was then 11 people.

## **Premises**

In her interview Mrs. J. had mentioned premises as a critical issue on which the bank had disappointed them. “The bank makes it impossible for small businesses to buy industrial property”, she deplored. “They ask for a 50% deposit, do you think any small business can put so much cash in?”

Wynand confirmed that, at the end of 2001, the business had wanted to buy industrial property. They had identified suitable premises and had put a significant amount of capital aside for that purpose. Specifically, Wynand mentioned that they had R118 000 available in cash. But the bank rejected the loan application, so the transaction aborted. Wynand was not as emotional as his mother about this lost opportunity – possibly because, as he put it, the cash surplus that they had at the time went into his own private house instead, which he bought in 2002.

After several moves to cater for the increasing need of space, the business is now renting two units in the same business park, one for work and office, and the other one for storage. For those two units they pay a total rent of R11 000 per month, “far too expensive” according to Mrs. J – while Wynand was rather satisfied and emphasised that they had “a very good landlord”. The business owners reached an agreement with the landlord by which they are going to give up the smaller warehouse (which costs them R4 000/month) and build a mezzanine in the larger one, which will provide some space for storing. The rent for the larger premises, after addition of a mezzanine, will be increased by R1 000/month, but this will still lighten the burden. In his interview Wynand proudly announced that “my rent will go down from R12 000 to R7 000/month”, thus betraying a lack of mathematical agility since the rent was in fact going to decrease from R11 000 to R8 000.

## **Assets**

The business fixed assets are composed mainly of machinery and equipment on

one hand, and vehicles on the other hand. Naturally, as for any small business, the amount of equipment is limited by financial affordability and Mrs. J. emphasised that this causes permanent constraints on the business and its ability to take on larger contracts.

Plant equipment, it seemed, was a combination of high-performing modern machinery and older equipment. Wynand seemed to operate a reasonably strict distinction between the essential apparatus, which were used regularly and had to be reliable and efficient, and the secondary assets, for which it would not make economic sense to buy expensive brands.

In particular, Wynand mentioned a piece of equipment used to knock big nails into wood. Those nails are expensive so the equipment is not used for small jobs (in which case it is more economical to hammer smaller nails manually). But if the volume is sufficient, that machine saves time – a critical factor in large jobs. With this piece of equipment, they can make up to 92 crates a day. Other essential pieces of equipment are the circular table saw (with a measuring board) and the 2 circular saws.

In contrast, Wynand regards the forklift, which was one of the first investments of the father, as a secondary asset. While Mrs. J. deplored that their forklift was old and difficult to move, Wynand insisted that buying a new forklift was “not a priority in my life. It was a priority in her life, I know, but I don’t want to spend R200 000 on a fancy forklift that will be used two or three times a week – I’ll rather spend that money on a truck”. When a specific need for a performing forklift arises, the business would rather hire a better forklift since the need does not justify a purchase.

The other major assets are vehicles, especially a truck and two bakkies (one for each brother). The truck has been bought in 2002 on instalments over 3 years: at the time of the last interview the credit was still running over 15 months. The bakkie used by Kobus was also bought on instalments over 5 years, and was not yet entirely repaid – a study of the financials would suggest that the instalment sale agreement was still recent, concluded only towards January 2004. The brothers had agreed that once fully paid-up, the vehicle would move into the private ownership of Kobus (as an indemnification for leaving the business). As to “Wynand’s bakkie”, it is older and already fully paid-up, which caused Wynand to declare: “My bakkie is earning money. Today it has done 3 collections and 2 deliveries, so it has earned R700 just in a day”.

Lastly, among the office equipment, there is a PC which is still on instalments; the business pays 700R/month to repay it.

## **Management style and philosophy**

With the distinct personalities involved in the management of the business, the management style has been fluctuating over the business’s existence, although it would seem that, since 1998, Wynand’s influence has been more and more dominating.

Compared with his mother and supposedly his brother's more "romantic" philosophy (Mrs. J. talked about "offering a good service", "trying to educate the staff (forklift license, 1<sup>st</sup> aid) and make things easier for them", "promoting black empowerment"), Wynand's approach was more hard-line, down-to-earth and strictly guided by economic concerns. This included aggressive marketing ("walking into people's businesses" and "keeping a foot in the door until they let [him] in"), improvement of logistics (reorganising work processes to make them more efficient) and ensuring that the black empowerment company would work in his business's interest.

Wynand was also more ambitious as to the growth and contract size that the business needed to achieve – whereas his mother had been somewhat reluctant to engage into big contracts (such as tenders), as this would require them to expand their capacity, which would not necessarily be profitable owing to the fierce competition for tenders.

Mrs. J's and Wynand's look to the future also differed significantly, with Mrs. J. being "confident that, unless a political or economic crisis cause a major drop in exports or tourism inflows, business will remain sustainable", while Wynand was more nervous and focused on the critical ability of the business to recover from the current cash crisis.

## **Market, Competition and Workload**

### **Clients**

There has been a shift in the way the business defines its target market, although this shift does not yet seem to be reflected in the effective client base.

Initially, customers were mainly exporters and tourists, who would hear from the firm by word-of-mouth advertising. This gave a nice spread of small clients but the job flow was discontinuous and job size was limited. The business did not have any long-term contracts or even long-term relationships with its clients.

In a bid to get a more steady work flow and a larger job size (enabling productivity gains), Wynand has made a strategic move towards larger clients. In particular, he has undertaken to build longer-term ties with shipping agents, both in Cape Town and Johannesburg. More recently, he has started targeting the large industrial or service companies (including Eskom and Telkom) and checking tender opportunities (using the empowerment company as a vehicle for tenders).

Any contract from such a large client would radically transform their turnover structure, since the job size would be considerably larger than for private jobs. But this strategy has not yet borne its fruits. Wynand remains confident that he will eventually have a breakthrough, but it takes time: "big companies are resistant to change". However, his optimism should be pondered by two remarks. First, the business's limited capacity remains a serious obstacle to its ability to

gain large contracts. In addition, the power imbalance between an SME and a large firm cause unfavourable trading terms, while longer-term contracts slow down the working capital cycle – both elements being inconvenient in the business's current cash-tight situation.

So far, Wynand was proud to announce that for the first time in five years he had secured a large, long-term contract. At the time of the second interview, a first chunk of the job had been completed, but unfortunately the client was not showing much interest for it, and did not wish to have it delivered (supposedly the client only wanted to pay once the entire job was completed). This put a strain on the business both logistically (they did not have the space to store the finished crates) and financially (they would have to wait before recovering the costs engaged for this early phase of the job). Nevertheless Wynand wanted to keep a good contact with that client, in order to keep “a foot in the door” and hopefully gain further contracts later.

### **The fluctuating workload**

The reason for Wynand's persistent efforts towards large clients and large contracts was that the lack of a continuous workflow had caused a real problem to them in the past.

As Mrs. J said, “In this business it's either too much or you have nothing to do”. She described the business as follows: They used to start every month not knowing what they would have to do. After 3-4 days with no work, they would suddenly receive a job that they could hardly cope with, and were working at 150% of their capacity. This situation caused difficulties in planning and additional costs in all respects (labour, since they had to pay overtime; equipment hiring when necessary; as well as financial costs, in particular with regard to managing the stock and the working capital).

In addition to these week-to-week fluctuations on the workload, they had an annual cycle caused by their dependence on tourism. The summers were usually busy, while there was little work in winter.

The situation was slightly better at the time of the interviews, since the business had been able to secure a few contracts, especially from non-tourist based sources. In addition to the large long-term contract already mentioned, the company was working on two other small contracts. Furthermore, they were waiting for the black empowerment contract to come through (Wynand was confident that they would win the tender and that it would be profitable). The owner hoped that these contracts would help them to plan their capacity, manage the stock and smoothen the cash situation.

### **Competition:**

Because of the way they had been working previously (with small, mainly private clients, on a word-of-mouth basis), the business owners had not suffered

from the competition. Mrs. J. even ventured that in the beginning there was no competition at all, and they were entirely free to set their prices and conditions.

As time went and the demand broadened (with an increase of trade and tourism), a few more firms entered the market, including one previous client (a shipping agent) who had set up its own packing facilities. But at the time of the case study there was no feeling of harsh competition, presumably because crating remained a niche market, with most new entrants being also small and having a limited capacity, while the demand was still vibrant.

A check of the yellow pages confirmed that there were a few competitors (5 companies under “crates” and 4 other companies under “packing and crating”), but that the marketing positioning of Wynand’s firm was relatively favourable, with only two other companies having comparable large display adverts.

However, of course, in their bid for large contracts and tenders, the business would feel more severe competition, probably from the packaging industry as a whole, which involved some relatively large companies possibly working with other materials (e.g. plastic crates).

## **Costing, Pricing and Credit Policy**

### **Costing and Pricing**

Thanks to the weakness of competition, the business has been able to set its prices according to its needs. Costing takes place in co-operation with the external bookkeeper; Mrs. J showed me the costing sheets, which include cost of materials and labour; she mentioned that they worked on a 13.9% profit margin, but did not make it entirely clear whether this was the *ex ante* margin built up into the pricing (it would be an odd number), or the *ex post* effective margin.

### **Credit policy**

Up to the time of the case study, the management had not felt the need to define a strict credit policy, and payment terms were agreed according to the client’s preferences. A good indicator of how little attention was paid to this issue, was the contradiction that came up in the first interview when I specifically asked about payment terms: Mrs. J. answered that “most clients pay COD but some pay only after 30 days”, to which the administrative employee, who was sitting in the same room, commented: “it is rather the other way around” – which, if the accounts are correct, was still an under-estimation of reality.

The best payment terms were obtained when the firm worked in co-operation with clearing and forwarding agents. As Wynand explained, on export contracts, the firm could hold the clients’ paperwork until the payment is through, thus ensuring a prompter payment. Among other clients, though, delays in settling the invoices are frequent and not well monitored.

The result of this slack credit management has been that cash inflows have been more and more delayed, putting a strain on working capital. The balance sheets confirm this situation, with accounts receivable increasing from 32 days of turnover in February 2001 to 60 days in February 2002 and up to 96 days in 2004. This latest figure diverges with the indications given in the interviews, which had suggested that accounts receivable might have stood at around 30 days of turnover. If effectively a significant proportion of clients are prompt payers, then the late payers must take at least four months to pay.

Wynand confirmed that they were now “fighting” with a client who had owed the firm money for five months. This client had ordered the next job but had still not paid for the previous one, so that Wynand was refusing to start a new job. In spite of these increasing payment delays, Wynand was not really worried by the prospect of customer default: they had had only few bad experiences so far. They used application forms to verify their clients’ credentials prior to agreeing to a credit. At some occasions they have had to take legal action but it has always been resolved smoothly. Wynand believed that the late payments were not caused by the bad liquidity of clients, but by the fact that “in Cape Town, people are so slack”.

Around the time of the case study, with the tightening of cash and the need to manage working capital more strictly, Wynand determined a new, hard-line credit policy – a reasonable step considering that the low levels of competition allowed him to dictate terms of trade. He noted: “Things are going to change. From now on, all new customers will have to pay COD or on presentation of statement. As to the old customers, they will be treated individually, some don’t actually mind paying COD, for others we will have to see what we can do”. Wynand presumably forgot to mention the case of new large contract clients, who would be more inclined to impose the credit terms that suited them; Wynand’s business would have to be flexible in order to win these contracts.

## **Profitability**

Asked for her opinion about the profitability of the business, Mrs. J. in her interview answered “Yes we are keeping a certain level”, adding that “the growth has been steady”. This positive account contrasted with her son’s statement that “in 1998 the business was nearly bankrupt” and that it had taken him 5 years to get it above the water level.

The financial statements confirm Wynand’s rather than his mother’s version of facts. They show substantial accumulated losses in years prior to 2001, followed by alternating losses and profits between 2001 and 2004. Only in February 2004 have the accumulated losses from early years been covered by that year’s profit. (The good 2004 result however was partly caused by a profit on a sale of asset, although the financial year would have been positive even without this transaction).

As Wynand emphasised, the reason for the lack of profits in the past was the

insufficient turnover. Only in 2002 did the business reach a sufficient business volume to cover fixed costs (see breakeven analysis), which did not prevent them from writing losses again in 2003 as a result of an increase in variable costs, especially salaries. Therefore, in spite of the good profit in 2004, the situation remained precarious.

*Table 36.1 – CS6’s summarised income statement, 2001-2004*

	<b>Feb-01</b>	<b>Feb-02</b>	<b>Feb-03</b>	<b>Feb-04</b>
Turnover	553 667	1 040 493	1 148 698	1 429 327
Cost of sales	161 597	482 355	526 639	573 728
Salaries	42 953	60 768	122 331	128 266
Wages & subcontractors	87 583	85 904	83 591	86 663
Other expenses	263 150	323 146	420 786	583 176
Extraordinary income				34 999
<b>Profit before tax</b>	<b>-1 616</b>	<b>88 320</b>	<b>-4 649</b>	<b>92 493</b>
Actual tax				12 936
<b>Profit after tax</b>	<b>-1 616</b>	<b>88 320</b>	<b>-4 649</b>	<b>79 557</b>

## **Member's remuneration**

As a minority shareholder who was not directly involved in business, Mrs. J was not taking any salary. By contrast, her sons were dependent on a salary from the business for their livelihoods.

From 2001 to 2003, Kobus, as the then main owner, paid himself a salary of between R53 000 and R55 120 (during those years Wynand was working as an employee, therefore his salary does not appear separately in the accounts). To this cash salary should be added advantages in kind (Mrs. J. mentioned medical aid, home bond and car).

It seems that the improvement of profit in February 2004 caused the brothers to pay themselves a premium on their usual salary, since both earned R72 321.

## **5. Financial management**

### **Organisation of the business administration**

In the early years of the business there has been no awareness of the need of a separate financial management. The work was split between the “plant” and the “office”. The latter was regarded as secretarial work only (such as writing invoices), and was done by Mrs. J.

As the business grew, they employed a person to look after the administration,



which involved searching suppliers, marketing the services to potential clients, doing secretarial work and maintaining proper financial records.

The largest part of the financial management was done externally by a bookkeeper who collected business records once a month, and prepared some financial documents. Wynand named a statement of income and expenses, balance sheet, register of petty cash, VAT filings etc., but he did not give the impression of knowing exactly what he was talking about, or of studying those documents thoroughly.

Another indication of Mrs. J. showed that the bookkeeper was also involved in producing costing sheets and monthly breakeven calculations – hence going beyond a pure archive-oriented work to include decision-driven analyses. In that sense the business seemed to be better served by their bookkeeper than many other SMEs studied.

Surprisingly, the income statements do not show any traces of bookkeeping fees – the remuneration of the bookkeeper was probably included in the accounting fees.

## **Forecasting and monitoring of sales and costs**

Again, there was a contradiction between mother and son as to the existence of forecasting and monitoring. According to Mrs. J., the business did not normally do any plans or forecasts; in contrast, Wynand said that he redressed the turnover by setting himself monthly targets that were permanently updated. This statement suggests that at least the sales have been planned and monitored.

Maybe a correct interpretation of the mother's statement would be that there was no significant planning and monitoring of costs.

## **Accounting and setting up of financial statements**

If Wynand gave a correct description of the tasks of the bookkeeper, she was significantly involved in accounting, preparing at least management accounts.

The year-end financial statements themselves, however, were compiled by another company, which acted as Accounting Officer. However, Wynand indicated that he was considering changing this current arrangement because this company was too expensive. (The business paid accounting fees in excess of R30 000 in 2003, down to R21 800 in 2004).

Compared with other SMEs it was relatively easy to obtain copies of the financial statements. On my first site visit, a first draft of the latest financial statements (February 2004) had just been prepared by the accounting officer and laid on the office desk, so that they could be immediately handed over to me (Mrs. J. did not even bother to make copies since it was a preliminary version which would be replaced by a final version in due time). Older financial statements were taken out of the safe and handed out to me. (Again Mrs. J. did

not bother to make photocopies and declined my offer to return the originals after making my own photocopies). A few weeks later, after a few phone calls I received the main 3 pages of the final 2004 statements by fax.

The comparison of the draft and final versions of the 2004 accounts was interesting. When she handed over the draft financials to me, Mrs. J. indicated that the accountant had offered to “adjust” the accounts in order to minimise the tax burden. Indeed, for the first time, the business was doing a significant profit and using up the tax credits resulting from previous years’ losses.

The final statements confirmed that a revision of the draft has taken place to the effect that the profit before tax was lowered by over 31%. As a result of the tax credits available, the effect of this was to lower the tax burden by half. Interestingly, only one item was changed in the income statement, namely the purchases (which went up from R529 752 to R572 517).

On the balance sheet side, the lower profit induced a lower tax liability, as well as a lower distributable reserve. These changes were compensated by two adjustments: on the asset side, a loan receivable amounting to R16K (which Wynand had described as representing the money lent to his brother’s new business) was removed from the accounts, while the balance was compensated by an increase in member’s loan.

Table 36.2 summarises these main differences:

*Table 36.2 – Comparison of Draft and Final Statements for 2004*

Item	Value in draft accounts	Value in final accounts	Difference	Comments	
<i>Income statement</i>					
Purchases	R 529 752	R 572 517	R 42 765	} <i>automatic consequence of higher purchases</i>	
Profit before tax	R 135 258	R 92 493	R -42 765		
Tax	R 25766	R 12936	R -12 830		
Profit after tax	R 109 492	R 79 557	R -29 935		
<i>Balance Sheet</i>					
Assets					
Loan receivable	R 15 765	R 0	R -15 765	} <i>consequence of lower profit</i>	
Equity & Liabilities					
Distrib. Reserve	R 51 305	R 21 370	R -29 935		
Tax liability	R 25 766	R 12 936	R -12 830		
Member’s loans	R 150 973	R 177 973	R 27 000		

*Source: elaborated from the balance sheets and income statements 2004, draft version and final version.*

The table shows an apparent relation between the change in purchases and the change in the loan receivable (both ending with 765). This raises the suspicion that, for the purpose of saving tax, some purchases that had been paid by the

crating business on behalf of the brother's new firm, have been rebooked under the older firm's name (explaining the disappearance of the loan receivable). Also, it is possible that an expense carried by one of the members, for R27 000, has similarly been placed on the books of the firm. One may speculate that this expense may have also been related to Kobus's start-up.

Surprisingly, even after these adjustments, the ratio of cost of sales to turnover remains lower, at 40,1%, than in the two previous years (respectively 45,8 and 46,4%) – so that an external reader of the final statements would not suspect any upwards manipulation of this figure.

### Accounting transparency score

Table 36.3 – Accounting transparency score

Quantitative score	13.0	/ 20
Formal Quality Score	20.5	/ 30
Transparency Score	37.4	/ 50
Suspicion of manipulation	#	
<b>Total score</b>	<b>70.9</b>	<b>/ 100</b>

#### Main issues:

In general accounts are clean and transparent.

There are shifts between Balance Sheets and Income Statements with regard to fixed assets and liabilities, suggesting that some investments have been made at end of year and are only reflected in depreciations and financial costs in following year.

There is a strong suspicion that in 2004 some costs (possibly related to brother's new start-up business) have been booked under this business in order to reduce taxable income. However this does not fundamentally affect the reliability of accounts.

### Working capital and Cash management

Working capital and cash management have become the most pressing problem in 2004, in spite of Mrs. J.'s statement, in her interview, that there was "no pressure on the overdraft, [they] [were] managing quite well". Again this assertion betrayed either a drastic lack of awareness on the part of the minority shareholder, or an effort to brighten up her description of the business. Wynand, on the other side, was realistic and admitted being close to bankruptcy.

## **Accounts receivable and payable and Inventories**

A major reason for the tightening of working capital has been late payments by customers. "It has been very bad lately", commented Wynand, adding that it was "always the same people who pay late". He mentioned a "long story" which they had in 2003 with a client who owed them R15 000 and took at least 150 days to repay (sent a cheque that was not signed, etc). The balance sheet shows that accounts receivable have escalated in 2004, rising from an already high level of 65 days of turnover, to 96 days.

In spite of these long credit periods, the business has hardly experienced any bad debts. In four years, it has written off less than R8 000, or on average 0.2% of the turnover.

This situation has forced the business to stretch their use of supplier credit. Wynand mentioned that they got credit on only three items: wood, wrapping, and petrol. For those items, the suppliers normally granted a 30 days period. Other purchases, such as nails, were paid cash. He added that they used to cope well with this 30 days period, and it is only "in the last few months" that they have had to further delay the settlement of their purchases. This, though, was not confirmed by the balance sheet which suggests that the payment cycle has been 89 days of turnover since February 2003.

In any case, the result of this situation was that suppliers were pressurising the firm, not willing to supply wood. On my question as to whether they would turn to new suppliers, Wynand answered negatively, insisting that "the suppliers know us and eventually we can discuss".

Needless to say, this situation has made it impossible for the SME to build up stock, in spite of the management's effort to gain larger, longer-term contracts, which would require a more even stock. The inventories, which were already low in 2002 at 0,8% of turnover, have gone even further down to 0,2% of turnover in February 2004. Practically, the business had to buy wood and wrapping as needed for each job, and was even regularly obliged to delay work, deliberately not starting a new job at the end of a month because of its inability to buy wood.

## **Cash and Overdraft**

CS6's cash was very tight, and followed a monthly cycle, the worst period being between the 28<sup>th</sup> of a month (when salaries are due) and the 7-8<sup>th</sup> of the following month.

According to Wynand the cash level used to fluctuate between +R30 000 and -R40 000, and was well within their initial overdraft limit of R60 000. In recent times, though, an increase of overdraft to R100 000 had become necessary. It must be noted that such overdraft limit was relatively high relative to the business's size (8,3% of turnover, far higher than found in any other case study). This is probably explained by the business's longer history (it had already been

running for 13 years), which gave the bank some confidence that the business would resist to difficulties.

As Table 36.4 shows, except for February 2003, the overdraft facility has been almost fully used at the end of every financial year since at least February 2001 (source: balance sheets). The amount at 28 February 2004 was still within the overdraft limit, but it was possibly temporarily affected by a sale of asset (see Section 4: profitability).

*Table 36.4 – CS6's cash balances, 2001-2004*

	<b>Feb '01</b>	<b>Feb. '02</b>	<b>Feb '03</b>	<b>Feb. '04</b>
Overdraft	-96,279	-83,755	-11,767	-85,495
Bank balances	0	0	2,076	170

*Source: Balance sheets*

During the months that have followed the closure of the financial year, the cash situation has worsened further (source: interview with Wynand), especially since the business has lent substantial amounts of money to Kobus's new start-up – something that it could not actually afford to do. As a result, in June 2004 the bank balance was beyond the overdraft limit. At the end of May 2004, for the first time, the business was unable to pay salaries; the administrative and sales employee has agreed to wait until the beginning of the following month before taking her salary.

The reasons for the tight cash situation are manifold and certainly not limited to the payments to the sister company. As Table 36.5 shows, the increase in long-term resources (bank debt and members' loans) over the three years between February 2001 and 2004 was insufficient to cover the investments in fixed assets. As a result, 25% of the investments (or R56 160) were de facto paid for by operating cash flows.

From the R250 000 generated by operations over the three years, only R193 000 were left for working capital. The customers' increasingly late payments, meanwhile, had generated a financing need for over R330 000, of which only 38% was covered by increasing supplier credit. That imbalance forced the business to lower its stock, although the increasing workload would have required more substantial investments in stock.

This pressure on the cash was detrimental to the business in many ways:

- It effectively depleted the firm's working capital, thus hindering the business from being prepared ahead of contracts, especially because of the impossibility to maintain stock;
- It led to sub-standard maintenance of vehicles;
- It also affected the ability to generate new contracts, since the work capacity of the office employee, who was also sales representative, was concentrated on administrative matters (such as the relationship with suppliers, SARS and other creditors), leaving her no time to sell.

*Table 36.5 – CS6, simulation of cash flow statement*

	<b>Mar '01 to Feb. '02</b>	<b>Mar '02 to Feb. '03</b>	<b>Mar '03 to Feb. '04</b>	<b>Overall</b>
Net profit	88 320	-4 649	79 557	163 228
Depreciation	20 511	26 783	39 579	86 873
<b>Operating cash flow</b>	<b>108 831</b>	<b>22 134</b>	<b>119 136</b>	<b>250 101</b>
Accounts receivable	125 975	33 350	172 210	331 535
Change in accounts payable	31 718	93 170	1 371	126 259
Change in stock	-4 666	-3 475	-1 211	-9 352
<b>Change in working capital</b>	<b>-89 591</b>	<b>63 295</b>	<b>-156 692</b>	<b>-182 988</b>
Change in LT Liabilities	-8 279	63 968	82 681	138 370
Change in members' loan	11 502	7 025	10 939	29 466
<b>Cash flow from financing activities</b>	<b>3 223</b>	<b>70 993</b>	<b>93 620</b>	<b>167 836</b>
<b>Investing activities (additions to gross fixed assets)</b>	<b>9 939</b>	<b>82 359</b>	<b>131 698</b>	<b>223 996</b>
<b>Change in Cash Resources</b>	<b>12 524</b>	<b>74 063</b>	<b>-75 634</b>	<b>10 953</b>

*Source: adapted from the cash flow statement, as reconstituted according to balance sheets, income statements and notes.*

At the time of the case study (June 2004), Wynand was hoping that a harder-line credit policy towards clients as well as continued sales efforts would progressively accelerate the working capital cycle. The danger however was that the sales representative would be too tied up with managing the finances to achieve her sales targets. If sales started decreasing, the cash situation would only worsen further. To avoid this, Wynand decided to rely more heavily on the (external free-lance) bookkeeper for all financial matters.

Wynand expected that it would take 6-8 months to get back to an acceptable level of cash. He indicated that he would monitor it closely and take more drastic measures if necessary. The two possibilities under consideration were, either to pledge his house in order to secure a new term loan (but Wynand was not too keen on taking this risk), or to team up with an external partner who would bring in additional capital – he had received offers for partnership but had declined them so far.

## **Ongoing access to finance and relationship with creditors**

The business has been with the same bank since it was started in 1991, but Mrs. J. laughed when asked about the quality of her or her son's personal relationship with the bank manager. In her experience, the bank was an entirely anonymous institution, they had no single person to refer to, and nobody at the bank really knew them or their business. "The banks only know you if you have lots of investments with them".

The absence of a relationship with a bank manager contributes to explaining that their use of bank products was limited to standard services (vehicle finance and overdraft) rather than services which would have been particularly adapted to their need (such as discounting or factoring).

Nevertheless, the lack of a good relationship with the bank should not be exaggerated; after all, the bank has agreed to an increase of overdraft limit to an unusually high level compared with the business's size (8,3% of turnover).

### **Equipment finance**

According to Wynand, the investments in fixed assets were financed following two rules: vehicles, which were the major expenses, were bought on hire purchase, in general over 5 years, while the other (smaller) equipment was bought on cash (post-dated cheques over 3 months).

Instalment finance for vehicles is a standardised product and has been relatively easy to obtain, since the value of the assets provide the financial institution with automatic collateral in case of bad payments. However, the accounting documentation would suggest that the interest rates paid on instalment sale were high (except in 2004). As Table 36.6 suggests, the interest rates charged on the ISA were 4 to 5,7 basis points above prime rate. This may indicate that the bank classified CS6 as a high risk and therefore charged a high premium. On the last ISA facility granted, in January 2004 (presumably Kobus' bakkie), the conditions were apparently more favourable, estimated at 2,8 basis points above prime<sup>55</sup>.

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<sup>55</sup> This latter estimate is based on the prime rate applicable between January and February 2004, which is lower than the 12-months average rate.

*Table 36.6 – CS6 interest rate charged on instalment sale, 2000-2004*

	Prime interest rate		interest rate charged on ISA, as per the notes	calculated premium over prime
	at 28 Feb	average across 12 months		
Mar 2000 to Feb 2001	14,5%	14,5%	18,9%	4,4%
Mar 2001 to Feb 2002	14,0%	13,5%	19,2%	5,7%
Mar 2002 to Feb 2003	17,0%	15,5%	21,2%	5,7%
Mar 2003 to Feb 2004	11,5%	(14,3%)	14,3%	2,8%

*Source: Prime rate from SARB, averages calculated from SARB data; interest rate charged on ISA as per notes to the financial statements. For the calculation of the risk premium in 2004 see footnote.*

Considering this cost, one understands that Wynand preferred the small equipment, such as saws and small machines, to be paid in cash – apart from the old forklift, which was there from the start, each individual piece of equipment costs between R8 000 and R18 000, and was financed from the proceeds of larger contracts.

### **Short-term finance**

As discussed, CS6 had a tight working capital, resulting from several factors: (1) the use of short-term finance (cash flows from sales) for equipment purchases, (2) the lack of control over accounts receivable, and (3) more recently, payments done for the benefit of Kobus' new start-up.

The answer to this tight working capital has been the overdraft facility, which has been reasonably easy to get since Mrs. J. could offer significant collateral. Mrs. J. indicated that when they contracted the facility, they have tried to negotiate a reasonable interest rate with the bank. The limit was increased as the business grew.

However, at the time of the case study, the business was in persistent breach of its overdraft limit – a situation that became very costly. Mrs. J. lamented that exceeding the limit took away any possibility to negotiate: “the minute you go over the limit, they phone you, make you sign papers”. Wynand was not keen to comment on this, “well, the bank phones, I cry a bit for them, and that’s it”.

## **6. Financial ratios**

Financial ratios are particularly interesting here to diagnose the “illness” of this business which, in the words of its main owner, is close to bankruptcy.



## Cost structure

The cost structure of the crating business is summarised in Table 36.7. The cost structure appears as somewhat unstable, with fixed costs going up steadily and the ratio of variable costs to turnover moving by almost 9% between 2003 and 2004. Indeed, all major cost items (purchases, wages and subcontractors, salaries, vehicle expenses) have decreased in proportion of sales between 2003 and 2004. This may come from insufficient prices in 2003, which may have been corrected in 2004, or from productivity gains in 2004, which may have been enabled by the previous year's investments.

Table 36.7 – CS6's cost structure

	Feb-01	Feb-02	Feb-03	Feb-04
<b>Turnover</b>	<b>553 667</b>	<b>1 040 493</b>	<b>1 148 698</b>	<b>1 429 327</b>
Cost of sales	161 597	482 355	526 639	573 728
Other variable costs (mainly wages, salaries and vehicle expenses)	191 771	240 637	332 750	360 986
<b>Total variable costs</b>	<b>353 368</b>	<b>722 992</b>	<b>859 389</b>	<b>934 714</b>
in % of turnover	63.8%	69.5%	74.8%	65.4%
Administrative fixed costs (rent, insurance, accounting)	107 125	129 996	185 707	239 274
Financial fixed costs (finance charges and depreciations)	41 790	44 185	53 039	53 314
<b>Total fixed costs</b>	<b>148 915</b>	<b>174 181</b>	<b>238 746</b>	<b>292 588</b>
Members' salaries	53 000	55 000	55 120	144 643
Other income (interest or disposals)			20	34 999
<b>Net profit</b>	<b>-1 616</b>	<b>88 320</b>	<b>-4 537</b>	<b>92 381</b>

Source: elaborated from the income statements 2001-2004. For 2004 the figures are based on the final financial statements, i.e. after adjustment of purchases.

Under these circumstances, the breakeven calculation should not be reduced to a point estimate but rather a broad range, as shown in Table 36.8.

*Table 36.8 – CS6's breakeven calculation*

	Estimation from past annual financials			bookkeeper's estimate
	low	high	mean	
Variable costs	65%	75%		
Fixed costs (higher and lower estimation, not including members' salaries)	238 746	292 588		
<b>Breakeven (range)</b>	<b>690 017</b>	<b>1 161 063</b>	<b>925 540</b>	<b>R1,32 million</b> (R110K/month)
Margin of latest known turnover (R 1,43 million) over breakeven	107%	23%	54%	8%

*Sources: own calculations from financial statements, except bookkeeper's estimate, which was revealed in Mrs. J's interview.*

The table shows a significant difference between the low and high estimations of breakeven. The bookkeeper prepared a further estimation, based on monthly costs, which placed the breakeven point at R110 000/month, corresponding to R1,32 million/year – this estimate is above our higher estimate.

The higher value in the bookkeeper's estimate was possibly explained by an inclusion of the member's salary as well as a likely increase in fixed costs since the last financial statements. Indeed there were some indications that the business invested in fixed assets, financed by instalment sale, towards the end of the 2003-04 financial year (this is probably the Kobus's bakkie); this situation creates higher depreciations & finance charges.

Whatever estimate is taken as a benchmark, the annual turnover registered for the financial year ended 29 February 2004 was over breakeven. However, in the bookkeeper's estimate, the margin over breakeven was slim at 8%. A turnover decline of 8-9% would potentially suffice to bring the business back into the deficit zone. This result is worrying if one considers the weakening of the sales effort in 2004 as a result of administrative complications. In this light, it was essential that management kept a sustained sales effort to maintain turnover well over breakeven.

This shows the vulnerability of every SMME. In 2003-2004, CS6 has been profitable and has covered up all accumulated losses from its past. However, every addition to fixed assets has the effect of raising the breakeven point, and as such it constitutes a bet on the future – the bet that turnover is going to increase further. If at some point this does not materialise – i.e. the growth curve plateaus – the cost structure may eventually be too heavy for the business, which would then slide back into deficits.

## Interest coverage

So far, the interest coverage has been more a function of the operating results

than of the financial charges. In the year ended February 2003, operations have been generally less profitable, lowering the interest coverage. However, the ratio, as long as it incorporates the depreciation, remains acceptable. (The ratios of EBIT to interest and finance charges would be below 1 in February 2003).

*Table 36.9 – CS6's interest coverage*

	<b>Feb-02</b>	<b>Feb-03</b>	<b>Feb-04</b>
EBIT (after finance charges)	97 510	5 891	95 790
EBITDA (after finance charges)	118 021	32 674	135 369
Interest paid (overdraft)	9 190	10 540	3 297
<b>coverage ratio (interest on overdraft only)</b>	<b>12,8</b>	<b>3,1</b>	<b>41,1</b>
EBIT (before finance charges)	105 366	15 342	102 397
EBITDA (before finance charges)	125 877	42 125	141 976
Finance costs (overdraft and instalment sale)	17 046	19 991	9 904
<b>coverage ratio (total financial costs)</b>	<b>7,4</b>	<b>2,1</b>	<b>14,3</b>

Again, caution is required on this table. The interview data collected suggest that in the months following February 2004 the utilisation of overdraft has dramatically increased, to the extent that it is almost permanently beyond the limit, causing a surge in interest costs. In addition, the new instalment sale agreement (bakkie) contracted towards the beginning of 2004 generated additional financial charges. As a result, there was some reason to believe that the coverage ratio for the first few months of 2004-2005 would be significantly less favourable, and might even be below 1 if the operating results have been poor. Unfortunately, there were no figures to back this assumption.

## Equity ratio

As in most SMMEs, the equity ratio *stricto sensu* is very unfavourable. Only in February 2004, after all accumulated losses from the past have been covered, does the equity reach a positive value.

Economically more significant is the broader definition of member's capital, which includes members' loans. It shows that in 2002, almost half of the firm's assets were financed by family resources. In the following years this proportion evolved to about a third, which reflects important investments made on instalment sale. Compared with South African SMMEs in general, this ratio was reasonably good.

Table 36.10 – CS6's Equity ratio

	Feb-02	Feb-03	Feb-04
1/ Technical equity			
Members' interest	100	100	100
Accumulated losses	-53 538	-58 187	21 370
Equity <i>stricto sensu</i>	-53 438	-58 087	21 470
Total Assets	229 663	317 189	578 401
<b>Equity ratio <i>stricto sensu</i> (1)</b>	<b>-23%</b>	<b>-18%</b>	<b>4%</b>
2/ Members' capital			
Member's interest	100	100	100
Accumulated losses	-53 538	-58 187	21 370
Quasi-equity (members' loans)	160 009	167 034	177 973
Members' capital in the broad sense	106 571	108 947	199 443
Total Assets	229 663	317 189	578 401
<b>Equity ratio (2)</b>	<b>46%</b>	<b>34%</b>	<b>34%</b>

The business, then, does also not suffer from a dramatic lack of equity resources. However, again, two remarks mitigate this statement. Firstly, after the exit of one of the brothers in June 2004, the members' loans have probably been lowered by R27 000 to R54 000<sup>56</sup>. Secondly, the large majority of the members' loans come from Mrs. J., who may have become more reluctant to provide further funds to the crating business since the conflict broke out between the brothers. Indeed, Mrs. J. now also holds a share in Kobus's new venture, and she may be tempted to invest in his rather than Wynand's business.

## Debt maturity

Table 36.11 shows that although the business has not been overly dependent on debt in general, its debt has been mostly short-term debt. In February 2002, when Wynand's bakkie was almost entirely paid up, short-term debt represented almost 100% of total debt and over half of the business's resources. In the following years, the purchase of new vehicles have slightly reduced the dependence on short-term debt but this remained high: in 2003 the overdraft was reduced but at the expense of a strong increase in the use of supplier credit; in the following year there was virtually no room to increase supplier credit any further, so the use of overdraft was stretched again. However, the mainly short-term character of liabilities appears to be linked to the asset structure, which is

<sup>56</sup> Unfortunately, the note giving the breakdown of members' loans by member for February 2004 is not available for the final accounts. Kobus's contribution was R27 000 in the draft statements, but in the final statements the total members' loans are R27 000 higher than in the draft. It is therefore possible that the book value of Kobus' share was R54 000.

strongly dominated by short-term assets (especially accounts receivable).

*Table 36.11 – CS6's dependence over short-term debt*

	<b>Feb-02</b>	<b>Feb-03</b>	<b>Feb-04</b>
Current liabilities	120 407	141 589	216 688
Accounts payable	36 652	129 822	131 193
Overdraft	83 755	11 767	85 495
Current assets	182 448	212 323	383 322
Total assets (TA)	229 663	317 189	578 401
CDR (Current liabilities / TA)	52,4%	44,6%	37,5%
NCDR (Current debt – current assets)/ TA	-27,0%	-22,3%	-28,8%
Current debt / Total (external) debt	97,8%	68,0%	57,2%

Overall, the dependence on short-term debt remains acceptable in February 2004 but interview data would suggest that it has increased again in the following months, with the overdraft being permanently beyond R100 000 and the accounts payable being generally held overdue for even longer periods.

## **Working capital cycle**

The working capital cycle was found to be the most critical issue behind the business's problems. As Table 36.12 shows, the business structurally operated with long credits to its customers (although the interview evidence did not confirm this, suggesting that the management was not aware of this issue), which generated an important need for working capital.

In addition, unlike most retail or service SMEs, there was a production cycle to take into account, since goods needed some time to be packed into crates. Unfortunately the evidence collected did not include an objective value for the production cycle, so that an assumption had to be made. Considering the statements made in the interviews regarding the week-to-week fluctuations of workload and the gradual shift towards longer-term contracts, it was assumed that the average production cycle lengthened from approximately 10 days in Feb 2002 to approximately 15 days in Feb 2004. Inventory, on the other hand, hardly played a role since it was kept to an absolute minimum.

To deal with this need for working capital the firm had, between February 2002 and 2003, dramatically increased its use of supplier credit, to almost 90 days – a very long period, since interview evidence suggests that suppliers normally granted either 0 or 30 days credit. The fact that this value of 89 days had been repeated for two consecutive years suggests that it is unlikely to be an outlier. If this value is representative, it would indicate that the business systematically went 2 months overdue over the credit period granted by suppliers. This practice provided temporary relief (the excess of venture capital even enabled to reduce the utilisation of overdraft in February 2003), but it was not a sustainable

solution. As time passed, suppliers supposedly increased their pressure on the crating business.

*Table 36.12 – Working Capital cycle*

in days of turnover	Feb-02	Feb-03	Feb-04
Purchases: average supplier credit	27,4	88,7	89,0
Inventory	2,7	1,4	0,8
Assumed production cycle	10,0	12,0	15,0
Sales: Average customer credit	60,0	65,0	96,0
Total need for (excess of) working capital	45,8	-10,2	22,6

In the early months of 2004, the situation of the business with regard to working capital was critical. After years of slack management of accounts receivable, the business was eventually planning to tackle the issue by negotiating with the customers. This was rather late, since the flows of cash had slowed down considerably. The high amounts overdue on the part of the customers meant that the business had little chance to return to normal practices with regard to suppliers. The additional pressure on cash caused by expenses made on behalf of Kobus' new venture further complicated the matter.

The risk of this situation was that the business's short-term creditors might eventually refuse to support it any longer, by either refusing to sell materials, or initiating legal action against it.

## Variability of ratios

The history of the firm shows that its evolution has been uneven. After 2002 when the business experienced a considerable turnover growth (88%) and supposedly wrote its first profit, 2003 was rather unsuccessful with almost no turnover growth and a dramatic increase in variable costs, bringing back deficits.

In February 2004, meanwhile, the accounts were generally favourable with a high turnover, low variable costs and the benefit of an extraordinary profit on the sale of a fixed asset. In addition, the burden of the acquisition of the new vehicle, which was supposedly undertaken shortly before the end of the financial year, has not yet its full impact on the business's cost structure (depreciations and finance charges). Finally, interest costs have been low as a result of the previous year's improvement of the cash balance.

But the evolution of the firm up between March and June 2004 raise doubts as to the ability of the firm to repeat the previous year's profit: sales were likely to be weaker, the new vehicle would become a burden (with financial and depreciation costs affecting the profits, while the vehicle would be used by the brother in his new business), and the dramatic cash situation would generate substantial administrative and financial costs.

## Firm value and indemnification of departing member

When Kobus decided to sell his stake in the business, Wynand agreed to indemnify his brother by paying off the bakkie for him. The vehicle seemed to have been bought in the first few months of 2004, and to be valued at R125 542, excluding financial costs (source: notes to the balance sheet).

Again, to verify the fairness of this indemnification, the value of the business in February 2004 was estimated according to a discounted cash flow method.

In this case, making proper assumptions on future cash flow growth is rendered difficult by the instability of past results. The operating cash flow has increased by more than 500% between February 2001 and 2002, then dropped by 80% in the following year, then increased again by more than 400% in 2004. Over the period, the average cash flow growth has been 91% p.a., however this cannot be seen as a sustainable growth rate for a 13 year-old business. It seemed more realistic to assume, in the cautious scenario, a permanent growth of 10% p.a., and in the optimistic scenario a growth of 25% for 2 years, followed by an eternal growth rate of 15%. According to these assumptions, and using a 35% discount rate, an appropriate indemnification for Kobus would seem to be in the region of R170 000 to R240 000 (see Table 36.13).

*Table 36.13 – Discounted Cash Flow estimation and fair indemnification*

scenario	optimistic	cautious
Assumed CF growth, 2 years	25%	10%
Assumed CF growth, 'eternal'	15%	10%
Discounted Cash Flow	628 577	476 544
Accumulated profit in Feb 04	21 370	21 370
<b>Net value of business</b>	<b>649 947</b>	<b>497 914</b>
Value of non-interest bearing debt in Feb 2004	177 973	177 973
Value of equity in Feb 2004	471 974	319 941
Value of 45% equity stake	212 388	143 973
Value of Kobus's member loan in 2004	27 067	27 067
<b>Fair indemnification for Kobus</b>	<b>239 455</b>	<b>171 040</b>

If this estimation is correct, the arrangement concluded between the brothers, corresponding to a value transfer of approximately R125 500, seemed rather favourable for Wynand. However, if one adds the financial costs to be borne by the crating business, as well as the estimated R80 000, which Kobus had apparently drawn out of the family business between February and May 2004 for the purpose of his own new venture, the total indemnification seems fair. Especially, the advantage of the vehicle arrangement was that it would not have too dramatic an impact on the crating business's cash position, while paying the same amount in cash would have been ruinous. In addition, the credit conditions

available to the older business (which have been estimated at 2,8 basis points above prime) might be better than what Kobus's start-up could have obtained.

## 7. Final reflections

Overall, the analysis shows a business in a twilight zone. On one hand, CS6 has visibly established itself as a significant player on its market, is selling well, and has generally profitable operations. Compared with average South African SMEs, the substantial loans provided by the mother gave the business a reasonably strong equity base. On the other hand, the very slow working capital cycle (caused in particular by a weak management of customer credit) forced it to exceed the allowed use of supplier credit and overdraft and impeded its building up of stock, causing considerable vulnerability.

Apart from the working capital situation, the ratio analysis does not indicate a major crisis in the business, but its conclusions may be too positive, because they are based on accounting evidence focused on the firm's best year – and there are indications suggesting that the situation has worsened after the closure of that financial year.

A factor of concern is the transfer of resources that has taken place between CS6 and its new sister company in the months immediately preceding the case study. This is likely to have significantly worsened the financial situation of the business, and it may appear surprising that CS6's shareholders approved these loans in spite of the company being already so close to full utilisation of its overdraft limit.

It is probable that, at the time, Kobus and his mother, who jointly owned 55% of the shares, were oblivious of the actually tense cash situation in the business, and had a perception that the older business was in good health, confusing profits with liquidity. Wynand, as a minority member (45%) could not prevent their decision. The lack of unity between the brothers was surely detrimental to the business and probably caused moral hazard in its management. The fact that the mother was associated with Kobus in his new venture, while Wynand was not, influenced her position in balancing between the sons, and explains why she was favourable to the loans.

With Kobus' withdrawal, Wynand would now have a full control over the business's decisions, and would certainly be less inclined to allow loans to brother. It is probable that this would enable a more consistent management, and a harder-line management of cash would probably be beneficial to the business. Questions remained, though, such as the quality of Wynand's managerial capacities and motivation (refer to the fishing magazines on his desk), his ability to manage teams and maintain a positive work atmosphere (refer to the aggressive tone of voice), the chances of success of the new sales strategy and the use of the BEE-vehicle to win tenders.



## **Annexure 37 – Case Studies, Synthesis I**

### **Financial resources and financial needs of SMMEs**

This annexure draws a synthesis from the six case studies on the existence and the magnitude of financial constraints and of a finance gap. For this purpose, the annexure first reviews the current (and future) resources available to the businesses. It then evaluates the financing needs faced by each case study, as derived from their asset base, their working capital cycle and their further ambitions. At that stage the demand function is examined more closely. Finally the needs are related to the resources, to derive a possible gap.

#### **1. Resources available (presently and in future)**

Per definition, the case study objects were characterised by various financing schemes, which will be presented according to the type of finance.

##### **1.1. Equity finance**

###### **a) Entrepreneur's own resources**

It is often said that the resources of the owner(s) are decisive in the early stages of the business, when institutional finance is unlikely. The case studies confirmed this statement, but also showed that the owner's resources are equally needed in later stages, to support the business through its growth phase.

- Start-up finance: Except for one of the franchises (CS1) and one of the township businesses (CS4b), which have received substantial start-up credits, all others were initially financed only by the owner and his family or friends. Savings from previous employment (CS3, CS5) or a personal bond (CS2) usually help to get the enterprise off the ground.
- This statement conversely means that businesses emerging from impoverished black township households have few chances of success, even more if the entrepreneurs are handicapped by their previous credit history (CS4a+b).
- Expansion capital:  
Although this is not always found in the literature, the case studies have shown that as the business expands, the need for the member's finance remains high or becomes even higher. For no case study was the

member's loan found to decrease; it rather remained stable (CS2, CS3<sup>57</sup>, CS5) or increased even more (CS1, CS6).

## **b) Informal network**

Beyond the owner himself, social networks proved to be a significant source of support. This was especially visible in the businesses owned by individuals classified as coloured.

- A first source of support is the family. In the start-up phase, the entrepreneurs' parents are often found to provide support either through equity participation (CS6) or through a personal credit contracted for the benefit of the son's business (CS5).  
The family is usually still supportive in the expansion phase of the business, either by lending money and providing collateral (CS6, Mrs. J. contributed to the majority of the members' loans for her sons' business; her investments also served as a security for the firm's overdraft), or by helping with the acquisition of assets (CS3 obtained his sewing machines and other manufacturing equipment from his mother-in-law, and also bought a second-hand vehicle on credit from an uncle).
- Friends have also the ability to support the entrepreneur, either by providing loans (CS5 heavily resorted to this in the early stages), or by teaming up as a partner (CS3 was joined by his neighbour for 3 years).
- Professional informal networks are also crucial: for example, Mrs v.d.S. (CS3a) obtained her sewing machines from her previous employer. Her son-in-law (CS3) bought his first sewing machine at a discount from a subcontractor who did not use it any more.
- Unfortunately, again, township entrepreneurs (CS4 a+b) could not easily rely on their equally impoverished social network, such as family and friends, to provide substantial support.

The importance of informal borrowings from family and friends especially among the coloured entrepreneurs has several reasons. Firstly, "social collateral" replaced the financial sureties that most coloured entrepreneurs did not have initially; in addition, the usual 'moral hazard' problem associated with bank lending does not take place in a context where generosity leads to co-operative reactions, cf Azam et al (2001) and Rabin (1993)). Secondly, these loans are usually interest-free. Thirdly, this financing choice usually gives the entrepreneurs more flexibility in the repayment schedule, than formal / institutional finance.

On the other hand, the social cost of such arrangements can be high and failing to repay such a loan can be hurtful for friendship or family harmony.

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<sup>57</sup> except for the effect of a member's exit, which caused a reduction in member's loan.

### c) More specifically “Informal venture capital”

Equity participations represent a particular form of support by the informal network; if it fulfils certain criteria (equity participation limited to a certain duration, with the member not being substantially involved in management), it can be termed “informal venture capital”.

In this respect, there was a striking similar pattern among three of the four regular case studies (CS3, CS5 and CS6), which have, at some stage during their lifetime, been operated in partnership. Although this may not have been foreseen initially, fact is that in all three cases, the partnership broke. In addition, in all three cases, the remaining member suggested that the former partner had not been substantially involved in management. Considered ex post, the data available suggest that in at least two cases (CS3 and CS5), this temporary equity contribution of an acquaintance is comparable to informal venture capital.

There was another common trait between the three cases. In each case, the divorce happened at a stage when the business seemed to have overcome most of its difficulties and was beginning, or about to write profits.

Although the frequency of this situation (50% of the 6 case studies) may not be representative, the circumstance of partnership break is probably a common aspect of small business life, for the following reasons:

- Many young entrepreneurs feel that they need a partner at a crucial time of the business’s life. This need is usually felt at start-up, like for CS5, but it may also be at a time of transition, like the evolution from the informal into the formal sector (CS3), or a change in the strategic path (CS6).

The partnership gives the entrepreneur more assurance in two respects. In terms of capital needs, the partner brings in a compulsory financial contribution, but he may also provide some collateral, which eases access to credit (CS3). Moreover, the partner may bring some management know-how (CS5 teamed up with a partner because he had an MBA; CS3 appreciated that his partner had some experience in running a CC; as for CS6 Wynand had more business experience and would be more apt to bring the firm back to profits).

- However, it frequently happens that one partner is more involved and committed to the business than the other (for easier reference the two partners will therefore be qualified as *main* and *minor* partner). As long as the business needs full-time attention, the main partner has no time to worry about this imbalance. However, when the investment starts bearing fruits and the minor partner requests its share, tensions come up. The main member has difficulties accepting an equal sharing of results when the involvement (hence, the responsibility for the growth and profitability

achieved) was unbalanced. (This was particularly the case of CS5). This causes the partnership to break.

- From the point of view of the minor partner, the involvement in the business goes barely beyond an initial equity contribution and the provision of some contacts or management advice; his involvement in operations remains marginal. When the business starts being profitable, the minor member exits and, if he adroitly negotiates his indemnification, may realise a substantial profit on the initial investment (this was at least the case of CS5, possibly also for CS3).

Generalising from these remarks, the case studies suggest that a form of small-scale informal venture capital is a relatively significant source of finance for emerging small businesses – although it is not necessarily perceived as such by the partners initially. It seems to be particularly relevant in communities where income levels are too low to enable entrepreneurs to run the business on their own, but high enough to allow for significant contributions of acquaintances – in present day Cape Town, the coloured community.

This tentative finding is new: up to now the literature has generally seen family and friends only as sources of loans, and informal venture capital was equalled to the activity of business angels, who are defined as “high net worth individuals” (Hollander & Schirinig, 2001). As an exception, GEM 2001 has admitted the existence of “business angels” in lower-income communities, and has pointed at a high business angel activity in South Africa (4,5% of adults surveyed were found to have provided funds to a business that was not theirs). However, GEM’s business angel concept included loan as well as equity contributions, and was therefore not conclusive on the significance of informal venture capital.

The case studies suggest more qualitative insights into the phenomenon of informal venture capital, as follows:

- Since it takes place within the entrepreneur’s social network, this form of finance has the advantage of being relatively easy to obtain. In particular, the assessment procedures are inexistent (CS5, CS6), or very unsophisticated (CS3).
- However, when the partnership breaks, the need to indemnify the exiting partner is usually costly for the business and the remaining member, for the following reasons:
  - The main member tends to be reluctant to allocate value according to nominal equity shares;
  - Defining a young business’s value is always difficult, especially if it has few assets and if the value resides primarily in a customer base or brand name;
  - Even if the value is fair, the cash impact is often ruinous for the SME: Small growing businesses can be valued at a high

price, but are typically illiquid and do not have such amounts readily available. (see section on “buy-out capital”).

- Some factors can aggravate the difficulty and may lead to litigations, as has been the case of CS5:
  - The later the divorce, the higher the gap between the nominal value of the minor partner’s investment, and the firm’s total value.
  - An unequal financial acumen of the two members (usually the minor member has better financial skills) potentially creates a risk of abuse of the main member by the other.

Further sections will come back to this issue.

## **1.2. Long-term debt finance**

The small businesses’ access to debt finance was strongly dependent on the type of debt required. The following distinguishes between long-term needs for real estate, equipment, or for the start of a franchise operation, and short-term capital needs.

### **a) Finance for real estate investment**

None of the case studies had been granted finance for the purpose of buying property, although one (CS6) had attempted to do so and another one (CS3) was in the process of lodging an application with its bank.

According to the experience of CS6, the only case study which completed the process, access to credit for the purchase of premises seems difficult. In their case, the bank refused to support the investment because the deposit that the business could pay was not sufficient (apparently it had to be 50%).

In the case of CS3, it was too early to know the outcome of the negotiation with the bank, but it seems unlikely that the firm would have been able to provide 50% of the property price.

### **b) Vehicle finance**

Vehicle finance was found to be easy enough to obtain. This is not surprising because it is a standardised financial service, usually organised in a separate division or subsidiary from the bank, with dedicated staff. In addition, this type of finance is regarded as less risky, since the lender can, at any time, repossess the vehicle, which will easily find an acquirer.

- All but two entrepreneurs from the 6 case studies bought their vehicles on instalments in the business' names. The exceptions were the township entrepreneurs (CS4 a+b), who probably had no access to formal finance at all and therefore used their own private vehicle for business purposes, and the restaurant owner CS2, who did not have a need for a business vehicle.  
Among the entrepreneurs who benefited from vehicle finance, most even used it several times, adding new vehicles as the business grew (CS5, CS6).
- When describing the procedure, entrepreneurs did not mention any explicit verification of creditworthiness on the part of the bank. This may explain why CS1 was able, in the year prior its liquidation and in spite of major liquidity problems, to buy an additional expensive vehicle on instalments. There is also some evidence that the procedure becomes even lighter and easier for frequent users of this type of credit (for CS5, the procedure is limited to a telephone call, after which bank officers come to his offices to collect his signature).
- The ability of SMEs to pay their instalments in time has mainly depended on the vehicle's price, the business's own contribution as well as the duration of credit chosen (and of course the business's cash position in general).  
CS3 bought a cheap vehicle and repaid it ahead of schedule, while CS1 and CS6 have contracted instalment sale agreements for more expensive vehicles and found it difficult to adhere to the payment calendar. As to CS5, it has taken the habit of taking as long credit periods as possible to minimise the monthly cash flow impact.
- It seems that banks have a reasonable tolerance with regard to delayed repayments (CS1's debt seems to have been rescheduled; CS5 with his tight cash flow in winter was still regarded as a "good risk" by the vehicle finance institution).

### **c) Equipment finance**

The case studies illustrated only limited cases of debt-finance equipment purchases:

- (i) Computer-related equipment  
Computers, like vehicles, are relatively easily purchased on instalment, for the same reasons (the bank can easily value the asset and recover it in case of default). Two case studies and one abandoned case study (ACS c) had bought computer equipment on instalments (CS3 and CS6).

- (ii) Other machinery:  
CS4b, a township entrepreneur, was the only one to obtain a specific credit for the purchase of machinery. She was an exception in this regard, since no other entrepreneur was found to buy machinery on credit, unless it was part of a franchise scheme. However, the credit facility received was informal (it was granted by the vendor of the machines, without any formality), very short-term (three months), and generally not favourable to the entrepreneur.
- (iii) Franchise:  
The only other case of non-vehicle equipment finance in the case studies was in the broader context of the initial investment in a franchise scheme (CS1, and indirectly CS2). This specific issue will be discussed below.
- For other equipment, the businesses studied did not receive or use any debt finance. At this stage, it is not clear whether this is due to supply-side restrictions, but there is a possible lack of a targeted equipment finance offer from the bank. This, in turn, may be caused by the fact that (manufacturing) equipment is specialised, difficult to value and sometimes difficult to repossess and re-sell. Specialised leasing divisions, if they do exist and have appropriate capacity within the bank, are presumably not targeting small businesses / small loan amounts.

#### **d) Franchise finance**

The previous analyses had already raised the suspicion that banks are more prepared to provide overarching long-term finance to franchise schemes, than to other small businesses (8 of the 19 SME files provided by the bank were franchises). Indeed, the two case studies organised as franchises benefited from substantial support from their banks.

However, one of the franchise schemes investigated (CS2) had adopted an unusual financial scheme (the member contracted a long-term loan in his personal capacity and put it at the business's disposal by means of a member's loan). Nevertheless, it is probable that the fact that the entrepreneur was engaged in a well-known franchise scheme eased his access to the loan.

The other franchise case study (CS1) provided a more conventional example of franchise bank funding, which presented the advantage of covering a major portion of all start-up costs of the firm (franchise fee, vehicle and other equipment, initial working capital)<sup>58</sup>, on a long term basis (4 to 5 years).

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<sup>58</sup> Unfortunately, some contradictions in the data caused difficulties in describing the nature and

Accordingly, the franchises were the only examples of firms which benefited from long-term debt finance for the acquisition of non-vehicle non-computer equipment, as well as stock.

### **1.3. Short-term finance**

Short-term debt finance is almost systematic in small businesses. This includes several sources, such as bank, trade partners and, in the case of township businesses, micro-lenders.

#### **a) Bank overdraft and credit card**

Bank short-term finance was generally limited to overdraft and credit card facilities.

Apart from the “nearly-unbanked” township businesses (CS4), all entrepreneurs studied had an overdraft facility. (CS5 contracted such a facility during the course of the case study). This, however, is not representative of the overall small business population.

The overdraft limits granted to the small businesses are individual and, in the 5 case studies concerned, varied between 25 thousand (CS1) and 100 thousand Rand (CS6), corresponding to 1,2% to 3,6% of turnover in 4 cases, and as much as 8,3% of turnover in the case of CS6.

Furthermore, the case studies suggested that the firms made different uses of the overdraft and credit card facilities. Some used it mainly for seasonal periods (CS5), or for extraordinary events (CS2, in case of a breakage), while others tended to exhaust their limit and even go beyond it, sometimes for prolonged periods. For example, although information is incomplete, it would seem that CS1 has been in breach of its overdraft limit for most of the months between early 1999 and at least June 2000, i.e. a period of 18 months. At the time of the interviews, CS6 was also in breach of its limit, a situation that had started several months earlier. Such breach of limit however, especially if prolonged, generated pressure from the bank in the form of repeated phone calls (the interest costs will be addressed later).

Overall, overdraft facilities proved to be common and reasonably easy to obtain for a business with a few years of history, but the systematic requirement of collateral constituted a strong restriction on the general availability of this form of finance (this will be discussed later). In addition, compared with longer-term debt, it was an expensive service.

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characteristics of this financial support. The official financial statements have suggested that there was one long-term loan “for the funding, assets and working capital” of the franchise – while the bank file mentioned a term loan as well as an instalment sale agreement.



## **b) Other bank products**

- No business, even those with substantial debtors books, were found to make any use of factoring/discounting or other instruments.
- In one case (CS1) a business required and obtained a bank guarantee – but further information was not available.

## **c) Trade credit**

There were mainly two sources of trade credit: suppliers and customers. Customer deposits (advance payments) were disclosed separately in only one case (CS1), but they may have been subsumed under “trade accounts” in other cases.

Supplier credit is by far the most frequent form of trade credit. All case study enterprises used it to some extent, although the statements made in interviews were occasionally contradicting data found in balance sheets (especially for CS3). Entrepreneurs had different views on the appropriateness, accessibility and cost of supplier credit:

- The use of supplier credit, as derived from balance sheets, varied from app. 5 days of turnover (CS2) to as much as 68 days for CS6, although generally suppliers would officially only agree to a credit period of 30 days.
- There were only few mentions of particular restrictions with regard to access to trade credit, although some suppliers supposedly asked for trade references and other information. CS3 mentioned that some vendors occasionally asked for bank details. The same business also mentioned that when sourcing from a new supplier or buying non-core business materials, they would not have access to credit. CS6 also confirmed that some materials had to be paid in cash.

### Customer deposits

- Only CS1 (furniture manufacturer) disclosed deposits made by the customers on some few occasions. Although infrequent, these deposits provided additional liquidity especially at initial stages of the business (in 1997 they represented as much as 32 days of turnover).
- There is a possibility that most entrepreneurs are generally reluctant to require a deposit from customers for fear to lose them to competition.

Table 37.1 summarises the firms’ average use of supplier credit and customer deposits according to balance sheets<sup>59</sup>.

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<sup>59</sup> The values for CS5 are not truly representative of the year-average use of supplier credit, since all balance sheet values are summer values, while the use of supplier credit becomes more

*Table 37.1 – Trade credit in days of turnover*

	CS2	CS3 (balance sheets) (inter-views)		CS5	CS6	CS4 a & CS4 b	CS1
Supplier Credit (average)	5.0	9.3	25.0	41.3	68.4	0 to 15	28.6
Deposits (average)		0.0	0.0	0.0	0.0	0.0	10.1

*Source: average of balance sheet values available, except for two cases: (i) in the case of CS3 the divergence between balance sheet values and interview data caused the latter to be included as well; (ii) CS4a+b are solely based on interview data.*

#### **d) Micro-lenders**

Not surprisingly, only the township entrepreneurs made use of micro-lenders, more specifically informal township-based money-lenders. Unfortunately, CS4b could not provide details about the procedure to access such loans, other than “filling in the forms” (sic). In addition, the lack of written quantitative information makes it difficult to make any additional statements at this stage. However, they were generally not satisfied with this source of finance.

### **1.4. Future finance resources: cash flow potential**

As a last source of finance, internal resources (more particularly, operating cash flows) should be mentioned. Previous research has found it to be the preferred form of finance for many small business owners (Myers 1984; Howorth 2001 p.81) and has suggested that the availability of such resource was determinant for growth (“internal finance theory of growth”, e.g. Carpenter & Petersen 2002).

Compared with external sources of finance which require some screening procedure, approvals, and interest or other costs, cash in a small business can be regarded as the most easy-to-use financial resource. The low levels of remuneration of cash savings make it, at first sight, a relatively cheap source of finance (this ceases to apply when cash purchases cause the business to break its overdraft limit or support other heavy costs for short-term compensations of the liquidity, though).

The cash flow potential of the firms studied varied a lot and depended strongly on the profitability of operations; however the tendency to use cash flows for investments was not limited to profitable enterprises; on the contrary, it seemed to be more frequent among young businesses that were not yet profitable, but did not yet have other possibilities:

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heavy in winter.

- CS3 bought its first sewing machine in 1998 and its first vehicle in 2000 in cash; the owner also indicated that he would use cash surpluses to build-up his stock;
- CS1 and mainly CS6 used cash for the purchase of small equipment and tools, the latter suggesting that, each time a contract was completed with a cash surplus, they would invest it into some new equipment;
- CS5 admitted to spending cash on his bar etc.

## 2. Need for finance

To evaluate the extent of matching of resources and needs, it is necessary to have a wide review of the needs (perceived and real) of the business.

The needs for finance were classified as follows: the financing of existing assets (as they appear in the balance sheet), the working capital cycle, and some specific needs that are related to a particular stage of development of the businesses. The review closes with a tentative dynamic view to reflect the need to sustain a certain investment activity, as well as possible ambitions of the owner.

### 2.1. Existing fixed assets (balance sheets)

The review of fixed assets to some extent involves repetitions with the presentation of the resources. Indeed, many assets that the business has been able to secure have been financed by specific finance schemes.

#### a) Property

None of the businesses studied owned property at the time of the case studies, although two of the six case studies had attempted to purchase premises.

Most businesses do not seem to have any need in this regard: some are able to operate from home (CS5), while others have obtained favourable arrangements with their landlords (CS2 pays a low rent).

The case studies however suggested that businesses with a manufacturing component were facing more difficulties in respect of premises.

For two of the three industrial cases studied (CS3 and CS6<sup>60</sup>), the access to suitable factory or warehouse space to rent poses problem. Both firms have to use split premises as a sub-optimal arrangement (in both cases, the two units used are in the same industrial park, but not directly next to each other). Especially CS3 was vehement about the problems that this represented, and was

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<sup>60</sup> Although the Standard Industry Classification labels the crating business as a “packaging service” and not as manufacturing, it is here subsumed as an industrial activity since it involves a production process.

keen to purchase property in order to be more independent and hopefully reduce rental costs.

Hence, there seems to be a need for finance for the purchase of property among some industrial firms, although the evidence collected was not sufficient to conclude clearly whether premises to buy were significantly more suitable than premises to let in this regard.

## **b) Vehicles**

Vehicles were an important need for almost all entrepreneurs. All but two of the six enterprises studied owned business vehicles, which were almost always acquired on instalments. In several cases, the businesses even had to own several vehicles (two for CS1 and CS3, three for CS6, more for tourism entrepreneur CS5).

The need for vehicles also applied to most service enterprises. The township entrepreneurs (CS4 a+b), involved in cleaning and other services, were heavily using their vehicle for business purposes – their choice to register their vehicle under their private name rather than under the CC may have been related to the age of the vehicle, which may have been anterior to the creation of the business. In any case, there was no strict separation of private and business ownership in this township enterprise.

The only business which did not seem to have a need for a business vehicle, hence, was the restaurant owner CS2, which supposedly benefited from deliveries of food supplies.

## **c) Furniture and equipment**

The need for other fixed assets (furniture and equipment) understandably depended on the type of business, although it was interesting to find that SMEs registered as manufacturing firms did not necessarily have more onerous needs than service enterprises.

As the case of CS3 (a textile SME) showed, manufacturing small firms may well choose to specialise on labour-intensive, low-equipment jobs, hence maximising their turnover to fixed assets ratio. However, the turnover on fixed assets ratio of CS3 was distorted by the facts that the firm was using sewing equipment which was not its own, and was also strongly involved in retail. The other manufacturing firm, CS1, had more substantial factory equipment, but was apparently also trying to achieve a higher capital efficiency than, for example, its franchisor.

Among the service SMEs studied, the need for fixed assets was usually relatively high, reflecting the expensive furniture and fittings of the restaurant, the cleaning machines of the township micro-business, which were onerous for the size of the enterprise, and the quasi-factory equipment of the crating business.

In addition, almost all SMEs studied had a need for some limited computer equipment (the only exception being the township micro enterprises, which could not afford this). In most cases, the quantity and sophistication of equipment required were low, limited to a few PCs with hardly any non-standard software and possibly a printer and a fax machine. For most case studies hence the total computer equipment was in the region of R10 000 (gross value), except the franchise restaurant, which had a need for computer equipment in excess of R50 000.

#### **d) Intangible assets**

Except for the franchise fees, none of the balance sheet studied included any intangible assets, although it can be argued that in most SMEs the largest part of the value is intangible.

This was strongly argued by one of the abandoned case studies (ACS e, a security business), which eventually refused to provide his financial statements on the grounds that it would not be meaningful since most of the business's value was its customer base. A similar issue arose when approaching IT businesses: they argued that their main asset was their "intellectual property", the technology they would have developed, which would not usually be reflected in the accounting.

A similar reasoning can still apply to most of the enterprises studied: in addition to fixed assets acquired, the most decisive investments for their success were intangible, including training their staff, building-up relationships with customers, suppliers and financial institutions. Although the accounting system does not reflect them separately, these investments did represent a heavy cost for the businesses – and entrepreneurs that have, often for financial reasons, neglected this investment (like the township businesses) were certainly not adding any goodwill to their assets.

#### **e) Preference for owning over renting/hiring**

A last note is required on the discussion of financing needs resulting from the use of assets. When assets (such as vehicles or equipment) are regarded as "needed", the need generally refers to the usage, not necessarily the ownership, of the assets. In particular, when assets are only occasionally used, or when the business is subject to fluctuations in the utilisation of its capacity, an acquisition of the assets may be superfluous.

However, the trade-off between ownership and hiring of asset is a difficult one that depends on many practical considerations (availability, fluctuations in the need, logistics such as space for storage and complexity of transport, cost and finance, commitment to maintenance and ability to alter the asset, etc). In addition, individual 'preferences' may influence choices, which may be related to status (the latter factor seems to have applied, in particular, to the desire of Mrs. H., minority owner of CS6, to own premises and a modern forklift).

Generally the data collected in the case studies were not sufficient to enable a judgement as to whether the enterprises had judiciously balanced ownership and hiring / renting. Two case studies have made use of equipment hire (CS5 hired vehicles in peak season; CS6 hired a forklift when needed) and felt that it was a sensible way of reducing fixed costs and keeping some liquidity in the business.

For the other firms, three possible cases could be identified where the owners' preference for ownership may be questioned:

- the acquisition by CS1 of an additional vehicle after 2 years of operation;
- the decision of CS3 to acquire its own premises (motivated by the unavailability of suitable premises to rent, cost considerations, and the possibility to alter the property to suit individual needs), and
- the acquisition by CS4 of cleaning machinery on the basis of one contract (probably caused by the absence of alternatives, or the lack of consideration of such other options).

However, in these three cases, an informed judgement as to whether the businesses could / should have used alternatives is not possible.

## 2.2. Need for working capital

If one defines the “gross need for working capital” as the sum of the main three activities consuming working capital, i.e. stock keeping, production cycle and customer credit, (without considering the offsetting effect of supplier credit and possibly customer deposits), the average gross need for working capital of the SMEs studied would be as represented in Table 37.2<sup>61</sup>.

The table suggests that there are three determinants for the (gross) need for working capital:

- Firstly, the type of activity is decisive, especially to explain the production cycle as well as the need to keep some stock. The three ‘industrial’ case studies CS1, CS3 and CS6 have the highest need in these two regards – while these items do not apply to transport and cleaning services, or are relatively insignificant in the case of the restaurant.

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<sup>61</sup> Again, the values for CS5 are not truly representative of the year-average customer credit, since all balance sheet values are summer values, while the duration of customer credit becomes much longer in winter.

*Table 37.2 – Gross need for working capital, in days of turnover*

		CS3				CS4 a	
	CS2	(balance sheets)	(inter-views)	CS5	CS6	& CS4 b	CS1
Inventory (average)	5.2	15.7	25.0	0.0	1.6	0.0	7.1
Production cycle (assumed)	0	1.0	1.0	0.0	12.3	0.0	5.0
Customer credit (average)	0	1.3	25.0	12.7	73.7	50	12.9
Total	5.2	18.0	51.0	12.7	87.6	50	25.0

*Source: The turnover of inventory and customer credit are average of balance sheet values available, except for two cases: (i) in the case of CS3 the divergence between balance sheet values and interview data caused the latter to be included as well; (ii) in the case of CS4 the data are only based on interviews. The production cycle is assumed according to interview data.*

- Secondly, the type of market served by the SME seems to explain a part of the differences with regard to customer credit. Put simply, the SMEs serving private clients (in particular the restaurant CS2 and the furniture business CS1) are able to obtain favourable terms of payment, while the firms dealing with corporate (e.g. CS6) or government (CS4) clients have to accept far longer credit periods. The cases of CS3 and CS5 are less clear, because CS3 deals with both private and corporate clients, while CS5 is in a seasonal business and its customer credit supposedly fluctuates between app. 10 days of turnover in summer, and app. 45 days in winter.
- Thirdly, the extreme variations in the duration of customer credit seem to be more heavily influenced by management policies or the stringency of administration, than by market considerations. In particular, the very high gross need for working capital noted in CS6 (assuming that the accounts receivable amounts disclosed in the balance sheets are correct) is supposedly owed more to a negligence with regard to the management of debtors, than to a business necessity.

### **2.3. Needs related to maintaining a capital base**

The case studies brought to light two particular needs for finance, which do not easily fit into usual classifications, and are therefore not commonly found in the literature, but applied to a significant number of businesses. Common traits between these two needs are the facts that (a) they appear at particular stage of development of the business, and (b) they are more related to maintaining a stable pool of resources, than with a particular use.

### a) Need to cover accumulated losses

The case studies revealed that initial losses are a common trait of most small businesses, and sometimes reach high amounts. To the extent that accounting data were available from the year of start-up, all businesses studied have experienced losses at least in the first year, more often in the first few years. When no accounts were available for early years, the fact that the first few years for which accounts were provided, were closed with deficits, confirms the hypothesis of an early phase of deficits.

The only possible exception is CS3, which seems to have operated with nearly-balanced accounts during its early years.

Table 37.3 – Accumulated losses

Business “code name”	CS1	CS2	CS3	CS5	CS6
Has business achieved breakeven?	unclear*	no	yes	yes	yes
Firm’s age at breakeven (years)	n/a	n/a	6?	4	11
Accumulated losses until breakeven (or until last year available) (ZAR)	433 672	155 283	3 786	53 519	141 758
Accumulated losses in % of total assets	76.5%	26.2%	2.6%	29.8%	119.2%

Source: balance sheets. The mention of “unclear” for CS1 comes from the lack of credibility of reported profits.

The reason for these losses is primarily to be found in the time needed to build the enterprise up to its critical size, where it can reach breakeven (although some enterprises would seem never to achieve this). In some cases, these losses could be interpreted as the cost of building a brand, of acquiring a customer base, etc – which would lead to the value of intangible assets already mentioned. However, apart from the difficulty of valuing these intangible assets, these specific uses do not necessarily explain all the losses incurred.

Therefore, it seems more suitable to approach this issue from a resource-side, rather than from an asset-side. Accumulated losses, when they reach high amounts, destroy equity and hence deprive the business of important internal resources. This is particularly relevant when the losses get close to, or exceed, the total value of assets, as in the cases of CS1 and CS6.

This finding is a strong argument against the occasional belief that owner’s finance is mainly relevant at the start-up stage, while after a few years of existence businesses are usually able to obtain debt finance.

In reality, when early losses are high, members’ finance is essential to cover them and maintain solvency as well as a debt capacity. Hence, as the business



expands, the need for the member's finance follows an upward curve. The case studies show that even after the business has been able to accumulate its first profits beyond the previous losses, the members' loans remain high (e.g. CS5, CS6). Understandably the businesses that were still unprofitable were even less able to decrease their member's loans (CS1 increase; CS2 stable).

### **b) Buy-out capital**

In a similar spirit, a financing need was identified among several case studies in connection with severing relationship with former partner. It has been seen that circumstances frequently bring initial partners to divorce. This has two effects: an equity effect and a liquidity effect.

- Firstly, and most obviously, the leaving partner withdraws his contribution to the business – actual capital and member's loan, as well as collateral. The business therefore is left with a reduced equity base and possibly (as may have been the case for CS3) a subsequent reduction in debt facilities, while the activities pursued and the assets owned presumably remain constant. This creates a potential resource gap, which depends on the actual involvement of the departing member (in the case of CS5, the impact was almost negligible).
- Secondly, the indemnification of the withdrawing partner, to the extent that it happens in cash, is likely to put a heavy strain on the business cash flow. This is especially true if the estimated business value is high, e.g. for small growing businesses. Indeed, small young firms are typically illiquid, hence not able to free an amount corresponding to half of their value. Several mitigating arrangements can be found, like the scheduling of the indemnification payment over 12 months (CS3) or an indemnification in kind, in the form of a vehicle (CS6). Nevertheless, the impact on the firm's liquidity often remains considerable, and may require specific solutions.

Table 37.4 illustrates the needs generated in the three cases encountered:

*Table 37.4 – Buy-outs*

Business “code name”	CS3	CS5	CS6
Contribution of withdrawing member (incl. member’s loan)	R 74 839	R 6 050	R 27 112
Indemnification agreed upon	R 100 000	R 115 000	R 125 542
Indemnification modalities	to be paid in cash over 12 months	none	in kind (bakkie)

*Source: balance sheets and interviews.*

The venture capital industry commonly uses the concept of “buy-out capital” to describe the intervention of large funds in facilitating the acquisition of a firm either by management (“Management buy-out or buy-in”) or by other individuals (“replacement”) (cf. KPMG-SAVCA 1999 p. 4) – but this concept is commonly applied to larger businesses (South African venture capital funds are hardly prepared to invest less than R5 million – cf. SAVCA 2002).

The three case studies encountered suggest that the applicability of the concept of “buy-out capital” could be enlarged to very small and small businesses, referring to both the need to replace lost equity, and the need for liquidity to indemnify the withdrawing member.

## 2.4. Ambitions and investing profile

After the static consideration of financing needs, following the structure of a balance sheet, this section adopts a more dynamic view into the analysis of financial needs, to examine future (or unfulfilled) financing needs. Indeed, technically speaking, existing assets always have a corresponding resource, so that the sole consideration of existing assets would not enable to identify gaps.

At this stage, the study adopts a more exploratory approach because these issues have not really been tackled by literature and are difficult to conceptualise.

Indeed, future / potential needs for finance depend on managers’ ambitions. However, the way these ambitions are expressed is a function of psychology as much as economics, and relying on utterances only seems an inappropriate way of comprehending an economically functional demand for finance.

To seek a workable way of dealing with these questions, a combination of accounting data from the cash flow statements, and qualitative data from the managers’ interviews, was used to derive different “trajectories” or “profiles”.

## **a) Owner's ambitions**

Although difficult to measure, the owners' ambitions is relevant to the question of financing needs because it influences:

- the spending behaviour of available resources (e.g. the preference for owning over renting/hiring),
- and the discourse / perception of sufficiency of financial resources.

Therefore, an important aim of interviews was to gather some impression on the owners' ambitions; for this purpose, they were asked for their "visions", and more specifically where they saw themselves in future. The data gathered in that respect may be subject to short-term fluctuations (particular state of mind of the interviewee at the time of the interview) and communication bias, but provided revealing insights.

A common trait of most case studies selected was the ambition of the owners with regard to business growth or diversification. This may not be representative since a number of small businesses are said to be unwilling to grow (e.g. McMahon, Kesper). Therefore, for more representativeness in this review of dynamic needs, abandoned case studies were added to the sample, to the extent that they had provided sufficient data.

Accordingly, the case studies were classified into three categories:

### High ambitions

High ambitions were manifested by a high "entrepreneurial drive", causing the firm to invest continuously (CS5) or to repeatedly add new operations to the existing portfolio (ACSa). Another indicator of high ambitions could be the way the entrepreneur defined his strategy against the competition (CS3).

Lastly, some entrepreneurs expressed bold "visions", like the micro-business CS4b dreaming of employing and training 50 people. Another example is ACSa who, for over a decade, has been dreaming of establishing an HVAC manufacturing operation, while being confined to retail by his scarce financial resources. However, his eventual breakthrough in 2004 (ability to build up his own factory) proved that even ambitious visions can sometimes materialise.

### Modest ambitions

Three businesses nourished more modest ambitions, for two main reasons:

- on one hand, the rooting in the family seemed to moderate the ambitions of CS6 (where the minority member dreamt of keeping the business for her grandchildren) and to some extent ACSc;
- on the other hand, the weight of present-day preoccupations prevented some owners from nourishing ambitious dreams for the future (CS2 and ACS c with their difficulties to raise turnover, and CS6 with its working capital problems).

### “Unclear” ambitions:

ACS b was a 6-year-old micro-business operating in the retail sector, supplying sport articles. The entrepreneur, from a coloured background, gave contradictory indications with regard to his need for finance, initially suggesting great difficulties (“I have been struggling to get finance”), but later being unable to substantiate them, betraying a lack of purpose in his business strategy. He confirmed that he had wanted to seek some advice but “most companies have been charging +/- R6000 for a business plan”.

## **b) Actual investment behaviour**

The businesses’ actual investment practices were studied according to two aspects:

- the initial (start-up) investment (expressed as the assumed or measured total of gross fixed assets at the end of the first year of operation), and
- the continued investments for expansion or replacement, measured as the average annual amount added to gross fixed assets over the lifetime of the business<sup>62</sup>.

Table 37.5 summarises the quantitative data.

In terms of initial investment, the businesses can be classified into three categories: (a) the “zero” investment, (b) the “low” initial investment and (c) the “high” initial investment, with the limit between low and high being arbitrarily set at R25 000. The three firms with a high start-up investment are all white businesses. It also appears that franchises start with the highest investment amounts.

As to follow-on investments, in theory three types of behaviour can be identified: (a) the “zero” investment, which means that assets are not even replaced as they age; (b) the “replacement” investment, which means that assets are mainly being replaced without a substantial increase in capacity, and (c) the “expansion” investments, which create new capacity. Expansion investments are usually done in medium-term phases, they are often large investments concentrated on a short period of time (one to three years) and followed by slower investment periods, while replacements are smoother and suppose the pre-existence of assets.

Linking these behaviours to figures is however problematic. Some investments can have both the character of replacement and of expansion (i.e. replacing a small vehicle by a larger one).

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<sup>62</sup> This measure of “average annual investment” is problematic because investments are generally not smooth, so the number of years included in the average, which varies from one firm to the next, influences the final number. Nevertheless it is regarded as preferable to “last year’s addition to gross fixed assets”.

*Table 37.5 – Investment behaviour of case studies and some abandoned case studies*

<b>Business “code name”</b>	<b>Sector / activity</b>	<b>Gross Fixed assets at end of start-up year (ZAR)</b>	<b>Follow-on average annual investment (ZAR)</b>	<b>Character</b>
CS2	restaurant	750 000	4 800	replacement
CS3	safety wear	0	20 000	expansion (R120 000 in 2000)
CS5	tourism	15 000	80 000	repl / expansion
CS6	packaging	45 000	20 000	repl / expansion
CS4 a	cleaning, construction	0	400	expansion
CS4 b	cleaning	13 000	n/a	zero
CS1	furniture	198 000	53 000	expansion
ACS a	Heating/Air Conditioning	app. 0	35 000	expansion (R 300 000 from 2000 to 2002)
ACS b	sport supplies	23 000	0	zero
ACS c	printing	app. 10 000	app. 5 000	expansion

*Sources: initial investment usually from interviews, follow-on investments from balance sheets (except for CS4a), character of investment from interviews (for practical purposes the “zero” investments at start-up have been restated as a symbolic R1 in order to enable ratios and logarithmic calculations).*

### **c) Tentative conclusion**

To draw a tentative conclusion from this exercise, two possible approaches need consideration:

- One approach would be to consider that a gap / contradiction between ambitions and actual investment behaviour may reveal a lack of finance (however, it may also reveal an inability to put ambitions into practice, i.e. the lack of realism of the owners’ visions)
- Alternatively, a way to distinguish between workable ambitions and mere dreams or vague aspirations is to condition the recognition of a proper need for finance to the conjunction of both a high ambition and at least some investment (i.e. excluding the zero-investments, e.g. CS4 and ACSb).

### 3. More insights into the demand function

The demand for finance to consider when evaluating the existence of a finance gap requires correcting the “apparent demand function” by two demand-side phenomena:

- on one hand, self-rationing (i.e. a reluctance of businesses to apply for finance, motivated by the conditions of supply of finance) should be added to the expressed demand because a relaxation of the supply constraints would bring this demand forward;
- on the other hand, cost-inelastic demand (i.e. the tendency to apply for finance even though its cost is excessive) should be deducted because it can be regarded as “unqualified” demand.

In addition, the case studies also provided evidence for another phenomenon which adds complexity, and relates to the degree of maturation / formulation of the demand function. Incorporating this last aspect enables a theoretically grounded summary.

#### 3.1. “Truncated pecking order” and self-rationing

The case studies findings are generally consistent with the theory that the small firms’ capital structures followed some “pecking order” rationale rather than a “static trade-off” theory – the firms did not seem to have a target debt ratio but decided on financing schemes on an ad hoc basis.

- Internal vs. external finance:  
The preference for internal over external finance was voiced by several firms (CS3; CS4; CS5; CS6), apparently for reasons of lower costs, including transaction costs;
- Debt vs. external equity  
The preference for debt over external equity is indirectly confirmed by the three partnership breaks (CS3, CS5, CS6), all to some extent motivated by the entrepreneur’s need to have better control over the business. Two case studies mentioned that they have been approached by larger groups interested in buying an equity stake (CS5, CS6), which they both rejected.

In one case the rejection of an offer for external equity was motivated by a definitive aversion to share ownership (CS5: “they will have to shoot 200 times at me before I sell!”), reflecting a truncation of the pecking order, while in the other case the owner suggested that he would only consider this option as a last resort (reflecting a low ranking within the pecking order).

- Short-term vs. long-term debt  
The case studies tended to confirm Howorth’s finding (2001, p. 82) that

the choice between short- and long-term sources of debt tended to be dependent on the type of asset being financed. The relevant criteria seemed to be not only the expected life of the asset, but also the total cost.

For example, CS5 had no problem with contracting long-term debt in the form of vehicle finance but was reluctant to engage in short-term overdraft. On the other hand, CS6 resorted to long-term debt for the purchase of vehicles but preferred to acquire his small machinery and tools in cash, thereby indirectly using his overdraft since he had no cash surplus.

ACSD, a township furniture entrepreneur, was the only entrepreneur voicing an absolute rejection of debt as a whole (“I do not want to borrow, because my mother has taught me that I should never take debt”). As suggested by Howorth (2001 p. 83), a truncation of the pecking order at this point caused a financial constraint.

- Informal vs. institutional finance

The case studies suggested another preference, which has not been discussed in the literature: the preference for informal as opposed to institutional sources of finance. This issue may be specific to the South African context, especially non-white entrepreneurs and especially at the early stage of the business: CS3 and CS5 turned to their family and friends for loans, although this had disadvantages, in particular the business’s inability to build up a credit record.

Similarly, CS4 voiced a clear preference for informal township moneylenders (“the ones in the townships they understand me”) over formal registered microlenders (“they are difficult”).

#### Relationship between demand and supply constraints; self-rationing

In most cases, the aversion to certain types of finance found its roots in personal, deeply entrenched beliefs, frequently caused by previous negative experiences. For example, CS5’s refusal to share ownership again came from his conviction that his initial partnership was “the biggest mistake in his life”. Similarly, ACSd’s aversion to debt was rooted in his mother’s warnings about other people’s bad experiences. Such strong convictions could not be affected by a change in supply conditions.

Also, to some extent, the reluctance to buy financial services appeared to be linked to what could be termed a “do-it-yourself mentality”. This impression emerged in particular from the study of CS5, in relation to his long refraining from contracting an overdraft facility. Intuitively, such a drive to be independent and autarchic, relying primarily on internal resources to survive and grow, seems logical in the psychology of genuine entrepreneurs.

There were however a few examples of ‘withheld demand’ motivated by supply

conditions. Among them were two classic conditions of supply, consistent with Howorth (2001, p. 83):

- collateral (ACSe: “I have no assets”),
- cost (CS5: “bank finance is too expensive for a start-up black entrepreneur; when you start you cannot handle the finance charges”),

In addition, two specifically South African factors emerged that influenced the firms’ demand behaviour. These issues were considered as ‘supply conditions’ because they are not necessarily immutable:

- The cultural divide between bank staff and (black) entrepreneurs, including issues such as language and understanding for the entrepreneurs’ background, seemed to specifically explain the preference of informal over institutional sources of finance (“black entrepreneurship was such a crazy thing”);
- The exclusion of blacklisted individuals: (CS4: “if you have a judgment against your name, even if the amount is under 3000R, they don’t want to give you.”)

The cultural aspect seems to be already fading off as banks are diversifying the cultural origin of their staff and marketing their specific interest in supporting “empowerment-related” enterprises. The constraint regarding blacklisting is, so far, still in full force, but there are discussions about relaxing it, which could have an effect on the demand for finance by concerned individuals.

To the extent that the withholding of demand was motivated by supply constraints, there is evidence of self-rationing (Levenson & Willard).

### 3.2. The cost elasticity of demand

The inelasticity of demand to cost is related to the study of a financial gap, because a business, for lack of alternatives, *consciously* chooses a form of finance that is overly expensive – that is, with little chance of being able to cope with the cost.

There are various degrees of cost elasticity, related to various levels of sophistication of the demand behaviour. The standard economic theory models cost-sensitive investors, who link their investment plans to precise quantitative profit forecasts, hence being able to define the highest interest rate (or more generally cost of capital) under which the project is worthwhile. Should the cost of capital increase beyond this point, they would drop their projects.

The case studies confirmed the expectation that small businesses’ behaviour is generally less sophisticated. The multiple uncertainties in their operations and projects do not seem compatible with a basis-point-sensitive decision model. Most of the interviewed business owners were unable to indicate the exact costs of the bank facilities that they were using – the only entrepreneur who gave a



precise answer was CS2, but his indications of the interest rate were contradictory (the mentioned “prime –2%” did not coincide with another indication of 11%).

In that sense, case study evidence suggests that small business owners do not have an acute cost awareness and elasticity.

However, cost elasticity may still exist on a larger scale, in the sense that when there are large variations in the magnitude of cost for the various types of capital available, entrepreneurs refrain from using the very expensive ones. To test this hypothesis, the costs of the various sources of capital used by each business were compiled in Table 37.6.

(Unfortunately, the evidence collected was incomplete, partly because of business owners’ ignorance of exact cost, partly because the financial statements did not always provide detailed information. In addition, in some cases the cost seemed to be fluctuating strongly from one year to the next).

*Table 37.6 – Cost of capital experienced*

<i>All costs in % p.a.</i>	CS1	CS2 <sup>63</sup>	CS3	CS4	CS5	CS6
Estimated cost of external equity (ex post)	n/a	n/a	10.1%	n/a	108.8%	16.6%
Cost of franchise finance	P+3%	P-2%	n/a	n/a	n/a	n/a
Cost of vehicle finance	P+3%	n/a	P+2%	n/a	between P+0.5% and P+3%	between Prime and P+5.7%
Cost of overdraft	P+3%	missing	P+2%	n/a	missing	missing
Cost of microlending	n/a	n/a	n/a	300 to 600%	n/a	n/a
Cost of supplier credit	missing	missing	missing	300 to 600%	missing	missing

*P: Prime Overdraft Lending Rate*

*Sources: own calculations from the data gathered in interviews and financial statements (for the cost of external equity); Bank file (for CS1 and CS3); Notes to financial statements and prime rate from McGregor Datastream (for the cost of vehicle finance); interviews (for CS2 and CS4).*

The table shows significant variations between the businesses with regard to the cost of bank finance, but the highest costs came from non-bank finance sources: the cost of external equity in the case of CS5 exceeded 100% p.a., while the cost of microloans and supplier credit in the case of CS4(a+b) was in the region of 25

<sup>63</sup> The case of CS2 is atypical since the owner chose to contract debt in his personal capacity rather than in the name of the business. This explains the far lower interest rate.

to 50% per month, corresponding to 300 to 600% p.a.<sup>64</sup>

Those three cases of non-bank finance were raised in a situation where the entrepreneurs had felt unable to obtain bank facilities (CS5, being still at the start-up stage, had not even tried to apply for a bank loan because he had no hope). By contrast, non-bank forms of finance had proved to be more easily accessible. This fact raises the question of whether there is evidence of a *conscious* choice of expensive financing schemes motivated by the absence of better alternatives. However, this assumption does not seem to apply to CS5, since he had not anticipated the cost and would probably not have accepted this unfavourable deal if he had been *conscious* of the cost.

Therefore, except for CS4 with its reliance on expensive micro-lending and supplier credit, the case studies do not provide clear evidence of demand inelasticity to the cost of capital.

A last note is required at this stage, on the fact that CS1 and CS6 indirectly financed some fixed assets on a breach of overdraft. This supposedly generated high penalty costs, which made the cost of finance overall higher than if they had been able to obtain more specific equipment finance. This may be interpreted as an inelastic demand caused by a financing gap, but on the other hand, the case studies could not clearly show whether the businesses would have made use of a different form of finance if it had been available.

To conclude on this cost issue, the case study findings do not strongly support the hypothesis of inelasticity of demand to cost in the case of formal businesses, although the elasticity to small changes in cost may be weak. On the other hand, the case studies brought another issue to light, which is only marginally related to the finance gap issue: there is some evidence of weaknesses in the functioning of small business non-bank financial markets, with a few cases of “easy-to-get” finance where costs are high, often unexpectedly, and where malpractices may be at work:

- informal moneylending;
- supplier credit;
- informal venture capital (partner may abuse the goodwill of the main member).

### 3.3. The ability to articulate finance needs

In addition to the factors identified in the conceptual framework, a factor that emerged strongly from the case studies was that the demand for finance of the various businesses verbalising financial constraints was at diverse stages of

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<sup>64</sup> Identifying these costs as high does not mean that they are unfounded – the case studies show that the exceptional growth and cash flow potential of CS5 could explain the high indemnification requested by the withdrawing member, while the short maturity, low amounts and high risk run by CS4’s creditors may justify their high interest rates.

formulation and filtration.

- The most striking example was ACSb, a micro-business operating in the sport retail sector. Having initially expressed financial difficulties (“I have been struggling to get finance”), he later admitted that he did not know whether he needed finance, and what for – indicating that he had wanted to seek advice but “most companies have been charging +/- R6000 for a business plan”.

ACS b seemed to illustrate the case of less self-confident entrepreneurs, who have a confuse expectation that finance is needed, as a necessary ingredient in the recipe for success – but have little concept about what to use it for.

- Another interesting case was Mrs. J.’s dream of a new forklift (minority member in CS6), while the majority member suggested that the need for such equipment was only occasional and they could hire a forklift whenever the circumstances required this. This case suggested that some small business owners forget a fundamental principle of the SME economy: since their resources are per essence limited, SMEs must remain lean and flexible. In order to compete with large groups, they should target niche markets or accept to work with less equipment than large businesses do. Mrs J.’s wish could therefore be discarded as ‘unrealistic’.
- These two examples, it was felt, were cases of entrepreneurs failing to undertake the first preliminary step in articulating finance needs: the step of operationalising the need and ensuring that the project was indeed necessary to the business.
- On the other hand, it appeared that other entrepreneurs who described themselves as finance-constrained had not entirely run through the process of formulating their demand for finance. In spite of having some specific, operational needs, they had not yet determined if this need would be compatible with their personal financing preferences (e.g. CS5 felt a need for liquidity but was initially reluctant to use overdraft finance), or if they would have any chances under the current supply conditions (e.g. ACSe felt that his lack of tangible assets would hinder him in obtaining bank finance).

Under these circumstances it was uncertain whether the need for finance would eventually be translated into an effective demand. In the case of CS5, it did, because the entrepreneur (possibly influenced by the discussions we had had) eventually relaxed his aversion for debt and applied for an overdraft facility.

- Lastly, CS4 provided an illustration of a different phenomenon. In spite of having recognised that their business itself is not economically worthwhile due to excessive competition for the tenders (“you cannot do proper work with those prices”), and having furthermore experienced that the cost of finance is unaffordable (“I have learned from my husband that

I must not use debt because the interest would kill me”), they however kept investing and applying for credits wherever they could.

Unlike the other cases, it is an example of demand for finance which reaches the final stage of formal application although it should have been filtered out in at least one of the preliminary stages – a behaviour which could be compared with gambling, in the hope that they may against all odds hit the jackpot.

All these examples suggest that the maturation and filtering process found in business management textbooks is, in practice, not linear in time: The failure to ensure that finance needs are concrete and realistic, which is the first step in the articulation of a demand, would not be surprising in infant businesses, which are still testing the market; but it is remarkable that it was found in the older case studies (CS6 was 13 years old and ACSb was 6 years old). Meanwhile, the case of CS4b, a very young firm (less than 1 year old), illustrated a phenomenon of shortcut, whereby the last step was undertaken first.

Figure 37.1 and Table 37.7 illustrate the various stages of the process, the shortcut phenomenon and the positioning of each case study on the continuum.

Figure 37.1 – The demand filtering process and the phenomenon of unfiltered demand

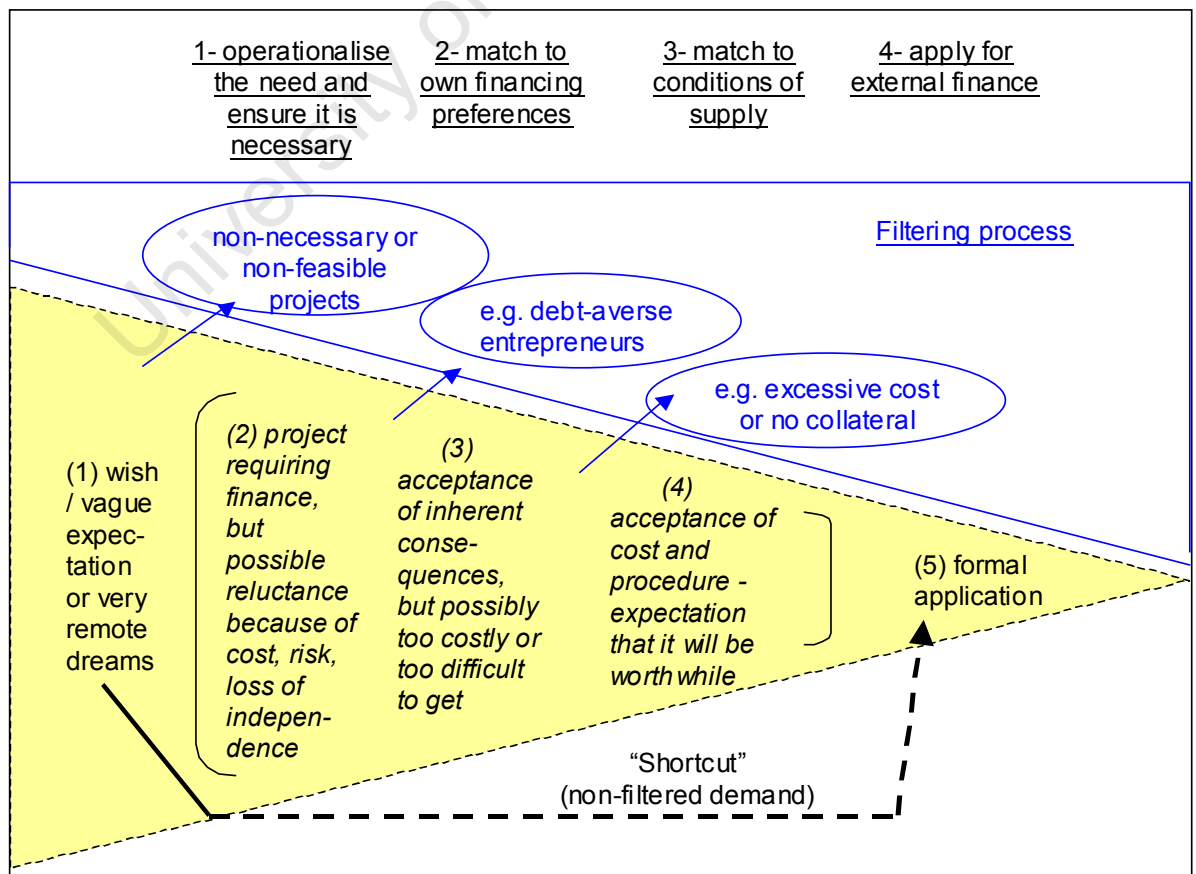


Table 37.7 – Demand formulation stages of the financially constrained case studies

Business “code name”	(1) wish	(2) project	(3) acceptance of external capital	(4) acceptance of supply constraints	(5) full finance application	Further details
CS1					X	
CS4b	X				X	<p><u>“Shortcut”:</u></p> <p>“Finance is very expensive, you cannot do proper work with those conditions, but what can we do? We have been to [various institutions], but they don’t help you”.</p>
CS5			(X)		X	<p><u>Maturation:</u></p> <p>initially: “I desperately needed finance, but there was no way that a bank would give a loan to me, I knew nobody”.</p> <p>then: “My bank tells me to take an overdraft but I am worried about the cost, and I don’t want to be debt-trapped”</p> <p>finally: applies and obtains a facility</p>
CS6	(X)		(X)			Diverging expectations from the members: minority member would like more external finance at a lower cost; majority member wants to stick to own resources for now
ACSa					X	“I have applied for an increase of my overdraft in 2002 but so far [1994] it has not been granted yet”
ACSB	X					<ul style="list-style-type: none"> <li>• “I have been struggling to get finance”</li> <li>• “I do not really know what are my needs”</li> <li>• “most companies have been charging +/- R6000 for a business plan”</li> </ul>
(ACSD)		X				“I do not want to borrow, because my mother has taught me that I should never take debt”.
(ACSE)			X			“I have no assets”

## **4. Is there a mismatch of supply and demand?**

A gap can exist because a type of finance is not available at all, or because it is not sufficient.

### **4.1. Availability considerations**

Rather than a general lack of finance, the case studies suggested that there might be gaps with regard to tailored financial facilities, i.e. for the acquisition of specific (targeted) assets or the bridging of specific financial phases.

#### **a) Business Property Finance**

The case studies have provided at least one illustration of the inability of a business to purchase property for lack of financial support.

Further studies would be required to establish the existence, the extent and the reasons of a financing gap with respect to the financing of property investments.

#### **b) Equipment finance**

The comparison of needs and resources with regard to equipment finance may suggest a gap in the market for the financing of non-vehicle, non-computer related non-franchise small equipment (“equipment micro-finance”). All three case studies which had a need for such equipment (CS4b and CS6, as well as CS1 in its later years) used short-term resources to fund these investments, and in all cases this seemed to cause non-contractual situations such as breach of overdraft limit (CS1, CS6) and failure to repay a short-term loan (CS4b)<sup>65</sup>.

A similar problem was found in ACSf, which was able to contract a new instalment sale agreement when it invested in computer equipment in 2000, but had to use its overdraft to buy more expensive furniture and kitchen equipment in 2002, causing the current balance to go beyond the authorised overdraft limit.

Further research would be required to verify demand- and supply-side factors for this situation:

(a) on the demand-side, the practice of cash-financing small equipment may come from the entrepreneurs’ reluctance to keep cash savings, and the fact that amounts were considered small enough for them to handle;

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<sup>65</sup> CS1 and CS6 bought tools and small machinery in cash while having a negative balance on their current accounts – thereby they indirectly used their bank overdrafts for investment purposes; CS4b obtained a 3-months credit only.

(b) on the supply-side, a possibility is that banks do not provide targeted equipment finance to SMEs due to the fact that (manufacturing) equipment is specialised, difficult to value and sometimes difficult to repossess and re-sell. Specialised leasing divisions, if they do exist and have appropriate capacity within the bank, are presumably not targeting small businesses / small loan amounts.

If there is indeed a finance gap in this specific area, it penalises small entrepreneurs operating in areas that require specific machinery. Their resorting to cash purchases creates a burden on their liquidity.

### **c) Buy-Out Capital**

For two of the three cases concerned with the indemnification of their former partners (CS3 and CS6), mitigating arrangements were found that would ease the settlement of sums due, but there was some reason to believe that the requirements would put some financial strain on the businesses (increased use of overdraft for CS3 and need to replace the lost vehicle for CS6).

For the third case (CS5), there was a latent but high need for bridging finance to provide the necessary liquidity. However, the fact that the business owner was still disputing the validity of the indemnification agreement meant that the demand for this type of finance was not yet effective, so that the availability of supply could not be tested.

Altogether, the case studies provided only weak evidence of possible gaps in terms of availability of specific financial products.

## **4.2. Sufficiency considerations**

Intuitively, the question of sufficiency should be of little relevance, for two reasons which are commonly believed to apply: (i) larger amounts of debt are usually easier to obtain than lower amounts<sup>66</sup>, and (ii) relationship banking, especially the building up of a credit record, usually ensure an easier access to capital on the second application, than for the first loan.<sup>67</sup>

Empirical evidence has tended to back this view, cf Guiso (2003 p. 137), who showed that the specific average capital structure of small firms (lower long-term debt) depends largely “on whether or not firms borrow, but not on how much they borrow if they borrow”.

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<sup>66</sup> Gonzales-Vega (1984) has developed a model to explain why lower interest rates lead not only to lower loan amounts for the “rationed”, but also to larger amounts for “preferred borrowers”.

<sup>67</sup> for the role of “personal knowledge” and banking record cf. Wolfson 1996, cf. Binks & Ennew 1998.

In spite of this intuition, the case studies did provide some pointers at a possible sufficiency problem. With the exception of the township businesses, the companies that were most financially constrained (CS6, CS1 and ACSa) had however received substantial amounts of financial support by their banks. In all three cases, the facilities granted seemed to be insufficient to remove the financial constraint:

- CS6, which gave abundant interview evidence of financial constraints, had however benefited from substantial bank facilities:
  - It has been granted substantial instalment credits for the purchase of three vehicles as well as computer equipment.
  - Its overdraft facility, at 8,3% of the business's turnover, was far higher than in all other businesses studied.
  - A closer analysis of needs and resources suggested that the business might have had a need for small equipment finance. More importantly, the need for working capital was so high that the overdraft, even at this high level, was not sufficient.
- Similarly, CS1, the furniture business, which mentioned “working capital” as one of the reasons for its failure, had however benefited from substantial bank facilities, in particular:
  - at start-up, an encompassing facility to finance the franchise scheme, covering equipment needs, stock as well as half of the franchise fee;
  - at a later stage, an overdraft facility (admittedly with a rather low limit compared with the business's turnover) and a bank guarantee, and
  - eventually, an additional credit for a new vehicle.

In spite of these facilities, the case study has shown that (a) the fixed assets financed initially may have been far too low for the operating needs of the business, justifying further investments and the subsequent need for additional finance, and (b) the overdraft limit seemed too low compared with the business's size and needs.
- ACSa, the HVAC retailer, was equally in breach of his overdraft limit, in spite of having been granted instalment finance for R268K, an overdraft facility of R180K and a term loan guaranteed by Khula, for R320K, for the establishment of his manufacturing operations. The bank had rejected his application for an increase of overdraft.

Ignoring at this stage creditworthiness-related aspects, which obviously have some relevance, a preliminary conclusion is that there is more evidence of financial gaps among already debt-financed firms, than among self-sufficient firms.



A possible explanation for this is that the businesses may have underestimated their financial need when first applying for finance, which causes them to feel liquidity constraints, hence building an unfavourable credit record. It is certainly difficult to ask for increases when previous repayments have not been on schedule.

### **4.3. Exclusion from finance channels: township micro-entrepreneurs**

Only one case study provided conclusive evidence of a genuine lack of access to finance: the township entrepreneurs CS4a+b have crucially lacked resources to operate, both in terms of equipment finance (especially in the case of CS4b) and even more in terms of working capital.

The credits obtained from suppliers, informal micro-lenders and equipment vendors, were not adequately meeting the needs of the businesses, on at least two grounds:

- Firstly, the credit terms, averaging 30 days, were too short. In the quasi absence of equity, the township businesses would have needed some alternative stable resource to build their operations on. This applies particularly to CS4b, which had to purchase machinery.
- In addition, the cost of credit, at 300 to 600% per annum, was ruinous.

However, even there, it is difficult to talk of a proper financing gap, since the demand for finance formulated by these two entrepreneurs – as discussed – was not abiding to the rules for responsible borrowing, in particular self-screening of project and consideration of financing costs. This issue will be discussed further under the consideration of the borrowers' intrinsic financial quality.

### **4.4. Conclusion on financing constraints and finance gaps**

Ultimately, the case studies showed that in spite of a high level of financial constraints, there was only weak support for the hypothesis of finance gaps. Within the population studied (formal businesses which have been running for at least 18 months, have sound financial records, and are run by owners agreeing to grant me two detailed interviews and an access to financial data), there were generally three types of situations causing entrepreneurs to express financial constraints:

- In many cases, the demand for finance was not entirely matured, and therefore not actually expressed on the market. To some extent this happened because the need was not fully validated. In other cases, in

spite of a genuine need, there was a reluctance to use external finance either for personal reasons or for reasons linked to the conditions of supply – in this latter case it is possible to talk about self-rationing.

- There was one case of demand which was formally expressed on the financial market although the filtering process should have caused the entrepreneurs to withhold it: this demand was entirely cost-inelastic and could be considered as unqualified.
- In all other cases of financial constraints, the demand for finance came from businesses which had already been granted substantial long- and short-term credit facilities. The constraint hence came not from a lack of access, but from apparently insufficient amounts. This raises the suspicion of creditworthiness issues, which will be evaluated in the next section.

## **Annexure 38 – Case Studies, Synthesis II**

### **Accounting opacity within case studies**

This synthesis presents in greater detail the data from case studies related to the quality of accounting, both in the organisation of financial management and in the reliability of the output, i.e. financial statements.

#### **1. Organisation of financial management**

While large businesses have some form of finance department with dedicated and specially trained staff, the organisation of the financial function in a small business is usually less rigorous, although it typically changes during the lifetime of the firm.

##### **1.1. At start-up, and micro-businesses**

When it starts, the business is often limited to the person of its owner (or owners if it is a partnership), who concentrates the operating, marketing and administrative functions. Some micro-businesses never grow beyond that stage, so that the owner is still responsible for all these tasks (e.g. CS4, ACS b).

The procedure for registering a private company or close corporation requires that the business should submit a written letter of consent from an accounting officer or an auditor to act as such for the business. This formality, although it does not always achieve its goal, has at least the effect of pushing people of good intention to maintain a relationship with a properly trained and qualified accountant, who can provide additional support for the accounting / financial function.

However, it would be too expensive for a micro business to rely exclusively on an official accounting officer or chartered accountant for the entire bookkeeping and accounting processes. The case studies suggested that this could cause three possible evolutions after start-up:

- The case studies suggested that all businesses who experience significant growth become able, at some stage, to employ their own administrative staff (like for CS3, 5 and 6),
- For stagnating or declining businesses, a possible evolution is to sever relationships with the chartered accountant, turning to an external bookkeeper as a less expensive alternative (e.g. ACS b). Supposedly, the budget of the bookkeeper only allows him/her to capture the business records into an accounting software and produce trial balances or other

outputs with little quality-enhancing procedures, explaining the poor accounting quality found (ACSb, CS1);

- In more extreme cases, micro-businesses may resign about external support altogether. An example of this phenomenon was CS4a (“I had an accountant, but it costs you a lot of money, so you leave that one, you take another one, [and eventually] you start doing things on your own.”). If the case of CS4 is representative, this step would be most frequent precisely among those entrepreneurs who have no personal financial know-how. As a result, the financial function simply disappears.

NB: Two case studies were, to some extent, counter-examples:

- The franchise operations (like CS2), do not actually go through the stage of a micro-business. They immediately employ administrative staff according to situation 3 below.
- CS5 was an interesting case: since one of the initial members was highly qualified with regard to business administration, the sophistication of the financial function has been very high initially, to the point of being premature at that early stage and, in the eyes of the main member, counterproductive. After he decided to resign about the support of this partner, the main member fell into the other extreme of “working out of a shoebox”.

## 1.2. Growing businesses

The case studies have shown that, as a business grows, it becomes able to employ more people and there will soon be one, later several persons in charge of the office / administration. Again, many small businesses presumably never go beyond that stage, maintaining an administrative function rather than a financial function.

### a) Tasks and qualifications of the administrative function

In general, the administrative function at this stage seems to aim more at organising the paperwork, having a clean desk and ensuring proper payment of the invoices, than at providing useful information for the strategic management of the firm. The staff responsible for this function is often employed within the family and immediate network (e.g. the founding member’s wife in CS6, young girls from the neighbourhood in CS5), rather than being selected for their qualifications in business or accounting.

Almost all case studies encountered were organising their finance according to this model:

- CS3, until shortly before our first interview, had only one secretary responsible for the entire office work of business with a R2 million

turnover (unless the member who left was strongly involved in administration and finance);

- CS5 had several office employees, but the main role that emerged from the interviews (prior to the stage 3 of installing a new accounting software) was to phone clients to ensure that they would settle their invoices. As to record-keeping, the business was “working out of a shoebox”, not even keeping a record of its cash sales, which represent the majority of its R 1 million turnover.
- CS6, during the first 7-8 years of its existence, was employing the founding member’s wife to do the office work. Interviews showed that she had little understanding of business administration;
- In addition to a secretary, ACS a, a R5 million turnover business, had employed two “ladies” whose job was primarily to ensure that clients paid their invoices in due time.

## **b) Owner’s interest for administrative issues and level of knowledge on the business**

Interview statements suggested that at this stage, the members tend to view the secretarial work as an annoyance, slowing down operations and hindering the acquisition of new business. This is illustrated by the statements of CS5: “by the time he had finished his analyses, opportunities were gone” and CS6: “[Cathy] is so busy sorting out administrative matters that she has not been able to sell”.

As a consequence of this organisation, management had little knowledge about the business’s financial condition, especially with regard to liquidity and working capital:

- At CS3, neither the member nor the administrative officer could explain the contradiction between balance sheets and their own statements regarding stock, payment terms granted to customers and obtained from suppliers...
- The member of CS3 engaged his business into the purchase of premises, without realising how little equity it had;
- The owner of CS5 said that he “has no idea” about his annual turnover, and admitted that he took many bad decisions as a result of not knowing exactly where he was.
- The minority member of CS6 was assuming that “most customers pay cash”, being absolutely unaware of the dramatic problem that her business had with accounts receivable (which, according to the balance sheet for the same year, amounted to 96 days of turnover)!!!
- Also, two of the members of CS6 have tended to approve considerable loans to sister company, because they felt that the business was “doing well”, while the liquidity was actually very tense.

In the case of the latest business, the lack of knowledge and understanding about the financial condition would have been fatal if the only member who was reasonably aware had not bought his brother's stake, hence becoming majority owner and able to put an end to these harmful practices.

For CS3, at the time when the case studies were being run it was still too early to establish the harm that lack of knowledge was possibly causing on the business.

As to CS5, fortunately, the general intuition of the main manager has been cautious; especially, he has refrained from taking on too much short-term debt, hence guarding his business against the risks of a liquidity crunch.

### **c) Quality of the co-operation with external accountants and bookkeepers**

The co-operation with external accounting service providers emerged as a decisive factor for the financial function. Here again the firms studied have shown various tendencies:

- In CS3, the co-operation with the accountant seemed to be a pure formality: he would come at regular intervals to collect various records and enter them into the accounting – and the latest accounts have shown that the accountant would occasionally “adjust” the accounting to fit the needs of the management. However, there was no sense of a partnership beyond this. There was also no particular opinion on whether the accountant's services were cheap or expensive – it simply did not seem to interest the management. From the accountant there were also no complaints or comments about the quality of the records kept by the business, as if that were actually of little importance.
- CS5 seemed to have a close relationship with a serious and reliable accountant. Unlike the two other cases, he was in no need of opportunistic accounting: “my brief to [John] is to make the accounts for me, not for anybody else”. The interviews revealed that the accountant was advising the owner in several respects, e.g. with regard to possible cost-reducing or liquidity-enhancing strategies, as well as tax matters (e.g. VAT-related). In particular, the accountant was the main responsible for the owner's increased awareness of the need to save rather than spend all cash flows, and the need to improve his internal records. Although the owner of CS5 complained about the cost that resulted from this close co-operation, he seemed to benefit from it.

- In CS6, the management was working with both an accounting officer, who was responsible for the annual statements, and a bookkeeper involved in day-to-day activities. As for CS3, the case studies confirmed that the accounting officer was involved in “opportunistic accounting” choices. Apart from that, there was little co-operation and the new majority owner was concerned that this accounting officer was too expensive – he was willing to look for a new one. On the other hand, the case study showed that the relationship with the external bookkeeper was relatively intensive (apart from a pure mechanistic job of “keeping the books”, she would get involved in providing strategically useful information, like breakeven calculations), and the new majority member was keen to intensify it further.

### 1.3. Established businesses

A few of the case studies reached a further stage of development of the financial function, which – although rudimentary compared with larger organisations – can be described as a fully established financial function.

In this case, the business moves away from the earlier “operations and office work” dichotomy to allow for more specialised financial work (or it sets up this financial function right from the start, as in the case of the restaurant franchise CS2).

The finance function then is no longer seen as a “necessary formality” but as a way of creating information of strategic value. It usually involves the following aspects:

- The business obtains the rights to use an encompassing accounting software (CS1, CS2, CS5), which may require specific staff training (CS5);
- On the basis of this software, the management is able to produce periodic information about costing, planning and monitoring, several performance measurements, working capital management, as well as pro forma accounting outputs (CS2, for example, would print and study rudimentary income statements every month – also, the monthly balance sheets and income statements which CS1 provided to its bank were probably prepared internally);
- As a result, the business becomes more autonomous and less dependent on its accountant and/or bookkeeper (e.g. CS5 was looking forward to this stage in order to save on accountant’s costs).
- Nevertheless, the quality of the relationship with the external accounting officer proves still relevant (CS2).

At this stage, it is interesting to note that the sole ownership of an accounting software without proper know-how of the users, or without the correct

motivations to use it, may produce counter-productive effects. For example, the very poor quality of the management accounts produced by CS1 would probably not have been possible, had the business been obliged to resort to an external accountant to produce his monthly statements.

Similarly, the owner of the franchise restaurant CS2, who studied “rudimentary” income statements every month, seemed to gain false impressions on performance and profitability: he would not have been as satisfied with the results if he had included all year-end fixed costs, which were probably not included in the monthly performance reports produced by his software.

## 1.4. Evaluation of record-keeping practices

Records for: sales – purchases – inventory – accounts receivable and payable – overdue accounts – cash in and out – Cash-flow

- Franchise restaurant CS2 has state-of-the-art computerised accounting systems: the sales, whether cash or per credit card, are fully captured on the computer. At the end of every day, the software generates totals of sales, stock utilization, and other control sheets that are reviewed on a daily basis. Food costs are filed “religiously”, because “at the end of the month if there is a bill missing for thousand Rand it will never be possible to find what it was”.
- Safety wear business CS3 keeps a record of sales and purchases, which are all paid by cheque – but the records on accounts payable and receivable as well as inventory seemed to be either poor, or poorly known, since there were many contradictions between interview statements and accounting figures. In fact, the physical organisation of the business, crowded in a tiny office space, does not leave much room for neat filing. Nevertheless, the accountant suggested that the bookkeeping records of the business were satisfactory.
- The record-keeping of township cleaning business CS4 consist of a box in which she keeps the slips of the equipment she purchased, as well as other receipts; and a register of the wages paid to her workers. Since she currently has only one client/contract, and pays all her materials in cash, records for sales, accounts receivable and payable do not pose problems. Similarly, she argues that inventory records are unnecessary as she always only buys stock for a month. There is no record of cash in and out.
- The bookkeeping practices of tourism business CS5, in spite of its R1million turnover, were almost as rudimentary as for CS4. The enterprise has no comprehensive record of sales or purchases. There is a filing of monthly invoices sent to large customers, as well as their payment – but the only way to track the plethora of cash customers is to consult the “booking schedule” to count, day after day, the number of



participants to each type of tour. Costs are tracked on the owner's as well as the firm's bank and credit card statements. Overdue accounts, however, are followed closely in winter as they cause tension on the business's liquidity. However, the firm was currently installing a new accounting software (Pastel) which should enable more accurate records and monitoring of sales and costs in future.

- None of the two owners of CS6 whom I interviewed was particularly aware of the record keeping practices of the business. They had an administrative employee who had to "deal with the invoices", look after UIF and other SARS matters, whereas the external bookkeeper would prepare statements and inventory the petty cash on a monthly basis.

Only CS2 and CS6 kept a copy of their historical financial statements at their offices - other businesses referred me to their accountant to obtain these. In the case of CS6, the office employee dug the financials out of her cupboard and left me with the only copy she had, declining my offer to make photocopies – suggesting that these documents were of little usefulness to her.

## 2. The quality of financial statements

Although the case studies (with the exception of CS1 and CS4) have been selected among enterprises which kept better-than-average accounts and whose statements appeared reasonably transparent, the process has shown that even then, there were substantial quality problems in the outputs of accounting.

(In the case of CS3, the initial score in the pre-selection process was 55.6, which seemed sufficient for running the case study – but on the day of the last interview, the owner provided a new set of financial statements, which were of poor quality, forcing to revise the overall accounting score).

### 2.1. Factors causing reliability problems

The case studies usually confirmed the elements from the conceptual framework about the quality and reliability of small business financial statements:

In the first place, the quality of the accounting outputs was a function of the business-specific balance between need for financial information, and resources available:

- The quality was best when the accounts were primarily sought for their internal usefulness (CS5), or at least when there was some indication that the owner was interested in the financial information produced (CS2, CS6).
- Cases where the financial statements were mainly produced to respond to an external pressure might have caused an increase in the quantity of information disclosed, but not an increase in the quality and transparency

(especially CS1 and CS3 were found to produce statements for the purpose of the bank: their statements show poor transparency scores);

- The availability and affordability of accounting skills were often influencing the quality of the output. For example, in the case of CS1, there was an obvious lack of in-house competence, visible in particular in the technically erroneous cash flow forecast; meanwhile, the owner was probably not willing to spend high costs on accounting services. For CS4 too, the reason for the absence of financial records was the owner's lack of skills and the unaffordable cost of external advisers. On the opposite, CS5, although complaining about the costs engendered, was both lucky to be in contact with a good accountant, and willing to pay for his services.
- As expected, the compliance to legal obligations did not represent a strong guarantee for good quality accounting. In fact, the case studies suggested that what the law or the Generally Accepted Accounting Practices define as *minimum* requirements were rather interpreted as "targets" and eventually proved to represent the upper, rather than the lower boundary for effective quality. For example, all case study firms, which were registered CCs, omitted to produce a cash flow statement. In three cases, though, the notes to the financial statements included a note to explain, in varying wordings, that: "The CC has not complied with GAAP as it has not prepared a Cash Flow Statement. The members are of the opinion that compliance will entail additional expenses out of proportion to the needs of the members". (CS2, CS5, CS6). In this particular case it would seem that the accountant himself systematically offers to its small clients the option of non-compliance as a means to reduce costs. Other more serious examples of non-compliance came from CS1, a pretended Pty (ltd) but which produced even less information than a CC; or CS4, a CC which has no records whatsoever.

In addition to the balance of needs and skills, the complex economic reality of some small businesses sometimes affected the transparency of financial statements:

- The fluidity of the boundary between the owner's account and the firm account was a common problem, with almost all entrepreneurs suggesting that they would occasionally use firm assets for their own purposes, if not drawing funds out of the cash box without keeping a record of this. While the limit tended to become stricter as the size of the business grew, there is also some confusion in the case of the largest case study enterprise (CS2), which was mainly financed by a member's loan

attracting a sizeable interest: this creates a risk of adding a hidden remuneration to the real interest costs.

- Similarly, the phenomenon of serial entrepreneurship (whereby an entrepreneur, after having run his first firm for a few years, creates a second one, which often rather informally borrows some of its funding from the first) generated ambiguities about the allocation of some debts or costs (e.g. when CS5 put some vehicles of its first business at the disposal of the second, one wonders whether to which firm the corresponding costs were attributed; also CS6)
- The informality in the record keeping caused some uncertainty about the reality of the figures (e.g. CS5 did not even have a record of cash sales – in fact it is surprising that this business was able to reach such a high score in its accounting evaluation while having such a poor record-keeping system!)
- In all businesses except the franchise restaurant, the instability caused by the high growth experienced (or, in the case of CS1, caused by other reasons) makes it difficult to ascertain the realism of the figures, because ratios become very variable, hence reducing the meaningfulness of year-to-year benchmarking.
- An additional factor of instability to which small businesses are more sensitive is the seasonality. It was particularly relevant for businesses related to tourism (CS5, and to a lesser extent CS6).

Lastly, in all but one case, the case studies raised suspicions of some extent of manipulation, which in most cases was assumed to be benign and could rather be subsumed under the heading of “opportunistic accounting”. The evidence confirmed that the phenomenon of account manipulation could be conceived as a result of motives, opportunities and owner’s integrity:

- Two main motives were identified which (may have) caused some ex post interventions on the accounts: the will to save tax (certainly for CS6 and possibly for CS2) and the need to convince the bank of one’s success while applying for a bank facility (CS1, CS3).
- Opportunities depended on the auditor’s or accountant’s attitude as well as internal controls. In some cases it seemed that the accountant himself provided the opportunity: in the case of CS6 he faxed a first version of the statements and from his own initiative indicated that the accounts will only be final once they have discussed opportunities to reduce the profit figure in order to save tax. In other cases the accountant agreed to adjust

financial reporting to the circumstances of the business (in CS3 the accountant produced an optimistic but incomplete set of statements to enable the business to apply for a bank loan).

- Regarding internal controls, there was conflicting evidence as to the relationship of shared ownership and opportunities for manipulation. In the case of CS5, one could argue that the withdrawal of the initial partner reduced the moral hazard tendency of the managing partner: being sole owner, he felt more committed to its business, less inclined to informal drawings, and more keen to have accurate information on its real condition. A similar interpretation could be made for CS6, where one owner took over his brother's share primarily in order to avoid unsustainable loans to the sister company, and improve discipline in financial management. The opposite effect may have been prevalent for CS3, which had been reasonably stable until the second owner withdrew: there is a possibility that the remaining member allowed himself more liberties once he became sole owner, e.g. reducing his member's loan which had been constant since registration of the CC, and starting to use the accounting for opportunistic purposes.
- In some cases, the auditor's vigilance proved to be of little use, since the business simply repudiated his auditor, and presented non-audited financial statements to the bank and supposedly the Receiver of Revenue (CS1);
- Lastly, there was evidence that some businesses used multiple accounts. In particular, CS2 and ACSe expressly indicated that if they were to sell their businesses, they would circulate different profit records than what they use for tax purposes.

## 2.2. The transparency scoring

In some cases, the quality judgement was homogenous (generally good for CS5, generally poor for CS1), while in other cases the reports of specific years seemed to be problematic, supporting the hypothesis of opportunistic accounting (in the case of CS3, profit figures were inflated in 2004, corresponding to a bank loan application; in the case of CS6, profit figures were reduced in 2004, the first year in which tax was to be paid).

The main quality issues were the following:

Table 38.1 – Main quality issues

	Quantitative issues	Formal quality	Turnover	Costs & Profit	LT Financing structure	Current net assets & Cash	Related Parties Transactions	Comments
CS1	X							Accounts are very irregular, with gaps and overlappings
CS1		X						no comparative column, many negative liabilities
CS1			X					Turnover figures seem to be falsified
CS1				X				no depreciations, no tax, inappropriate treatment of finance charges: all these tend to “inflate” the profits
CS1					X			apparent falsification of members' loans and retained income to hide negative equity
CS1						X		no stock adjustments in IS; contradictions on Accounts Receivable
CS1							X	Lack of clarity on member’s loan and member’s remuneration
CS2				(x)			X	The performance figures contradict interview data (probably correct though); owner may have drawn hidden remuneration
CS3				X				2004 accounts are clearly done to convey the bank an impression of high profit
CS3						X		Accounts receivable and payable, stock and cash balance contradict interview data
CS5						(x)		Accounts do not give a clear idea of working capital and cash (seasonal)
CS6				X			(x)	In 2004 some costs related to brother's new venture were booked under this business, reducing taxable income.
Total	1	1	1	4	1	3	3	

## 2.3. Particularly sensitive items

Table 38.1 above shows that the lack of reliability of financial statements affected mainly three areas:

### a) The bottom line

Profit figures were generally difficult to interpret, for two reasons:

- Firstly because, technically, they are calculated as the residual balance of all income and expense items, so that they are affected by all errors or abnormal developments that take place in these items;
- secondly because there may be contradictory interests in reporting either a low, or a high profit figure.

However, the case studies also came to the finding that

- In most cases (CS2, CS3, CS6), profit figures found in the financial statements were more credible than statements made by the owners in their interviews (for example, the owner of CS2 made statements on the operating margins which, in view of the accounts, seem highly questionable; the minority owner of CS6 suggested that the business had always been profitable, whereas it had only achieved profitability in the last year);
- In the cases of suspected manipulation of accounting, it was generally possible to correct the statements to arrive at more realistic profit figures. In particular, non-operating expenses, such as financial charges and depreciations could be estimated from balance sheets and were found to be frequently understated (e.g. CS1, CS3); missing extraordinary items could be identified from the interviews (CS3), and tax could be estimated based on all the above (CS1).
- The truth of operating income and expenses was often more difficult to establish, especially when turnover figures themselves were questionable (CS1), but contradictions in the data often enabled to trace manipulations (e.g. overstated cost of sales in CS6).

Even the simulation of income statement undertaken for CS4a, although rudimentary and solely based on interview evidence, was more informative than the members' statement that "we never do any profit".

### b) Current assets and liabilities; cash

The current assets and liabilities, including the cash level, were generally subject to more uncertainties than the profitability figures.

Indeed, there were frequent contradictions in the data on debtors and creditors, often to the effect that the balance sheets did not reflect any accounts receivable (CS1 February 1997 balance sheet, CS3) and only low accounts payable (CS1 January 1998, CS3), although other evidence would indicate that supplier credit and customer credit were more significant.

In addition, in the case of CS3, the value of stock indicated in balance sheets was significantly lower than stated by the owner.

Unlike for the income statement, these contradictions seemed to be rather linked to improper accounting, possibly caused by a lack of records on the date of payment of invoices and/or a cost-related omission of heavy procedures like stock valuation.

The opposite contradiction applied to CS6, where the balance sheets tended to suggest far higher credit periods than indicated by the owners in the interviews.

In that case, there were indications of more proper record-keeping and sound working procedures on the part of the accountant, so that the presumption was rather a lack of awareness of management on the extent of the problem.

In addition, short-term fluctuations may have complicated the interpretation of current net assets. Generally, cash levels follow a monthly rhythm (the need to pay salaries at month-end often causes a tightening of cash at that period, although this could not be verified for CS3), so that accounting figures, which are always at month-end, are often too pessimistic. More specifically, longer fluctuations happened in the cases of seasonal businesses (CS5 and CS6) and in the occurrence of short-term variations of cash level due to investments and disinvestments (for example, in CS5-2003 and CS6-2004, the sale of vehicles may have relaxed cash constraints and have caused a temporary reduction of accounts payable).

In the cases where the uncertainty about current assets and liabilities was high and affecting the interpretation of accounts (especially CS3), it was chosen to use two competing sets of figures (labelled 'CS3 Balance sheets' and 'CS3 interviews').

### **c) Related parties transactions**

A last major area of uncertainty was the array of transactions with related parties, especially members – and, if applicable, other businesses owned by the members.

#### Members' loans

In the first place, the correctness of the member's loan was often difficult to establish, especially in the cases where it fluctuated from year to year, which applied to the majority of cases.

Only two of the five case studies had examples of quasi-constant member loans: in CS3 the loans were determined at the date of incorporation, according to

contributions in kind made by each member (source: interview with accountant), and remained untouched until one of the member withdrew. Similarly, in CS5, the ‘sleeping’ member kept his member’s loan constant throughout the duration of his involvement.

In all other cases, including the main member of CS5, the member’s loan fluctuated to reflect a variable number of transactions. In some cases, the main causes to changes in the member’s loan would be the retention of member’s salaries (this was heavily practiced by CS5 in the first few years of the business, consistent with Howorth 2001 p. 81) or simply periodic additions to the current loan amount as the need was felt (Mrs. J. in CS6).

In other cases, the member’s loan was continuously affected by frequent transactions made by the member on behalf of the business (e.g. if the member used his personal credit card to pay materials, or paid wages from his own cash), or conversely the use of business liquidity for the member’s private purposes (CS5 indicated that he would occasionally use the business’s cash for his own entertainment expenses, in which case he undertook to write this against his member’s loan).

Finally, in some cases (notably CS1 and possibly CS3-2004), the interview data did not allow to identify any particular transactions, but there was a suspicion that the member’s loan was calculated “per difference”, as the amount balancing total assets and total liabilities and equity – in which case the figure reported would bear all the contradictions, errors and omissions from the balance sheet and income statements, in particular inaccurate profit figures and inaccurate reporting of current assets and liabilities.

### Member’s remuneration

A related issue is the reporting on members’ remuneration. There were three main cases of contradictions in this regard.

In CS1, the analysis of monthly and interim statements would suggest that after two years without declaring any remuneration, the owner may have drawn a monthly salary of R20 000 for a period of 13 months (Jan 1998 to Feb 1999)– a very high compensation for a business which had not achieved turnover targets and was not writing profits. There is a lack of clarity on the subsequent remunerations, especially with the apparent salary of R45 000 for the sole month of January 2000. It is not entirely clear whether the business has falsified its reports to convey the impression of success (a successful entrepreneur is one who either achieves high profits or earns a high salary), or whether the owner did indeed draw such high amounts out of his business.

In CS2, the member’s statement in the first interview (“I don’t really pay myself a fixed salary, but if the business generates some excess capital, I put it into my bond”) contradicted accounting data, which showed neither a profit or positive operating cash flow, nor a reduction of the member’s loan, nor any other form of remuneration of the member or transfer of capital. While the owner may have



elegantly used a conditional phrase to avoid admitting his inability to earn a salary from the business, the absence of a formal compensation raises suspicions about possible hidden remunerations, for example through the interest-bearing member's loan. However, detailed analyses did not uncover any significant evidence of such remunerations.

The last case was the 2004 statements of CS3 – where the member's salary was far higher than in previous years (R180 000, after R52 500 in 2002 and 2003), again possibly to convey the bank the impression that the entrepreneur was successful. However, the analysis of accounts shows that such a salary will not be sustainable once several costs have been allocated, including tax.

#### Transaction with related businesses

Among the cases investigated, there was only one case of a related business whose dealings with the main business were, or should have been, reflected in the accounting: CS6 and the new business started by Wynand's brother.

(The other cases of related businesses were CS2 with the DVD business, and CS5 with the 'inbound' tourism company, but it seemed both these businesses were created after the date of closure of the last financial statements available, namely February 2003).

A comparison of two versions of the 2004 statements, recouped with interview data from Wynand, enabled to identify that some of the costs related to the brother's new venture had been shifted to the crating business for tax-saving purposes.

## **Annexure 39 – Case Studies, Synthesis III**

### **Creditworthiness**

This annexure presents the detailed financial ratios calculated for the case studies. After a review of individual ratios, a diagnosis is deduced on the health of each firm and its ability to draw benefits from additional finance.

#### **1. Review of ratios**

The analysis of ratios was purporting to answer the six questions below:

1. Does the business have enough markets/clients? (breakeven)
2. Are the operations profitable? (operating margin)
3. Are financing costs consuming all operating profits? (interest coverage)
4. Is the business able to finance its operations? In particular, does it control its debtors sufficiently? (working capital cycle; bad debt)
5. Is the business over-indebted or does it rely excessively on short-term debt? (equity ratio; current debt ratio)
6. Is the business stable? (variability of ratios)

The case studies furthermore emphasised the relevance of additional questions / ratios:

7. Does the business keep liquidity reserves? (liquidity ratio)
8. Is the business owner committed to its business (remuneration scheme)?

#### **1.1. Sufficiency of turnover**

For all 6 case studies, a tentative breakeven analysis was undertaken, and the assumed breakeven point was compared with the latest achieved turnover figure.

In some cases, especially for the growing enterprises, methodological issues complicated this attempt. Indeed, the successive investments aimed at developing the enterprise's capacity caused fixed costs to rise permanently, with two consequences: first, the traditional distinction between fixed costs and variable costs was blurred. Secondly, the costs reflected in past income statements were usually too low to reflect the costs that would be relevant in future (see especially CS6). To avoid distortions in results, the latest achieved turnover was compared with the breakeven resulting from the latest income statement, rather than a mean over the period (however, while the resulting figures are slightly different, the conclusions were not affected by this choice).

The study of breakeven enabled to identify three cases of firms, i.e. half of the case studies, which seemed to have an insufficient turnover: on one hand, the two franchise businesses (CS1 and CS2) did not generate sufficient business to justify their high initial investment; on the other hand, the township micro-businesses, although they had only low fixed costs, were only operating under discontinuity, with prolonged periods of inactivity between two tenders, so that their turnover was not sufficient to cover their costs. In those three cases, the issue of insufficiency of turnover was worrying since none of these firms was experiencing a significant growth of sales. Under stagnation or decline there were no prospects for the businesses to reach operating profits.

All other firms tended to have grown sufficiently to reach their breakeven point, and CS5 was even far beyond this point.

*Table 39.1 – Breakeven analysis*

	CS1 furniture franchise	CS2 franchise restaurant	CS3 (revised) safety wear	CS4 a cleaning services	CS5 tourism	CS6 packaging
Latest margin (deficit) over latest breakeven	-19%	-5%	165%	-28%	72%	59%
Evolution of sales	→	→	↑	↓	↑↑	↑

Legend: → stagnation; ↓ decline; ↑ low growth; ↑↑ rapid growth

*Source: analysis of income statements – in the case of CS4 the calculation is based on a simulation of income statement using interview data.*

## 1.2. Interest coverage

The interest coverage was defined in the broader sense as the number of times that the operating cash flows (calculated as the EBITDA) covered total interest costs for the same year. This definition was deemed more practicable than the EBIT-based definition, because of the frequent occurrence of negative EBIT values.

Technically, the levels of interest coverage tended to fluctuate from one year to the next within the same firm, probably because the operating cash flows and interest costs are negatively correlated (on good years, the operating cash flows are high, hence the firm does not need to use its overdraft and has low interest costs, while on bad years the opposite happens). Therefore, the results are presented below in three lines: lowest value for the period, highest value for the period, and mean.

The ratios show that the coverage levels are generally poor, with only two cases

where the lowest values are higher than 2, remaining however in all cases under 4. This means that if the coverage had been calculated on the basis of the operating profit (EBIT) rather than cash flow (EBITDA) the lowest values would hardly have been higher than 1.

Not surprisingly, the worst coverage ratios are found among the enterprises with the worst operating margins (CS1 and CS2) or with the highest financial costs (CS4a). In two of these cases (CS1 and CS4a), the mean coverage was below 1, indicating interest costs higher than the firm's operating cash flow.

CS3, CS5 and CS6 have generally better coverage values, but in bad years the financial costs, as well as depreciations, use up the operating profits – except for CS3.

Table 39.2 – Interest coverage

	CS1 furniture franchise	CS2 franchise restaurant	CS3 (revised) safety wear	CS4 a cleaning services	CS5 tourism	CS6 packaging
lowest interest coverage in the period	-2	1,4	3,8	0,6	2,3	1,8
highest interest coverage in the period	+3,4	2,2	4,5	1,1	7,8	14,3
mean for the period	0,5	1,8	4,1	0,8	4,9	6,4

### 1.3. Working capital cycle and bad debts

Again, there were two methodological issues with the study of the working capital cycle and bad debts from the annual accounts:

- Firstly, some of the case studies (especially CS5 and to some extent CS6) have a seasonal character, while balance sheet data were generally only available for the month of February, which in both cases represents the best season.
- Secondly, considering that the SMEs' accounting is generally relatively rudimentary and essentially cash-based, it is not certain that provisions for bad debt have been appropriately reflected in the accounts.

These reservations in mind, the case studies presented the following working capital cycles and bad debt problems:

*Table 39.3 – Working capital cycle of Case studies*

	CS1	CS2	CS3 (balance sheets) (inter-views)		CS4 a&b	CS5	CS6
	furniture franchise	franchise restaurant	safety wear		cleaning services	tourism	crating
Purchases: Supplier Credit (average) <sup>68</sup>	29	5	9	25	15	41	68
Deposits (average)	10	0	0	0	0	0	0
Inventory (average)	7	5	16	25	15	0	2
Production cycle (assumed)	5	0	1	1	0	0	12
Sales: Customer credit (average)	13	0	1	25	60	13	74
Total need for working capital (in days)	<b>-14</b>	<b>0</b>	<b>9</b>	<b>26</b>	<b>60</b>	<b>-28</b>	<b>19</b>

*Source: balance sheets and, in the cases of CS3 revised and CS4, interviews. The total may not coincide to the sum of items due to rounding differences.*

The table shows that SMEs can be classified into three types:

- Some, like CS1 and CS5, have a negative need for working capital, i.e. they are able to use working capital (in particular, supplier credit) as a resource for the financing of other assets. In the case of CS5 this situation however is only applicable in summer, since in winter the debtors book increases, supposedly creating a positive need for working capital.
- Others like CS2 are working capital neutral – their operations are essentially cash based;
- A last group, especially businesses working for corporate or government clients, has a positive need for working capital, mostly caused by the need to grant credit to customers and in some cases, the need to keep stock. The need for working capital ranges from a few days to two months of turnover (CS4).

In two enterprises, customer credit was particularly acute and explained most of the need for working capital: in the case of CS4, debtors management procedures would have done little to improve the situation since late payment was a given condition of government tenders. However, in the case of CS6, it is probable that more stringent credit management procedures would have improved the

<sup>68</sup> In the case of CS5 the term of “supplier credit” may be confusing, since the firm does not use ‘suppliers of materials’; the short-term creditors are mainly free-lance tour guides as well as institutions like Telkom, and the providers of insurance and vehicle finance.

situation.

*Table 39.4 – Bad debts in relation to turnover*

	CS1 furniture franchise	CS3 (revised) safety wear	CS5 tourism	CS6 packaging
highest value over the period	3.5%	2.5%	0.0%	0.6%
mean	0.9%	0.6%	0.0%	0.2%

Bad debts did not seem to represent a serious problem for the case studies:

- Two case studies had no risk of bad debts: the restaurant CS2, because it did not sell anything on credit, and the cleaning businesses CS4a and CS4b, which were only operating with government clients.
- The other four businesses had hardly experienced any bad debts, with the mean ratio of bad debt written off to turnover being under 1% in all cases. However, this result may be distorted by a failure to write off such bad debt.

## 1.4. Reliance on debt, especially short-term debt

### a) Equity ratios

*Table 39.5 – Equity ratios*

	CS1	CS2	CS3 (balance sheets) (inter-views)		CS5	CS6
	furniture franchise (white)	franchise restaurant (white)	safety wear (coloured)		tourism (coloured)	crating (white)
mean equity ratio (incl member's loan)	20%*	93%*	82%	45%**	10%	30%
evolution of equity ratio over the period	↓	→	→	↓	↑	↓→

Legend: → stable or uneven evolution; ↓ decline; ↑ growth;  
↓→ first decline, then stabilises

**Notes:**

The equity ratios incorporate the members' loans because they can usually be understood as quasi-equity, and in many cases they represent the largest part of an SME's equity, especially among firms having accumulated losses.

\* The equity ratios derived from the data for CS1 and CS2 must be interpreted with caution. In the case of CS1, as discussed, there is a major uncertainty about the member's loan figure, which may have been calculated by difference and reflect all other errors and manipulations affecting the accounts. In addition, accumulated profits may not be real. It is symptomatic that the only financial statements of CS1 validated by an external accountant (February 1997) suggested a negative equity ratio at -8%, while the "home-made" accounts all indicate equity ratios ranging from 20 to 42%.

As to CS2, the member's loan was the main, and almost the sole source of finance for the business – but it corresponded to a personal long-term bank loan contracted by the entrepreneur and placed at the business's disposal.

\*\* The difference in the two versions of equity ratios calculated for CS3 illustrates the "dilution" effect caused by higher current assets and current liabilities, particularly strong in this case where fixed assets have a low book value: although the equity (nominator) remains unchanged, the denominator increases considerably, causing a significant reduction of the ratio.

The equity ratios varied significantly from one firm to the next and, interestingly, showed little correlation with the ethnic background of the owners (one may have assumed that white entrepreneurs would have more easily maintained high equity ratios). The equity ratios found are relatively high in CS2 and CS3(BS), but generally lower in the other cases. The equity ratio was particularly low in CS1 and CS5, for a combination of three reasons:

- Firstly, both these businesses were started with a low initial contribution of the member. At least in the case of CS5, the low resources of a young coloured man in the 1990s explained the low initial capital.
- Secondly, the accumulation of losses over several years has created an equity gap. Although the member's loan has filled this gap, it has not left room for further equity build-ups.
- Thirdly, the expensive fixed assets (especially vehicles) required for these two businesses caused them to contract relatively large amounts of long-term debt – in contrast to firms like CS3, which had almost no long-term debt on its balance sheets;
- (It is not surprising, then, that these two firms have had a relatively heavy use of short-term credit, as already described).

The same three factors applied, to a lesser extent, to CS6. In that case, the relatively low initial capital was explained by the motivation of the founding

member, who was starting this firm as an occupation for his retirement years and did not have particular ambitions. When the sons took over the business, they engaged on a bolder growth path, but did not recapitalise the business, either for lack of resources (they were still young) or for lack of awareness.

Furthermore, although no ratios were available to corroborate this assertion, it made no doubt that the same factors were also relevant to CS4. Started with hardly any capital, the business has had no opportunity to accumulate profits since the gains that were realised – if there were any – were urgently needed by the members for their private purposes (such as children's schooling) and therefore not retained in the business. The fixed assets, although not expensive in the absolute, were too heavy for the owner's financial capacity and caused them to use debt.

CS3 (also coloured) was started with an even lower start-up capital than CS5, but the light nature of the business, and the entrepreneur's skills for bargains (in the selection of its vehicles and arrangements for the use of sewing machines) helped him avoid accumulation of losses and expensive fixed assets, so that he was able to maintain its equity ratio at a reasonable level.

## **b) Evolution of equity ratio: frequent absence of equity build-up for growth**

More than the mean over the period, the evolution of the equity ratio was found to be relevant for an assessment of creditworthiness. Two opposite tendencies were observed:

- In young (CS1) or fast-growing (CS6) businesses, the equity ratio tended to decline as a combined result of the lack of profits and the need to grow current and possibly fixed assets.
- On the contrary, in the case of CS5, a substantial profit in the last year of review (2003) brought the equity ratio up to 32%. The profits are likely to be maintained in the next few years, compensating the low initial equity ratio.

These quantitative findings were corroborated and explained by qualitative insights, which emerged from almost all case studies. Interviews revealed that small entrepreneurs, even in growing concerns, do not have much interest in building-up equity. There seems to be a lack of understanding for the need to strengthen financial structure as business grows.

This lack of interest seems to be related to the following facts:

- Small entrepreneurs (especially coloured and black entrepreneurs, it seemed) have a biased understanding of the concept of profit. They do not perceive it as the growth of the firm's structural resources but as liquid money in the bank account, that is, a cash surplus. A telling



comment from CS3's owner was that "rather than writing profits, he would prefer building-up his stock". (He did not realise that doing profit would augment his own resources, which he could choose to invest into stock).

- Related to this, small entrepreneurs intuitively reject the capitalistic approach. This applies especially to "lifestyle entrepreneurs" who have built up their business on their own. They are more concerned by their operations than by their financing, which again is associated with investing money in financial markets, and is not regarded as desirable. Their concerns revolve mainly on the business's (turnover) growth, the ability to create employment, and to pay themselves a proper salary (CS3, CS5, CS4). This seemed to be less relevant for entrepreneurs who bought into a franchise (CS1, CS2) or who acquired the business at a later stage (CS6) – but this dichotomy may also come from a cultural gap between white and non-white entrepreneurs.
- A last aspect is that, once the existing business is perceived as becoming sustainable, the entrepreneurial drive leads some business owners to use cash surpluses for investment in new ventures (CS5, CS6). This deprives the old businesses from the opportunity to accumulate cash and equity.

Tellingly, the only business which achieved a significant growth of its equity (CS5) was the sole case study entrepreneur who, in the interviews, revealed a concern for strengthening his financial structure for sustainability, even though he did not seem to be fully aware of the role of equity ("My main concern is to be able to invest while maintaining the business on a positive cash flow footing"). CS5 also admitted that this worry was quite new to him, the result of a long maturation.

### **c) Reliance on short-term debt**

The case studies showed different levels of dependence on short-term debt, but mitigated the frequent assertion that most small businesses overly rely on short-term debt.

- There was no sign of excessive reliance on short-term debt for CS2 and CS5<sup>69</sup>, whose current debt ratios were well under 33%. Both firms had secured long-term bank facilities covering the largest part of their financing needs;
- In CS3, the evidence was contradictory – but even the high ratio derived from interview data was not worrying since the short-term debt was used for the financing of short-term assets (stock and debtors); the same applied to CS6.

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<sup>69</sup> In the case of CS5, seasonal factors are believed to cause relatively little distortion of the current debt ratio, since the overall balance sheet structure is dominated by long-term assets and liabilities.

- The ratios confirmed qualitative evidence that CS1 could be regarded as the most dependent on short-term debt, because its strong use of current debt, in particular bank overdraft, was not matched to the maturity structure of assets.

Table 39.6 – Current debt ratios

	CS1	CS2	CS3		CS5	CS6
			(balance sheets)	(interviews)		
	furniture franchise	franchise restaurant	safety wear		tourism	crating
mean current debt to total assets	39%	7%	18%	55%	29%	45%
(compare to current assets to total assets? <sup>70</sup> )	28%	7%	39%	75%	8%	60%
Net current debt ratio	11%	0%	-21%	-20%	21%	-15%

For CS4, no balance sheet ratios were calculated, but it makes no doubt that the two micro enterprises were over-reliance seriously restricted by their excessive dependence on short-term debt.

## 1.5. Liquidity reserves

The liquidity ratios, visible on Table 39.7, raise the following comments:

- In the case of CS1, the moderate mean ratio is occulting a deterioration of the liquidity situation across the lifetime of the business: the use of overdraft reached –11% of total assets in June 2000, suggesting a serious lack of liquidity. The negative cash flow meant that there was no hope for the liquidity situation to recover - which is why the business had to be liquidated;
- CS6 also seriously lacked liquidity. However, while its mean liquidity ratio was the worst of all case studies, the situation presented in the 2000 accounts was less critical than for CS1, since the operating cash flow still covered the overdraft.
- Although no ratio was calculated for CS4, it is assumed that the micro-business did not keep any significant liquidity reserve.

<sup>70</sup> excluding cash and cash equivalents

Table 39.7 – Liquidity ratios

	CS1	CS2	CS3 (balance sheets) (inter-views)		CS5	CS6
	furniture franchise	franchise restaurant	safety wear		tourism	crating
Mean year-end liquidity to total assets	-1%	-4%	22%	16%	15%	-24%
Evolution of liquidity reserves	↓	→	→	→	↑	↑↓
Cash Flow to Overdraft	-154% (neg CF)	299%	n/a	n/a	n/a	139%
(add a reference to unused OD capacity?)						

Legend: → stable or uneven evolution; ↓ decline; ↑ growth; ↑↓ first improvement, then decline

## Notes:

\* The difference between the two ratios in CS3 comes only from the revision of total assets to reflect higher values of inventory and accounts receivable, as suggested in interviews.

\* The liquidity ratios must be interpreted with caution, for they may be affected by short-term variations. In particular, in the case of CS5, seasonal variations tended to favourably distort the ratio.

\* The ratio of liquidity to turnover, as opposed to fixed assets, did not yield significantly different conclusions.

The interviews provided some insights into the general lack of cash saving among small businesses. To some extent, it was related to the lack of equity building, which has already been mentioned. Furthermore, the following factors may have played a role:

- Firstly, significant amounts of operating cash flows were spent immediately, notably for the purchase of small equipment. Several entrepreneurs admitted that, whenever they get paid for a large contract, they immediately acquire new equipment or tools (CS4, CS6).
- In addition, the township entrepreneurs (CS4a+b) expressed a reluctance to save which could be interpreted as a fear that they might not be able to benefit from their savings. Although they did not give further explanations, possible reasons for this might be the poor performance of financial markets, the poor image of the banking system, the high criminality threatening the savings kept out of the bank, and the social pressure for sharing which came from the township environment.

- Also, anecdotal evidence suggested that visions of “what they could do if they had money” create irrational temptations and spending, illustrated by CS5 using his business’s money to build a bar in his home, next to his office.
- These remarks should not be interpreted as a sign that entrepreneurs had no interest in saving: there was clear evidence of cost-cutting (CS5) and avoiding to overpay when investing (CS3). But the maintenance of sound liquidity levels was not a priority.

## 1.6. Owners’ commitment to the business (Remuneration scheme)

The members’ salaries, to the extent that they truly reflect the remuneration that takes place between the business and its owner-manager, are a good indicator of the owner’s business philosophy. Generally, a high member’s salary, especially if it does not coincide with a high business performance, suggests that the member views the business as a lucrative opportunity, whereas a low salary indicates that the member’s focus is on the business’s growth and sustainability.

However, there are numerous other ways for an entrepreneur to draw advantages out of their position, like medical aid / provident fund, the use of a business vehicle, the contributions to the repayment of a home loan (e.g. if the business pays a rent to the member for operating from home). None of the businesses was found to pay dividends to its members.

*Table 39.8 – Highest and mean remuneration of owners*

	CS1	CS2	CS3	CS5	CS6
monthly (equivalent <sup>71</sup> ) salary per member					
• mean salary over the period	11 938	0	7 740	4 698	4 905
• highest salary over the period	20 000	0	15 000	8 542	6 027
salary in % of operating profit					
• mean over the period	40%	0%	42%	30%	36%
• highest ratio over the period	77%	0%	53%	35%	45%

Source: financial statements

<sup>71</sup> the term ‘monthly equivalent’ is used to cover cases where members are not paid on a monthly basis, but rather at year-end depending on the year’s performance. In this case the period’s salary was divided by the number of months.

Notes:

\* Reference is made to the general caution required when dealing with reported salaries (see section on ‘information opacity’).

\* The CS1 percent figures may be distorted by an overstatement of operating profits.

\* In addition, the mean figures for CS1 hide a very irregular pattern, starting with no remuneration in the first 22 months, then a remuneration at R20000/month for over a year, which was only reduced as the business approached bankruptcy and was forced to strongly reduce its salaries to the member.

\* The CS3 results are distorted by the high member’s salary proposed in the 2004 (draft) statements, which suggested an abnormally high profit; it is probable that this high remuneration could not be maintained in the final statements. The mean remuneration, excluding this last year, would be R5319 per member.

\* There is a possibility that CS2 indirectly earned a remuneration via the interest payments from the business to the member. However, this could not be established precisely.

In spite of the weaknesses of the ratios, Table 39.8 suggests differences between the businesses as follows:

- The high cash remunerations practiced by CS1 during the middle period of its life (R20 000/month after the first 20 months of operation, or 77% of operating profit) seem suspicious for a young business, which has not yet reached breakeven. It suggests that the entrepreneur was not strongly committed to its business.
- CS2 illustrated the other extreme, with the owner officially earning strictly no salary for the period under review. Interview evidence showed that the entrepreneur had expected a decent remuneration but this would not be affordable to the business under present circumstances. However, the zero-remuneration should not be interpreted as a sign of commitment to the business, since the lack of success in the first 2 years caused the owner to withdraw from management and consider selling the business.
- CS3, CS5 and CS6 had more average, yet overall modest, remuneration behaviours, always adjusting the member’s salary to the business’s performance for the year. The interview evidence however suggested differences in attitude between two types of businesses:
  - “Lifestyle entrepreneurs” (CS3, CS5), having built up their business on their own, were highly committed to it and would always moderate their remuneration ambitions to enable the business’s growth;
  - CS6, historically a family business, inherited the remuneration pattern discussed above, but the new majority member, who

bought his stake at a later stage, seemed to have an attitude closer to that of CS2: if the business's performance failed to improve, he may well consider to sell his stake rather than maintain his modest ambitions.

Qualitatively, interview evidence raises the attention not to another risk criterion: the involvement of the owner in multiple projects (CS2, CS5, CS6). This factor, which cannot be measured in terms of ratios, has both managerial and financial implications for the first business, as follows:

- The owner's private resources (equity, including member's loan, and ability to pledge collateral) are shared between a larger number of commitments. This was visible in particular for CS2 whose member's loan to his restaurant decreased in 2003 when the owner started a new DVD business;
- The requirements of the newer businesses often cause the older one to have to grant some of its fixed assets to the newer one(s), often without compensation (both CS5 and CS6 provide examples of new businesses using the vehicles initially purchased for the older businesses);
- The same applies to costly resources such as liquidity (CS6 mentioned high sums borrowed by the brother's new start-up from the older business's already negative current account);
- The personal commitment of the owner to his first business gets reduced (at least CS2 and CS5 provided examples of this).

## 8. Variability of ratios (year-to-year)

Table 39.9 suggests that the volatility of firms' ratios varied from case to case as follows:

- CS2 and CS3 were found to be relatively stable (although the first case may be distorted by the lower number of years). Factors for this stability seem to be:
  - the relatively low turnover growth (normal in a franchise like CS2, while in the case of CS3 the considerable growth of the previous years has slowed down after 2000);
  - the quasi-absence of follow-up investments in the period, causing a stability of the financing structure.
- On the contrary, CS5 and CS6 were unstable (in the case of CS5 the instability is for the better since it is a general improvement), apparently as a result of:
  - high turnover growth
  - continued investments
  - improvement of profitability

- CS1 generally showed relatively high volatility measures, in spite of not being growing. In this case the volatility may be explained by:
  - continued investments, as for CS5 and 6, and
  - the lack of profitability (the accumulation of losses caused an imbalance in the financing structure, which gradually deteriorated).

*Table 39.9 – Volatility of a few ratios over the period of review*

	CS1	CS2	CS3 (revised)	CS5	CS6
<i>Number of years included</i>	4	2	3	4	4
Compound turnover growth p.a.	4.4%*	10.4%	26.9%	57.5%	37.2%
Investment to turnover	2.1%	0.2%	0.2%	16.0%	9.2%
Standard deviation of:					
• Operating margin	7%	1%	6%	5%	4%
• Equity ratio	21%	7%	14%	18%	19%
• Current Debt Ratio	19%	7%	14%	13%	6%
• Liquidity Ratio	8%	4%	9%	16%	18%
• Owner's remuneration in % of operating margin	34%	0%	10%	6%	9%
• Interest coverage	2.39	0.50	0.41	2.54	5.88
• Need for working capital	15.73	2.32	4.04	15.49	24.55

*Notes:*

\* For CS1 the turnover growth rate must be interpreted with caution, because of inconsistencies in the reporting of turnover (possibly due to tax-saving attempts). To minimise the impact of inconsistencies, the growth rate was calculated between January 1998 and June 2000, i.e. the first financial statements for February 1997 were ignored, because it seems that turnover was not established along the same method as for following years.

Comparisons between the firms should be done with caution, because the varying number of years included in the data sets influences the volatility measures. Automatically, firms which have provided only two sets of financials were found to be less volatile than the ones who could be tracked over 3 or 4 years. CS4 was not included in the table because the data collected did not adequately reflect the entire period of life of the business.

The volatility varies strongly from one indicator to the next. In particular, the range of variations of the interest coverage ratio and the need for working capital are by construction unlimited, while all other ratios are normally fluctuating between 0 and 100% (although negative values are possible for the operating margin and the equity ratio).

## 2. Summary of ratio assessment

Table 39.10 summarises the main findings of the ratio-based analysis for each case along this classification.

Table 39.10 – Summarised creditworthiness assessment for all case studies

	CS1	CS2	CS3	CS4	CS5	CS6
<b>Fundamental deficiencies</b>						
(1) insufficient market	x	xx		x		
(2) unprofitable operations	x	x	(x)			
(7) lack of member's commitment	xx	(x)		x		(x)
(7bis) involvement in multiple businesses		x			x	x
<b>Financing difficulties (possibly transitory)</b>						
(3) excessive financing costs	x	(x)		xx		
(4) lack of working capital				xx	(x)	xx
(5) over-indebtedness	x			x	x	
(5bis) over-reliance on short-term debt	(x)			x		
(6) lack of liquidity reserves	(x)			x		x
(8) instability	x				(x)	(x)

Legend: x: existing constraint xx: main constraint  
(x) possible or occasional (e.g. seasonal) constraint

(See also Annexure 21 for a summary of creditworthiness scores, including qualitative scores, of case studies)

Hence, the case study methodology led to diverse diagnoses as to the problems of small enterprises:

- CS1 was found to be non-creditworthy, with lack of turnover; lack of initial equity; insufficient member's commitment (member's salary); questionable integrity of owner; being the main concerns;
- CS2 was a mixed case. While it had less downside risks, the fundamental weaknesses, especially the lack of turnover, meant that the upside potential was unlikely to materialise; the interest costs were high if interest paid to member was included;



- CS3 was regarded as creditworthy, although not very profitable. The business did not seem able (or willing) to accumulate equity to support growth – this may become problematic when the business decides to take a new, bolder strategic path.
- CS4 was found to be non-creditworthy, with a lack of everything. There was a crucial lack of working capital, but also a lack of commitment and discipline;
- CS5 was regarded as creditworthy, although too illiquid (all resources were tied in fixed assets). This caused a cash problem in winter, when working capital cycle slows down; in addition, strong investing activities used up operating cash flows. Up to now, equity had been insufficient, but profits were expected to help to build it up. The new business being created represented a risk, though;
- CS6 was another mixed case: It had significant immediate risks, especially with working capital and liquidity, dependence on short-term debt; sluggish management of working capital. The lack of discipline on the part of brother and divergences between the owners seemed to be resolved by the exit of one brother, bringing hope that the business might recover. Hence, if supported through this phase, it might be able to reach a more stable stage.

## **Annexure 40 – Case Studies, Synthesis IV**

### **Remarks on franchise firms**

Before concluding on creditworthiness, a specific look at franchises was taken, because they seem to be treated slightly differently from other businesses, and indeed have an easier access to finance.

#### **1. The reasons for banks' preference for franchises**

Banks (for example ABSA 2002) indicate several reasons for their willingness to provide capital to franchises:

- Franchise operations are regarded as more stable and more predictable than independent SMEs. This is understandable since a principle of franchise (which may not always materialise in practice) is that the business starts up at its critical size and with a pre-established market. Indeed, in the case of CS2, it seems that the financial structure and performance have been remarkably stable compared with other case studies, but there were only two years available.
- Since all assets needed are acquired at start-up, the initial investment is usually equal to the total investment. Therefore, apart from possible liquidity needs, the bank runs little risk of escalation of its commitments.
- Banks usually believe that, since franchise entrepreneurs are less dependent on a learning curve (a successful business format is already in place), they have higher survivorship rates than independent businesses (ABSA talks about “statistical evidence”). This survivorship advantage has, however, been contested in literature (see for example Stanworth et al, 1998).

In addition to the arguments usually found in the literature, the case studies brought the following other reasons to light:

- The relationship of the bank to the franchisor influences the support given to the franchisee. The franchisee, instead of being one of many anonymous small business owners, benefits from the franchisor's credit record. This was apparent in the case of CS1, where the “franchisor's approval” seemed to be more prominent in the bank file than any reflections on the person of the franchisee. By giving their support to the establishment of a franchise operation by one of their client, the bank to some extent bound itself to also provide support to the individual franchisees (even if the interests of franchisor and franchisee may be divergent and the risks dissimilar).

- The fact that there is an active and organised “secondary market” for established franchise operations may have eased access to finance for CS2, who invested in a well known restaurant franchise. If the owner resigns about running this business, his good prospects for selling the operation at a profit limit the bank’s risk.

## 2. The specific risks of franchises

In spite (or maybe precisely because) of this easier access to bank finance, the cases studied suggested that franchises are not necessarily less risky.

- None of the two franchise operations included in the case studies was really successful; one (CS1) had to be liquidated, apparently with great loss to the bank, while the other one (CS2) just seemed unable to reach the profit zone. Mr. R. A.’s partner, in CS3, similarly got involved in a third case of franchise that did not work (but no details were available).
- The main reason for the risk of franchises is probably the high initial investment. Unlike independent businesses, whose growth curve follows market (demand) and affordability considerations (usually internal finance), the initial size of franchise operations is dictated by the franchisor’s market estimations as well as a need to maintain the chain’s image. This may lead to oversizing. The two franchise operations included in the case studies were indeed suffering from an insufficient turnover, compared with their level of fixed costs; considering their low turnover growth, there was little hope for them to reach breakeven. CS2 appeared to be a typical case of an outlet which was strategically important for the franchisor (the franchise’s name had to be visible in this very busy restaurant street), but which made little business sense for the franchisee (as the competition was too tight in this area). This illustrates that even the market presence of the franchisor may not be sufficient to guarantee sufficient sales.
- In addition, the expectation that the initial investment is sufficient may not materialise. In the case of CS1 the bank has not been able to avoid an escalation of its commitments.
- In addition, the hypothesis of a secondary market does not apply well to new franchise networks such as CS1’s franchise. Under these circumstances, the bank may become unable to recover the franchise fee, which may represent a substantial part of the finance provided.

Other risk factors include the facts that:

- Franchisees may be less screened than other entrepreneurs who have to prove, rework and ensure the viability of their business concept with every hurdle that they experience. Even though CS2 participated in a

selection process as well as a training organised by the franchisor, the two processes hardly included any financial management;

- Franchise business owners may be less committed to their businesses than genuine entrepreneurs who cherish their enterprise as their child. None of the three entrepreneurs encountered who have been involved in franchise (CS1, CS2 and the partner to CS3 in its previous investment) appeared really bound to their business. From all the success factors of a small business, though, the owner's commitment seems to be one of the most crucial ones (see below).

Altogether, the case studies tended to convey the impression that franchise operations were not necessarily better risks for a bank, than independent businesses. However, this impression may be distorted by a (survivorship and self-selection) bias in the data on non-franchise operations (except for CS4 a+b).