

UNIVERSITY OF CAPE TOWN

SCHOOL OF ECONOMICS

INFORMAL PRODUCTION IN ZIMBABWE:

A STUDY OF PRODUCTION METHODS AND INTERSECTORAL RELATIONS

WITH SPECIAL REFERENCE TO THE CLOTHING INDUSTRY

BY

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A Thesis submitted in April 1985 in fulfilment of the requirements for the degree of Master of Arts.

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## A B S T R A C T

This thesis covers the constraints, both theoretical and practical, on the growth and evolution of the Zimbabwean informal sector, in particular of informal clothing and footwear production. The aim of the study was to provide a foundation for decision-making in the intersectoral allocation of resources. To this end, a survey was conducted of over one hundred and twenty formal and informal clothing producers in Bulawayo. The questionnaire was administered and completed by the author during the course of an interview, the questions requiring specific, as opposed to open-ended, answers. The production data obtained were analysed using the Kmenta formulation of the Constant Elasticity of Substitution (C.E.S.) production function, with a view to obtaining the production parameters. The data from formal and informal sector interviewees were analysed separately and in aggregate and tested for constancy of variance, significance of parameters and explanatory power. Whilst a number of conclusions are drawn in the course of the thesis, the central finding is that allocation of scarce resources to the informal sector should be based on the standard procedures used by venture capital seeking an outlet in a normal market economy, and in particular on the ability of the entrepreneur, since this appears to be an increasingly crucial variable as firm sizes fell.

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P R E F A C E

Humpty Dumpty insisted that a word meant just what he thought it meant, neither more nor less. Unfortunately, the same cannot be said of a thesis; I am, therefore, making use of a preface to describe the limitations of this study, and to acknowledge the extensive help which so many people have accorded me.

In Zimbabwe the 1970s were a decade of general economic traumas. One of the most evere of these was the high incidence of joblessness amongst the Black urban population. The growth rate of this group was also particularly high, a combination of an exceptionally fast natural rate of increase, and migration from the rural areas as a result of hardships endured during the "bush war".

It should not be surprising that economists welcomed the hopeful note which was sounded by the I.L.O.'s 1972 report on "Employment Incomes and Inequality in Kenya", which mooted the idea that very small-scale private enterprises, though unregistered and apparently under-capitalised, could thrive and apparently support large populations in low income urban areas. The term "informal sector" was coined to describe this concept, and has remained in general use although others had been used before, and have been used since.

With the passage of time, however, doubts have been expressed as to the value of the I.L.O. claims for the informal sector, in particular there have been ideological objections on the grounds that it constitutes a "petty bourgeois" class. Empirical analysis (as opposed to description) has, however, remained rare.

With this in mind, it was felt that five fundamental questions needed to be answered in terms of Zimbabwe's informal economy:

1. Do informal enterprises benefit from financial aid?
2. In a given industry would a limited amount of aid achieve greater employment and output effects if addressed to formal or informal enterprises?
3. Can the results to question (2) be tested empirically, and what are the limitations of the testing procedure?
4. What long-run political and economic ramifications might emerge subsequent to the stimulation of the informal sector?
5. How effective would non-financial assistance of the informal sector (e.g. easing constraining legislation, provision of additional infrastructure and development of human capital through training schemes) be in rendering the informal entrepreneur more efficient and more vertically mobile?

The first three of these questions formed the basis of the empirical research dealt with in Chapters IV and V, while the final two questions, with their greater latitudes of interpretation, have formed the background to the discussion in Chapters I, II and III.

In the course of this thesis, it will be shown that theoretical opinion on the informal sector is divided. Much of this division may be traced back to the standpoints from which the sector is viewed. One issue, however, may not be regarded in this way, the problem of involutory growth, where expansion is accompanied by worsening conditions. Although it is espoused most ardently by members of neo-Marxist schools, it is visible in terms of any ideology. Whether or not informal sector expansion in response to economic stimulation is involutory depends on the individual circumstances of the branch of the formal economy viewed. The probability of involution is substantially reduced, however, where barriers to entry in the form of capital and skill requirements exist concurrently with the prospect of entry into the formal sector as the individual firm expands. This situation pertains in clothing manufacture, the area on which this study has particularly focused; it does not apply, however, to petty retailing which seems to comprise the largest single portion of the informal economy. For this reason, the specific results of Chapters IV and V must be read as describing a special case.

If a general solution to the employment problems of Zimbabwe is sought within the bounds of the market mechanism, as opposed to central planning, then indigenous enterprise will have to form part of it. The African-owned store is not a new phenomenon in the state, but the capacity of commerce to alleviate unemployment is limited. What this thesis will try to describe is the capacity of investment in petty production to generate employment. A glance at Chapter V will show that the results are often ambivalent: investment in established formal enterprise is more productive and its manpower training rôle is more substantial, but informal production has the capacity both to expand and to transform itself. In the conclusion I shall, therefore, try to describe both the endogenous and exogenous constraints on such expansion and transformation.

Two minor points remain to be clarified. Firstly, where I refer to informal operators, it is the "owners" rather than their employees to whom I refer. Secondly, the name Zimbabwe has been used to describe the country both before and after 1980, except when quoting or when confusion might result, in which case the former name Rhodesia has been used. No value judgement is implied by this, the decision being made purely on the grounds of convenience.

The initial impetus for this research came from Toby Brooke, then manager of FEBCO who demonstrated the importance of entrepreneurial flair in the success of small enterprises. The problem which emerged focused on the necessity for a study of the needs of small-scale and informal African

businessmen and the characteristics of their enterprises so that the limited development funds available for their assistance could be used to maximum effect. In this, I was particularly assisted by my colleague at the Reserve Bank of Zimbabwe, Steve Gwasira, and in Bulawayo by the staff of the City Council's Department of Housing and Community Services.

It will be clear that the scope of this thesis extends beyond being an abstract problem in constrained optimisation, I have tried to keep real issues in mind so as to give it some practical worth. There is no doubt, however, that Zimbabwe's informal economy warrants a more detailed and extensive examination using the established tools of micro-economics and econometrics, than has been given here. There is also no doubt that to be truly effective, a study such as this requires more detailed data collection than that which can be achieved by a single researcher alone!

It is impossible for work to proceed in a vacuum, and inevitably my views have been shaped by those of the people to whom I have gone for assistance, in temporal order; the staff of the Reserve Bank of Zimbabwe, FEBCO and SIAS, the Bulawayo Municipality's Department of Housing and Community Services, in particular Dr Eric Gargett, and the members of the School of Economics at UCT, in particular Haim Abraham, Charles Simkins, John Whittaker and my supervisor, Professor Ben Gurzynski. Whilst acknowledging

their help, the usual proviso naturally still applies: any errors or omissions are strictly my own. Finally, I would like to thank Sally Ramsbotham and Mr T.S.J. Makoni for the trouble they have gone to on my behalf in Harare, similarly Arthur Kaplan and Mr N.M. Moyo in Bulawayo, and my typist, Bea Cornell, who has accepted my handwriting without demur.

Anthony Leiman

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CHAPTER 1THE INFORMAL SECTOR, A THEORETICAL PERSPECTIVE

The main objective of this chapter is the provision of an overview of informal sector literature as a whole, while concentrating on work with Zimbabwean relevance. It thus aims at setting up a frame of reference against which the following two chapters, on relations with the remainder of the economy, and with Government, can be fitted.

Unfortunately, there is no unified theory of informalism, although Tokman (1978) has provided the closest approach to one thus far. (See Section 3 of this chapter). Indeed, a spectrum of opinions, from libertarian to Marxist, have been expressed on the subject since the informal sector became fashionable in the early 1970s. For this reason, the spread of opinions presented in this, and the two succeeding chapters, should not be regarded as evidence of general eclecticism, but as an attempt to link theory to the diversity of interest groups involved with Zimbabwe's informal economy.

In an attempt to place some order in the spread of published opinions on the informal sector, this chapter has been split into six sections:

1. The dual economy and the origins of the informal economy;
2. The informal economy in terms of the neo-classical paradigm;
3. The benign/subordination debate;

4. Dissenting views;
5. The informal sector and economic growth, and
6. Constraints on the growth of the informal sector.

#### 1.1 THE DUAL ECONOMY AND THE ORIGINS OF THE INFORMAL SECTOR

What theoretical explanation is there for the existence of the informal sector? The early dualistic models of the developing economy (Lewis, 1954; Fei & Ranis, 1961) depicted an economy composed of two elements - rural subsistence and urban commercial/industrial. In terms of these models, labour would leave the rural economy, in which there was underemployment (i.e. where the average product of labour exceeded its marginal product), and enter employment in the urban areas, where the wage marginally exceeded the rural average product of labour (wage). Given perfectly competitive labour and product markets, this suggested that full employment would always prevail in the urban areas.

The weakness of these models lay in their failure to take due cognisance of factors other than the individual's wage, as incentives to labour mobility. Thus, despite the early economy of Rhodesia having accorded fairly closely with the dualistic models, a history of urban unemployment has been noted for some time.

Clarke (1977) showed that large numbers of local workers were unable to obtain employment in the early years of White settlement. His finding contrasted with the views expressed by the early settlers themselves who brought in workers from Nyasaland and Portuguese East Africa to satisfy an apparent labour shortage.

These two views of the situation need not be mutually exclusive. Cash wages fell in the early years of this century, as did the average product of labour in the rural subsistence economy. If wage expectations were formed adaptively, the apparent shortfall of local labour observed by the White settlers could have resulted from the gap between the income expectations of unskilled labour and the wage rate on offer to it. The unemployment described by Clarke would, therefore, have been 'voluntary'. In terms of the strict definition that unemployment only describes those who are willing and able to work at the going wage, but cannot find jobs, it could therefore be concluded that unemployment was not a true feature of the early years of White settlement.

By the later 1940s, unemployment, even in the strict sense, became a feature of the economy. This may partly have arisen from the rapid growth in the Black population, but significant too was the 1941 Land Apportionment Act. By the end of the following decade, the problem was serious enough to justify an official investigation. (The Stent Commission, 'Unemployment in Southern Rhodesia and Policy to Eliminate it', 1954.)

Despite this, an attempt was made by the Central Statistical Office in the early 1970s to show that local levels of unemployment were, and had been, low. The deficiencies of the new computations were shown up by Hawkins (1972) and there has been a general awareness that unemployment was, and remains, a major problem.

It is not conceivable that wage expectations, based solely on earnings in the first few years of White settlement, should have prevailed for the better part of a century. Nonetheless, unjustifiably high wage expectations may well have played a part in the establishment of a body of urban unemployed. As Todaro (1971) pointed out, the perceived rather than the actual differences between rural and urban wages, and the perceived probabilities of obtaining urban employment at the desired wage, determine the level of urban frictional unemployment.

Sandbrook (1982, pp.48/9), however, makes it clear that other factors must be taken into account. (He refers to them as 'psychic rewards').

The concept of perceived rewards over the individual's working life (i.e. lifetime wage expectations suitably discounted) was further expanded on and used by Harberger (1971) who introduced the social opportunity cost of labour to explain urban unemployment.

Fields (1975) used Harberger's ideas within a Todaro framework to show the effect on urban unemployment and underemployment, of an informal sector (referred to by him as 'murky' or 'urban traditional'). Fields pointed out that the informal sector results in a 'lower equilibrium' unemployment rate than the original Harris-Todaro result, despite the reduction in the individual's available time for job searching should he accept informal employment.

Taking this into account, the conclusions reached were that, given a free labour market, as the probability of an informally employed worker getting a formal sector job rises:

1. the equilibrium wage rate in the informal sector falls;
2. the equilibrium labour force in the informal sector rises;
3. the equilibrium labour force in the formal sector falls;
4. the total urban labour force in equilibrium falls, and
5. the equilibrium urban employment rate rises, i.e. there are fewer openly unemployed engaged in job search.

(Fields, 1975, p.175).

It should be clear that the significance of the Fields' model will depend on the extent to which it conforms to reality.

The implication which particularly needs to be scrutinised is that the urban informal economy acts as a buffer to unemployment, being a third best option as a long-term prospect, since the model predicts that the informal wage will be even lower than the average product of labour in agriculture.

The idea that informal work is a cushion against frictional unemployment was put forward strongly by Hart (1973). Using a case study approach, he tried to show that the informal sector in Ghana could "...act as a buffer, for those who are 'out of work', against destitution or dependence on others." (p.81)

It cannot be denied that in Zimbabwe informal self-employment does act in a buffer capacity to some extent. However, whether this is its primary rôle is open to dispute. All the studies which have been done in Zimbabwe, and mentioned in the biblio-

graphy to this text, mention the local informal sector as a permanent rather than a temporary source of employment.

Di Seager's 1977 study of Derbyshire squatter camp outside Harare showed that over 80% of the camp's residents were urban dwellers of over six years standing. While a number commuted to formal employment in the city, many were permanently informally employed.

In more concrete terms, a 1973 study of Hartley (Cheguta) (Davies, 1978) found that the average income in the informal sector exceeded the average offered by formal employment in domestic service, agriculture and mining, the three sectors which absorbed the bulk of the unskilled labour in formal employment (p.8). These figures are deceptive in that they exclude allowances for food, clothing, accommodation and other benefits provided by formal sector employers. Nevertheless, Davies's conclusion seems justified by the extent of the quoted discrepancies between informal earnings and those in these three formal sector occupations.

Even taking into account the insecurity generated by the absence of a contract to guarantee employment, Davies found that "...most informal workers are at least no worse off - in terms of income and security - than their counterparts in formal employment" (ibid., p.10). He added that the informal sector employment is not only viable, but "...is also often economically preferable to formal work" (ibid., p.10).

The same conclusion may be drawn from studies of the informal sector in Bulawayo and Harare. The data collected for this study showed that 74% of the informal clothing, shoe repair and upholstery enterprises approached, had been operating for over 10 years. Their informal employment was not generally regarded as a second-best by them. Even amongst the less financially successful, a number said that they would not enter formal employment at the going wage rates since they preferred the freedom of action given by self-employment. To these must be added the sizeable group who remain self-employed from religious conviction, in accordance with the tenets of the Apostolic Church (M'Apostoli). Indeed, the recent University of Zimbabwe study showed that only 41% of urban informal sector respondents would accept factory jobs (the most favoured of the formal sector options) at salaries of under Z\$300/month.<sup>1</sup>

All of these observations have pointed to the informal sector as a viable first choice by the worker. A caveat which must be taken into account, however, is that these were responses by those actually in the sector rather than the population as a whole. 49% of the University of Zimbabwe survey's urban respondents indicated that they entered the informal sector because they could not find formal employment, while only 31% entered because of a belief that it would pay better or from a preference for independence.

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1. Assuming that purchasing power parity holds between South Africa and Zimbabwe, which is not unreasonable since the relatively low price of staples and accommodation in Zimbabwe is accompanied by high prices on imported items and luxuries, the sum of Z\$300 would be roughly equivalent to R375.

The belief that the informal sector is more than a simple buffer against frictional unemployment also has exponents in West and East Africa. Nihan and Jourdain (1978) viewed it as

"...a magnet for workers who have been able to build up sufficient capital in the industrial sector, or even in commerce, to set up in business on their own and thus escape the constraints of a work pattern that is often inimical to their way of life."  
(p.713)

They add that 93% of informal manufacturers in their Nouakahott survey had profits equal to or greater than the wage of a skilled worker in the modern sector.

The indication is that the informal sector serves a dual function, acting as a primary employer to a substantial portion of the population, for whom it provides reasonable incomes and security, and also as a buffer against poverty for a floating population of new migrants and frictionally unemployed. The capital and skill requirements which tend to typify the former group are generally accompanied by competitive incomes, as would be expected in a market economy in which the individual is free to sell his labour as he likes. The occupations of the latter group, however, are more strictly those described by the early literature on the subject, in particular with regard to ease of entry through low capital and skill requirements, and hence low profit margins.

## 1.2 INFORMAL PRODUCTION, THE NEO-CLASSICAL PARADIGM AND TECHNOLOGICAL DUALISM

In the tradition of conservative economics, sectoral dualism is not the only source suggested for the informal sector. Technological dualism has also been presented as a progenitor of informalism. It is thus possible to explain the existence of the informal sector in terms of the fixed proportions production theory of Leontieff and of Eckaus (1955).

If the manufacture of an item requires fixed amounts of capital and labour, and the distribution of income among the population is such that capital intensive goods are required (as is expected where the bulk of purchasing power is in the hands of the wealthy), the result is a high capital/labour ratio in production, irrespective of factor abundance and prices.

This suggests that a bi-modal distribution of income, such as that prevailing in Rhodesia/Zimbabwe, would result in demand for two types of good, one characteristically capital-intensive and geared to the high income group; and a secondary labour-intensive low price set of goods aimed at the lower income groups. The relevance of this theory within a single industry is one of the issues at stake in the analysis of the production functions in Chapter V.

It is important to note the distinction which the fixed factor proportions thesis makes to the production concepts underlying the idea of the informal sector.

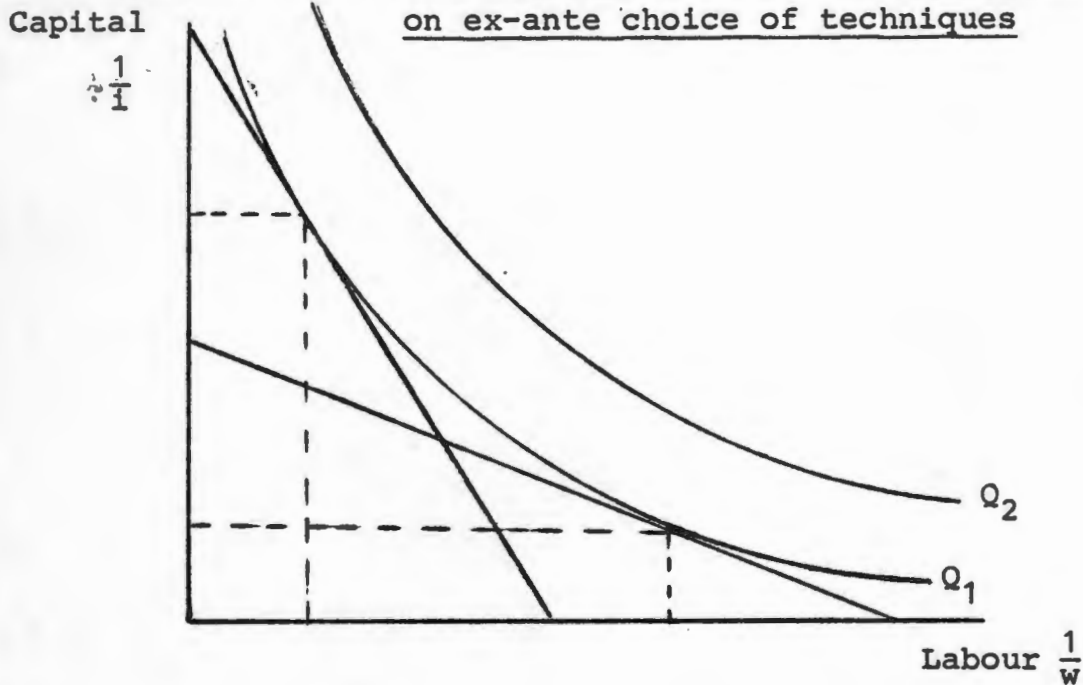
The theory heretofore has been that factors of production may be substituted for one another in varying proportions in the manufacture of a homogeneous product. The factor mix providing economic and productive efficiency is therefore found by a simple process of constrained efficiency maximization; graphically using the point of tangency between an isocost representing the appropriate factor price ratio, and the isoquant denoting the desired level of output; or algebraically using the Lagrangean function. (See, for example, Sydsaeter, 1981, pp.167/70.)

The implication of this is that, as the factor prices between the two sectors vary, so too will the ratios of factor inputs. It is generally assumed that the informal sector prices its labour at a lower level than does the formal sector, and will therefore choose a more labour-intensive production system, given equivalent prices of capital equipment, in order to product a given output. (See Diagram 1).

The relative price dimension of the choice of techniques (described by Forsyth et al, 1980, as the rotation effect) has been the subject of abundant debate and empirical testing. Pack (1976) suggested that there is ex ante choice available, even if the capital/labour ratio is fixed once production has commenced. Moreover, good management can achieve disembodied productivity gains in both capital and labour.

Diagram 1

The effects of relative factor abundance  
on ex-ante choice of techniques



The seminal work in this field, Eckaus's (1955) article on factor proportions, showed that it is possible to have variable production coefficients at one output level, and fixed coefficients at another. With this as a base, he indicated that the persistence of under- and unemployment, and the co-existence of labour-intensive and capital-intensive methods in the production of a single good may result from imperfections in the factor markets and from limited technological substitutability of factors, i.e. fixed coefficients of production.

The advantage of informal production methods is that they do allow variable production coefficients and therefore lead to the more efficient allocation of factors. In these terms, sectoral duality should contribute to full employment!

The small firm, by virtue of the direct relationship between ownership and control, and between work effort and rewards, may well be in a better position to avoid X-inefficiency than would its larger competitors. (X-efficiency being the case when costs are managerially minimised, given current information and in the presence of the objectively appropriate technology. See Leibenstein, 1966.)

In terms of the neo-classical growth models, the opinions on substitutability of factors of production have given rise to three basic divisions: putty-putty, putty-clay, clay-clay.

("'putty' stands for capital in a 'malleable' state, which can be made into equipment requiring capital/labour ratios of various magnitudes; 'clay' stands for capital in a 'hardened' state, its use requiring one unique capital/labour ratio.")  
(Wan, 1971, p.148)

Where capital is malleable, both ex-ante and ex-post, a putty-putty model (e.g. early Solow's) is said to exist. Given the lesser specialisation of capital within the informal sector, this seems a more reasonable expectation from informal producers than from formal ones.

Ex-ante substitutability only, as postulated by Pack (1976), suggests a putty-clay model, such as Johansen's or Phelps's (see Wan, 1971), while non-substitutability (in any event) gives a clay-clay model. (For example, Solow et al, 1966).

If, as Eckaus suggests (op.cit.), capital becomes less substitutable as output increases, then it seems reasonable to apply different models within an economy operating in conditions of techno-

logical dualism. Taking the idea of a technological dualism (manifested in distinctive production methods for the formal and the informal sectors) to its logical conclusion, the production potential of each sector should be analysable in terms of the appropriate model. For this reason, one of the principal empirical aims of this study was to ascertain whether, in fact, the production methods used in the two sectors were significantly different. (See Chapter V.)

### 1.3 THE BENIGN/SUBORDINATION DEBATE

The view of the informal sector presented thus far has followed essentially classical lines. The leading alternative to this approach has been presented by the neo-Marxist school and is based, appropriately, on a dialectical treatment of the informal sector. Thus, while the question of the neo-classical economist is: does the informal economy have a rôle to play in the growth of the economy and in the provision of employment? the neo-Marxist's central query concerns the nature of petty production's contribution to the class struggle.

Tokman (1977) presented a summary of the theory pertaining to the informal economy in which he suggested that a polarisation of views had emerged in the literature, with an optimistic "benign" approach being countered by a pessimistic "subordination" view. While neo-Marxists were the sole contributors to the latter approach, there was nevertheless an element of Marxian thought amongst some of the "benign" school's members.

Tokman's breakdown is not simply along lines of neo-classical vs. neo-Marxists thought, but rather in terms of the nature and effects on growth of intersectoral articulation.

Benign relationships, in Tokman's (1977) classification, have as their central feature the capacity for growth of the informal sector, irrespective of whether it is interacting with the formal economy (complementary), or is independent of it (dualism). The latter is evident where no formal enterprise exists and the demands of a burgeoning market are met by an expanding informal sector, such as the situation described in Lawson's Accra study (Lawson, 1971). The former situation presumes the existence of a mutually advantageous intersectoral trade, i.e. a symbiotic relationship in which the informal entrepreneur expands formal markets by acting as a small-scale retailer of their products, or alternatively, lowers their costs by purchasing offcuts, rejects and scrap, which would not otherwise be sold.

There is, of course, nothing inherently wrong with the informal sector lowering the costs of formal manufacturers. However, it has been held - particularly by the neo-Marxist development school - that this may result in no more than a rise in the rate of exploitation. Its origins seem to be jointly with the centre/periphery view of international trade (e.g. Prebisch), and the marginalisation theories of Quijano (1974) and Arrighi and Saul (1968), which perceived the rate of exploitation in industry as being raised by the development of a reserve army of urban labour.

The crucial point in the argument is that subordinate status may affect both the product and factor markets, and allow the appropriation of the informal producers' surpluses to the formal sector.

A spectrum of opinion lies between Tokman's two poles. However, market-oriented economists have generally tended to the benign view. Thus the various ILO reports (1972, 1976, etc.) would be fitted into this category, as would the "small is beautiful" school, headed by Schumacher and those others whose prime concern is the employment-generating capacity of the small scale enterprise (SSE) and hence, by implication, the capacity for development of the informal sector, in which lie the roots of the SSE.

An important aspect of the benign approach is the general lack of intersectoral competition for markets based on the assumption that, although the products of the two sectors may offer similar services, they are nevertheless not identical in the utility packages they offer. Ceteris paribus, it will therefore be the structures of the respective demand schedules which will determine their market shares. This brings one back to the Eckaus (1955) argument, already referred to on p.10, that the relationship between the community indifference map and the PPF will indicate whether the appropriate product mix involves underemployment or not, and if so, whether such underemployment is likely to expand over time.

If one were to take the basic point of the "benign" school and accept that employment in the informal sector will rise, despite

interaction with the formal sector, the problem of intersectoral income disparities would still remain: does the high degree of competitiveness between enterprises engaged in the informal retailing of formally produced goods prevent these enterprises obtaining more than the minimum subsistence wage? i.e. Can the informal operator obtain an economic rent in a labour surplus economy, with no barriers to entry? If he cannot, then complementary intersectoral relations will result in a failure to accumulate capital by informal enterprises and hence render any future expansion by them unlikely.

The point at issue is whether or not the informal sector has the capacity to accumulate capital. If not, then its stimulation in the context of a competitive labour surplus economy would be marked by an influx of new operators to the sector, competing down individual revenues to a subsistence level and therefore preventing saving and capital accumulation.

There is little empirical reason to doubt that this scenario is, for the most part, representative of the informal retailing of foodstuffs and factory made goods. Significantly, however, petty retailing in Zimbabwe is rarely performed by the permanent male breadwinner of a household, but almost always by women and children, although a few of these are the sole providers for their families. Although this group is large, it does not constitute the bulk of the informal sector. Indeed, Sr. Veronica (Brand, 1982) found that 25% of her respondents in Harare were engaged in informal activities only to supplement their families' incomes.

The observed difficulties experienced by petty retailers trying to accumulate capital are by no means insurmountable; a number of storekeepers interviewed stated that they had begun their careers in precisely this way. They represent, however, an extremely small proportion of the total numbers who have been engaged in this occupation over the years. In terms of informal retailing, therefore, there seems little justification for the total acceptance of the benign approach.

On the other hand, there is little reason to doubt that in informal production, where barriers to entry in the forms of skill and capital requirements, and legislation, exist, levels of income above subsistence should be earned and sustained. This need not refute the subordination argument since such a refutation would only be implied by an empirical observation that economic rents do not accrue to informal sector entrepreneurs in the long run.

Skill and capital shortages are not the only limitations to entry. This is especially the case in Zimbabwean municipalities where market imperfection is introduced and maintained by a council ruling that small enterprises should not open in areas which are already (in council's opinion) adequately served. As a result of this exogenous constraint on the smallscale sector's expansion, many of those capable of entry into the informal sector, by virtue of entrepreneurial or technical skill, and possession of capital, being denied access to their markets, are unable to operate and, therefore, to accumulate further capital, expand their operations and increase their incomes over time.

The ability of informal sector entrepreneurs to maintain their viability in the face of apparently increased competition from new entrants may also be explained by the high proportion of such new entrants to the sector who operate as employees rather than employers. That is to say, although some enter into competition in their own rights, others become workers in a highly competitive labour market in which official minimum wage legislation does not really apply. The wage is, therefore, competed down steadily, although imperfections, such as the observed preference for employment of family members, may prevent it dropping to the marginal product of labour.

New migrants will, therefore, decrease informal production costs, and increase the market facing the informal firm, unless they actually possess the capital and entrepreneurial skill to compete in the product rather than the labour market.

The "benign" view, taken in Nihan et al's various West African studies (1978, 1979, 1981) show that the informal sector operator generally does as well as, or better than, a formal sector employee with equivalent qualifications. They do make the point, however, that their figures are biased upwards by the use of family and apprentice labour. (This seems to suggest extended rather than immediate family). A more accurate estimate of the position might be obtained, therefore, by taking into account family rather than personal incomes.

The low wages of informal employees, and in particular of apprentices, need not imply high levels of exploitation.

Clearly, exploitation would not be implied if the workers were members of the operator's household, and need not, if an apprentice regarded his training as part of the reward package for his services (although a surplus would still be accruing to the employer). The concepts of worker and sectoral exploitation leads directly into the "subordination" or "dependency" approach to the informal sector.

The idea of sectoral exploitation is not a new one. Schmitz (1982) details Lenin's arguments on direct exploitation as a result of subcontracting to small-scale and home enterprises. Lenin held that official support of small-scale enterprises would have three adverse results:

- (i) the benefits would accrue to firms putting out work as a result of fierce competition amongst those trying to obtain contracts;
- (ii) it would preserve conditions in the contractee's workplace worse than those in factories, and
- (iii) it would retard the development of industry and capitalism. (Schmitz, 1982, pp.22/23 and Arrighi and Saul, 1973, pp.17/18).

These are all forceful arguments, however, they may be countered by arguing that if subcontracting allows firms to cover costs and make a small profit with low risk (and be therefore especially sought after in slack periods), then there is no reason why it should be condemned. It reduces the risk of business failure, allows steady employment and enhances competition in an industry which might otherwise tend to extreme

concentration. The results of the questionnaire, which is to be discussed in Chapter IV, showed, however, that subcontracting was almost unknown amongst informal clothing producers, although it existed amongst the smaller and newer factories. In this respect, the Zimbabwean clothing industry differs substantially from, for example, that in Britain and the Far East, where putting-out is a fundamental feature of the productive system.

Subcontracting and putting out are reflected in local formal clothing production by "cut, make and trim" (CMT) operations, a number of firms actually concentrating on this form of production. In this system, the purchaser (generally a retail firm) commissions a factory to produce a line of garments for it and provides the materials required to do so. The costs of the producer are reduced, hence this system suits particularly undercapitalised new firms whose only alternative would be through factoring to cover costs.

In terms of informal production, the closest equivalent is bespoke tailoring; however, this may be changing. Where small-scale enterprises in the Zimbabwean clothing industry have been producing to satisfy private sector contracts, these were, till recently, for the actual user rather than for resale, e.g. mission schools and hotels would contract an enterprise to provide them with uniforms. In the last year, however, a number of African-owned small-scale CMT operations have emerged, sponsored by existing factories attempting to diversify risks by broadening their spectrum of productive methods. (See Chapter II).

The Leninist argument leads to the question at the core of the subordination argument: Does sectoral exploitation necessarily imply that the exploited industries have their growth constrained? Attempting to answer this question within the confines of the "subordination" approach, two arguments seem to have emerged: marginalisation and involution, the latter growing to a degree out of the former.

Marginalisation theory suggests that the small enterprise is marginalised by the capital-intensive production methods of large firms within the Third World, i.e. such production methods not only reduce the labour/output ratio in the formal sector, but also reduce the viability of the informal sector, which cannot compete with cheap mass-produced goods.

The effects of marginalisation would be worsened by the existence of a labour aristocracy, a concept which, it must be admitted, has been vigorously disputed, and, to a degree, withdrawn from circulation by its authors (see Peace, A., and Saul, J.S. in Sandbrook, R. & Cohen, R. (eds.) 1975). It would imply, in terms of Todaro's analysis, that the flow of rural migrants would rise with unionisation until it is perceived that the probability of employment has fallen. However, vested interest would harden the behaviour patterns of those already in formal employment, thus forcing down wages in the informal sector, which would then be supporting an additional population burden.

The problem with the marginalisation thesis is well summarised by Mkandawire (1983) on the grounds that "subordination involves

not marginalisation but 'exploitative integration'." Following Amin (1974), she comments that:

"While, historically, capitalism in the centre capitalist economies strove for and achieved dominance and exclusivity, in the periphery capitalism has managed to be dominant without being exclusive."

The view that intersectoral articulation leads to exploitation rather than marginalisation has been taken by a number of prominent writers on the informal sector in Africa, including Davies (1978), Leys (1975) and Gerry (1979). Presenting a critique of the ILO's Kenya Report, Leys argued that the informal and formal sectors were already articulated in that the existence of the former provided cheap goods and therefore allowed lower wages in the latter. In addition, he regarded the informal sector as an employer of labour, rather than as a provider of self and family employment opportunities. These views led him to describe the informal sector as

"...a euphemism for the particularly intense form of exploitation to which the articulation of the capitalist and peasant modes of production gave rise...*a system of very intense exploitation of labour with very low wages and often very long hours, underpinned by the constant pressure for work from the 'reserve army' of job seekers.*"  
(Leys, 1975, p.167)

By contrast, Sandbrook, in a statement developed from the ideas of Foster, Carter, Quijano, Godfrey and Roberts on the marginalisation of petty producers, has stressed involution as a cause of reduced informal viability. Claiming that the socio-political structure reflects "the 'hegemony' of the oligopolistic capitalist mode of production", he takes a political view of inter-

sectoral relations and claims that

"...the prospect for the informal sector is neither evolution into larger more productive enterprises nor even displacement by large capitalist firms. It is instead involution, a situation in which more and more people share stagnant markets among themselves. Petty economic activities will continue to bear the cost of the failure of the labour force. Hence, more intensive competition, widespread underemployment... instability of employment and, in consequence, low and even declining, real incomes will be the lot of most of those consigned to marginal activities."

(Sandbrook, 1982, pp.63/64)

Viewed in these terms, the only escape for members of the petty economy is, therefore, through political changes which would remove the power base on which the "oligopolistic capitalists rest". The political approach to intersectoral relations, especially in states such as Zimbabwe, which have recently experienced radical changes in their political superstructures, therefore warrants further examination. (See Chapter III).

The nature of the conflict between petty producers and oligopoly capital is naturally expected to alter after a change in government from a colonial or settler administration to independent majority rule.

Arrighi (Arrighi & Saul (eds.), 1973, pp.109-114) argues that in newly independent states there has been a move away from portfolio investment following the loss of capital and skills with the emigration of the settler population. Certainly there has been a marked outflow of skills, and despite exchange control, also of capital, from Zimbabwe, not merely since independ-

ence, but antedating it by some three or four years from the period when the combination of civil war and economic depression reduced the enthusiasm of the White Rhodesian public.

Noticeably, however, there has been little movement of multinational capital into the country, with the exception of a major investment by the Heinz Group. This is important since the relationship between a small-scale African-owned enterprise and the foreign corporations is likely to differ substantially from that which it had with settler enterprises.

In addition to the change in the structure of the business community, the emigration of "middle bourgeoisie" from the country has changed consumption patterns. The business community is competing for the custom of African consumers at whom it is now gearing its marketing strategies. The informal sector has operated, by and large, in the African market and the switch in emphasis of formal marketing strategies may have implications for the market facing petty producers.

It has been mentioned that the products of the two sectors compete in terms of offering similar, but not homogeneous, services. An effective advertising campaign might reduce the apparent similarity of the utility packages offered by the products of the two sectors (since only those of the formal sector would presumably satisfy the wants created by an advertising campaign). Langdon (1975) pointed out that in Kenya multinational corporations (and, by inference, the formal sector) attempt to transform tastes as well as to cater for indigenous demand; "...redefining the need to drink into demand for Coke or Pepsi".

Similarly, Lebrun and Gerry (1975, p.16) showed that the "petty commodity producers" will be weakened by the changing of tastes and fashions by capitalist enterprise, especially where this is towards goods which cannot be produced or serviced by petty producers and artisans.

The brand name phenomenon allows for short-run monopoly profits as Chamberlin and Joan Robinson showed in the 1930s. In the small market of an LDC, where large-scale advertising is likely to be within the grasp of only a few, and where access to the market by foreign capital is limited by the lack of reliable information overseas, these profits may, however, persist in the long run. Marris (1968) showed that in Kenya small-scale African businessmen did not, however, tend to differentiate their products, their marketing strategy falling short of the enterprise they showed in other respects.

Monopolistic competition and the associated marketing techniques may, however, lead to benefits through improvements in the range and quality of goods offered, benefits which, in Lancaster's (1979) view counterbalance the costs of deadweight loss.

Within the context of an LDC, however, the idea that there is no loss of public welfare through formal sector imperfect competition is countered by the associated blockage of informal operators' access to the product market.

With this as a foundation, one can see the logic of Tokman's (1977) argument that part of the subordination of the informal sector lies in its inability to expand in the face of oligopoly

markets since the small-scale enterprise cannot increase in size beyond some critical point, without entering into direct competition with established big business.

A further constraint on the long-term growth of the informal economy is the low income elasticity of demand for its goods. The inferior nature of many informal sector products will prevent demand increasing as township populations become more affluent. To some extent, this may be alleviated by increased demand for the sector's products by newly urbanised migrants; however, the competitive nature of the informal economy might keep down the sizes of petty producers till the market has expanded sufficiently to warrant the entry of large firms. At this point, the entry of oligopoly capital will curtail development of the petty producers in the manner described by Tokman. However, the competitive nature of the informal economy might keep down the size of the enterprises in it until the level of demand is sufficient to warrant the existence of large firms, at which point one re-enters the oligopoly situation described by Tokman.

The inferior nature of the bulk of the informal sector's products tends to leave them with low income markets, while the large number of enterprises involved keeps turnover per firm low and profits are therefore severely curtailed. This has been propounded as an aspect of the exploitative results of informal sectorism. Schmitz (1982), however, contests this view on three grounds. First, empirically, he shows that the South American experience (at any rate) does not justify it, Then, on theoretical grounds, he continues:

'...if the "subsidy" (to the formal sector) is thought to be due to extra low levels of remuneration of petty producers, one needs to know why this remuneration is so low. If it is forced on them by the greater efficiency of expanding capitalist production, then clearly there is no subsidy; the remuneration is low because...the amount of labour time is higher than socially necessary.' (p.18)

Schmitz's third point is that if, by contrast, low informal wages are a result of high levels of competition, it must be asked whether the surplus is being channeled out of the sector or not. If it is going to intermediaries or to members of the rural subsistence economy, rather than directly in cheap goods to the workers from the formal sector, then the exploitation arguments of Leys, Davies and Gerry lose impact.

A question to be answered, therefore, and one on which little Zimbabwean evidence seems available, is what proportion of informal output is sold to workers from the formal sector? Appearances indicate that much informal production is geared to the rural market, which is largely traditional and to other members of the informal sector. However, the sales of informally vended foodstuffs, etc., aimed at employees of formal commerce and industry, though not significantly cheaper than they would be if purchased through formal channels in the city centre, thrive because of the convenience and service they offer. Since 1930/31, the operation of European or Asian businesses in the townships has been explicitly forbidden and competition constrained. Hence African vendors can buy goods in urban markets and resell them on the major routes in and out of the townships.

#### 1.4 DISSENTING VIEWS

A tacit assumption which has been made thus far is that the informal sector is clearly distinguishable through its characteristics from the formal sector, i.e. that there is a distinct dualism within the urban economy. This view has been strongly contested on two major counts. Firstly, that it is inadequate: House (1984) contends that the "informal economy" is not a homogeneous unit and cannot be described as one. Rather, he holds that a disaggregation of it into at least two subsections is required to give the concept analytical relevance. The second count on which the concept of the informal sector has been challenged forms a complete contrast to the first, it being contended that there is no sectoral duality, but rather a unity of the poor, irrespective of the nature of their employment.

Looking first at the objection propounded by House (1984): The 1977 survey of the Nairobi informal sector had shown that observed average monthly earnings in the sector varied from sh.58 (shoe repair) to sh.602 (vehicle repair), while the legal minimum wage was sh.350. This suggested heterogeneity of incomes, possibly based on skill and capital requirements within the subsections of the informal economy. House, however, went beyond this interpretation and distinguished between an "intermediate" sector and the "community of the poor", the former being dynamic and vertically mobile, and the latter stagnant, performing menial tasks for a subsistence return to its labour.

In addition to displaying a correlation between levels of schooling and business success, and mentioning that 45% of the intermediate group kept books, as opposed to 25% of the poor, House added the following table (which included a residual sample) to illustrate the differences:

Table 1: Average levels of various economic indicators for enterprises in subgroups of the Informal Sector

	Intermediate Sector	Residual Group	Community of the Poor
Initial Capital	72	44	51
Current Capital	704	299	329
Capital/Output	0,2	0,5	1,4
Capital/Labour	218	160	140
Weekly Sales	78	27	16
Additional Investment	483	212	180
Total Number of Improvements	2,7	2,2	2,1

(House, 1984, p.293)

Both capital and labour appear more productive in the intermediate group, and it is clearly more dynamic, absolute growth in capital being over two and a half times that among the community of the poor, almost all of it, he says, being from retained earnings. Over and above the physical characteristics of the intermediate sector's operations, House claims that they may be recognised by the extent of their commitment to their enterprises (only 25% said they would move to formal employment at a monthly wage of sh.1 000<sup>1</sup>, while 61% of the poor were

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1. Approximately R135 at the exchange rates on 1/3/85, presuming purchasing power parity.

prepared to do so, reflecting the lack of prospects that this group see for themselves.)

Mkandawire (1983) criticized House for his failure to show why the success of the intermediate group should not stimulate an influx of rural migrants, each one competing away intermediate sector profits. House, however, seems safe on this point since the size of the intermediate group seems predicated by the levels of expertise, capital and entrepreneurial flair at its disposal, and all three elements are likely to be in short supply among the newly urbanised.

The second objection to the concept of the informal sector was put succinctly by Leys (1975) who regarded the ILO's view of the situation as "...a misrepresentation of the modes of production in Kenya, and their mutual articulation". His contention is that there is exploitation of labour in the "informal sector", the worker there standing in the same relation to his employer as he would do in formal employment. Extending government and formal sector contracts to the indigenous petty bourgeoisie would, therefore, only result in exploitation being "spread more evenly". This critique, therefore, encompasses both the concept of an informal sector, and the policy measure derived from it.

#### 1.5 THE INFORMAL SECTOR AND ECONOMIC GROWTH

The root of the neo-Marxist critiques of informal sector stimulation seems to lie, not in the conviction that the sector has

no contribution to make to employment and growth, but rather in the belief that its fundamentally capitalist format will prevent it from ever providing a complete solution. Indeed, by ameliorating the problems of the urban poor, the informal sector might delay that transition to socialism which could presumably solve these issues.

A complete transition to socialism seems unlikely to occur in Zimbabwe's foreseeable future. Bearing this in mind, the output and employment-creating potentials of the informal economy remain issues of importance. For this reason, the constraints on them will be briefly summarised.

The first of these constraints has been described as "blocked access" and falls under the subordination school's view of intersectoral relations. In terms of this, formal enterprises may slow the evolution of petty commodity producers by limiting their access to both product markets, as already argued, and to factor markets. This has been described as a "...lack of stable access to basic resources of production", (Quijano, 1974, p.404).

In terms of Quijano's thesis, there is a difference in technology between the new and the indigenous productive groups. This technological discontinuity would theoretically result in product and factor markets biased in favour of the large corporations. Schmitz (1982, pp.5/6) suggests that, while internal constraints are not major handicaps, external ones, such as lack of access to raw materials, may force the small-

scale enterprise into a subcontracting role with an attendant reduction in the returns to the firm's labour. In this context it must be remembered that House (1984) has shown that in Kenya a subcontracted informal operator earns sh.15 178 p.a.<sup>1</sup> more, on average, than an operator who does not accept subcontracts!

A factor which must be taken into consideration when appraising Quijano's thesis of technological discontinuity, is the existence of markets for imported secondhand capital in many third world states, a point which has been stressed by Schmitz (1982). Moreover, service activities in the informal sector have low ratios of capital to output. It must be accepted, however, that Zimbabwe's informal metal and woodworkers and clothing manufacturers have no access to the limited amount of truly high technology capital in the country. Zimbabwe, in common with much of the third world, suffers from foreign exchange shortages, and funds for the purchase of foreign technology are scarce. The result is that whatever imported equipment there is, is concentrated in industries in which no local substitute for it is available. However, essential equipment is available to those in the informal sector who can use it, and items such as sewing machines suitable for use by informal producers, have been in local production for some years.

The result is that while there are doubtless areas from which the informal sector is precluded due to the required scale of operations and the indivisibilities of capital, there are

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1. Approximately R2 050 at the exchange rates on 1/3/85, assuming purchasing power parity.

many in which these indivisibilities do not occur. Indeed, if Eckaus's argument that the MRTS is greater for small than for large firms, then the informal sector may often be using a more appropriate technology, and be in a position to benefit directly from it. (See Chapters 4 and 5.)

The centrality of capital accumulation to the development of small enterprise has been challenged by members of both of the two main streams of economic thought. Leys (in Fransman and King (eds.), 1984) asserts that Marx was incorrect in his belief that machinery had no class character, being a neutral force that only heightens labour's intensity when employed by capital. Following Rossanda he holds that "...a given technology - including machinery - reflects or embodies the relations of production in which it develops". (p.175). In a similar vein, Gerry (1978) held that the informal sector was

"...trapped in an involutory impasse, able only to reproduce its conditions of existence, often at the expense of its own standard of living and labour remuneration." (p.154)

Le Brun and Gerry (1975) made the point that the evolution from petty commodity production to small-scale capitalist enterprise was dependent on the entrepreneur's personal relations with those whom he employed and on his access to credit. On top of this was the problem of intersectoral relations. This was explicit in their statement that -

"Internal growth is almost entirely involutory, taking place against a backdrop of restrictions, constraints and distortions imposed by the dominant capitalist mode of production." (p.30)

It is true that the informal sector is in a weak position when bargaining for raw materials with monopolistic suppliers, and also that it is often dependent on supplies of scrap materials which are only suitable for use in a labour-intensive system. There are, however, other (and purely endogenous) constraints on the expansion of the sector as well as the exogenous influences mentioned thus far.

#### 1.6 CONSTRAINTS ON THE GROWTH OF THE INFORMAL SECTOR

Taking a more conservative approach, Solow (1957) held that only 12,5% of the observed productivity increase in the U.S.A. over the preceding 50 years was a result of capital accumulation (net investment). The remaining 87,5% was attributed to "technical change", both embodied and disembodied, i.e. the alleviation of internal and external constraints on growth, and improvements in the quality of capital.

Staley and Morse (1965) went out of their way to emphasise that internal (as well as external) factors serve as major constraints on the growth of small firms. Education, book-keeping ability and entrepreneurial expertise are typical of the internal problems which may face the small-scale enterprise; equally important seem to be the social barriers described by Marris (1968), which also involve intersectoral behaviour, and entrepreneurial flair, a factor of production which is unquantifiable, although its effects are clearly tangible.

It is significant in this regard to note that in House's (1984) study of the income determinants of the informal sector in Nairobi the capital/output ratio had a negative coefficient, while the capital/labour ratio's coefficient was strongly positive, suggesting that entrepreneurship (viewed here as the ability to effectively combine factors of production) is of greater importance than the simple volume of capital possessed by an informal enterprise.

Marris investigated the effectiveness of aid from Kenya's Industrial and Commercial Development Corporation to emergent entrepreneurs. In his interviews, he found that the most commonly voiced needs were for loan facilities<sup>1</sup> and managerial training. However, he noted that there seemed to be little correlation between the satisfaction of these needs and entrepreneurial success in Kenya.

Assuming a neo-Schumpeterian entrepreneur, Marris perceived two major internal constraints to business viability. The first was an ability to function within a social structure based on the extended family. The successful innovator is likely to be besieged by poorer relatives whom social mores oblige him to assist. (See also Iliffe, 1982). The second is the entrepreneur's ability to differentiate self from firm and pay himself a specified amount rather than merely appropriate the revenues of the enterprise. This not only allows for corporate savings and hence further investment, but also assists in overcoming the

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1. By contrast, Nihan and Jourdain (1978) found that only 40,5% of their informal sector interviewees in Nouakchott felt themselves constrained by a shortage of capital.

first constraint.

The first important external constraint which he brings to light is social cueing, which is directly involved in inter-sectoral articulation in economies where certain race groups are not well represented in the formal sector's managerial corps.

The problem facing the emergent Black entrepreneurial is the mutual ignorance between him and the White, Asian and westernised African hierarchy of the formal commercial and financial worlds. The various parties lack the social cues necessary to form rapid evaluations of each other, a problem especially significant in the case of the small businessman with little collateral who is in search of a loan. To some extent, this situation has been ameliorated by the Africanisation of the Zimbabwean banking system. However, of major import is the recent decision to change the usury laws, potentially allowing the wider development of small-scale private loan agencies better able to deal with the problems and needs of the individual.

Other external limitations to the development of the small-scale entrepreneur noted by Marris included lack of knowledge of the mechanisms and structures underlying the market, and lack of business contacts. Marris's remedy was therefore to advocate the establishment of a marketing service (rather than further loan agencies), to reduce market imperfections by improving consumers' and producers' knowledge of each others' needs and products. Above all, to

"...find and develop points of contact, so that the opportunities of a wide ranging economic interdependence can be realised through a corresponding network of social familiarity." (p.258)

The non-social barriers to development of informal and small-scale enterprises have long been recognised, but seem to have been most explicitly enumerated by Staley and Morse (1965) and Suttcliffe (1971). Staley and Morse gave eight factors whose existence they felt would lead to the predominance of small-scale enterprises over large ones:

Locational:

- (i) Dispersed raw materials;
- (ii) a local market and high transfer costs;
- (iii) service industries;

Process:

- (iv) Separability of manufacturing operations;
- (v) craft or precision handwork;
- (vi) simplicity of the manufacturing process - assembly or finishing operations;

Market:

- (vii) Small total markets;
- (viii) product differentiation with low-scale economies.

It should be clear from these that improvements in the economic infrastructure of a state will reduce the advantages of small enterprises producing for the local market, since it will reduce the market aberrations and frictional costs which

allow them to survive. This has been especially evident in the newly industrialised countries of the Far East where non-factory manufacturing employment has fallen sharply as the industrial base has broadened. Thus Ho (1980) shows that, between 1915 and 1940, it fell from 75% of the total in Taiwan to 25%, and Staley and Morse note that similar shifts have been evident in South Korea. They observed that, though small enterprise employment falls proportionally with the economic development of an L.D.C., it does stabilize at some point.

There has recently been a surge in belief that in the developed world, small enterprise and the "grey" market will be the sources of future growth in employment. This belief in the continuing vitality of the system engendered by free entry of small-scale entrepreneurs has been advanced by figures as diverse as Schumacher and Schumpeter.

In recent years, widespread recognition of the informal sector by non-economic bodies has brought home the significance of intersectoral relations and of official attitudes. The distinction between the benign and subordination or dependency views is crucial, not for its academic relevance, but because policy decisions hinge directly on it.

If the aim of development economics is the promotion of economic growth and public welfare, then a benign coexistence of the formal and informal sectors will suggest that the authorities can foster growth, without any adverse effect on the distribution of income, simply by stimulating the informal

economy. The potential benefits of informal sector stimulation appear immense. Thus House (1984) made the following statement on the Kenyan economy:

"If we apply Powell's estimates to the formal manufacturing sector and consider the relative changes in output and employment from an investment of K£10 000 in the two sectors we see that whereas annual output would rise by K£6 667 in the formal sector, the change in output from the informal sector would be K£10 000. In addition, and perhaps more important given Kenya's urban employment problem, whereas five new jobs would be created in the formal sector, that same investment in the informal sector would have brought about fifty five new employment opportunities. Of course, this assumes that the incremental capital to output and capital to labour ratios are equal to our estimated ratios." (p.185)<sup>1</sup>

If, by contrast, the relationship between the two sectors involved a subordinated petty commodity producing sector articulating with a dominant formal capitalist one, then the benefits of any official stimulation of the informal sector would be appropriated by the dominant socio-economic group.

Such a transfer of productive surplus could be through the informal sector's ability to lower the minimum cost of reproduction of the labour force, hence the wage rate and

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1. Testing the hypothesis that the technology employed in the informal sector reflects an LDC's resource endowments, House claimed that his expectations were borne out by the findings of Tobin and of Powell, the latter having found that the formal sector's capital/labour ratio was about seven times higher than that in the informal sector, while Tobin found capital/output ratios in the formal sector ranging between 2,5 and 1,1 as opposed to House's informal sector estimates of 1,0 for manufacturing in general, and 1,6 for tailoring.

ultimately the rate of exploitation of labour in the formal sector. Alternatively, the transfer could be through the informal economy's dependence on imported raw materials or formal sector manufactures to which it only has access through a market in which informal operators compete to purchase from monopolistic formal enterprises, whose market power allows them to make abnormal profits.

The policy implications of such a scenario might be construed as opposition to the support of the informal sector as a relief measure. Pragmatic economists among those who hold with the dependency argument, recognise that the only alternative which does not involve the development of the capitalist economy is a total restructuring of the political and economic framework of the nation. This being the case does not necessarily suggest that the informal sector should go unassisted, unless the implicit assumption is made that capitalism is so structurally unsatisfactory a doctrine that national welfare would be enhanced by the breakdown and subsequent restructuring of the economy along centrally planned lines.

Marx held that, left unaided, the pre-capitalist forms of production (i.e. those based on self-employment by artisans or the sale of excess products in a subsistence economy) would disappear in the face of capitalism. (Capital, Vol.II).

Clearly, this has not been the case in Zimbabwe. Certainly, there was a pre-capitalist economic structure (Beach, 1972; Arrighi, 1970; Malaba, 1980), and equally certainly one still exists, although very different in form. It is true that a few

occupations formerly widespread, are now absent, the artisans having been superseded by the factory producing a better, cheaper product. However, given that flexibility is one of the hallmarks of the informal sector, this need not prevent individuals remaining in self-employment elsewhere in the informal sector.

Zimbabwe is in an unusual position with regard to these policy issues. Its government propounds doctrinaire socialism, yet the bulk of the economy is operating on openly capitalist lines. Official interference in the functioning of the formal sector (exchange control, minimum wage and employment legislation, price controls, etc.) has served as one of the major stimuli to the informal sector, substantially enhancing its viability by diminishing both the competitiveness of the formal sector and its ability to absorb labour.

The Zimbabwean government is in a position to exercise its authority in support of, or against, the informal sector as it attempts to impose a more egalitarian structure on the local society. The so-called "petty bourgeoisie", amongst whom informal operators may be grouped, are regarded in socialist literature (and by party hardliners) as a conservative force. Sandbrook (1982) summarises the situation as follows:

"...the exigencies of personal survival suggest that while the petty bourgeoisie may share and indeed foster urban populism, their hostility to the establishment will not debouch into a radical critique or movement." (p.154)

Since the petty bourgeois, as much as the fully-fledged capitalist, is threatened by wholesale political change in his already unstable economic niche, his conservatism is not surprising.

This chapter has undertaken to show that there is substantial disagreement on the informal sector, with alternative theories having been presented on its origins, relations with the formal sector, development rôle and future prospects, but with no real synthesis having yet been effected. This research does not purport to provide such a theoretical synthesis. However, it will attempt to place these theories in a Zimbabwean context where each may be evaluated. The next two chapters in particular will attempt to cover the origins, sectoral relations and the status of the domestic informal economy in the face of a socialist, but pragmatic official ideology.

## CHAPTER II

### INTERSECTORAL RELATIONS IN ZIMBABWE

#### INTRODUCTION

This chapter aims at establishing the nature of the relationship between the formal and informal economies in Zimbabwe, the analysis following the theoretical issues raised in Chapter 1. The questions forming the foundation of the chapter are -

- (i) whether the relationship is exploitative of the informal sector, symbiotic, or hostile, and
- (ii) the status of the urban informal sector, vis-a-vis the rural market.

To answer these, the chapter has been split into four sections.

- II.1 Historical relations (pre-1930)
- II.2 Township enterprise post-1930 (a resumé)
- II.3 Sectoral linkages and subcontracting
- II.4 Urban-rural linkages

Although it tries to demonstrate the potential economic benefits of a viable informal sector, this chapter does not approach the problem of intersectoral resource allocation, which will be treated in Chapter V.

#### II.1 HISTORICAL RELATIONS - THE ECONOMY BEFORE 1930

Following Arrighi (1967), the history of the labour surplus economy in Zimbabwe may be traced back to the actions of the Charter Company, as it tried to safeguard the status of its

equity between 1890 and 1923, the period of its administration of the infant state. In terms of his thesis, the White settlers (all of whom had to be "skilled" and/or capitalised to the tune of at least £700 before being allowed into the country) found it in their interests to perpetuate a system in which there would be no surplus of skilled labour (Black or White).

The reserve army of labour was to be strictly unskilled and Black. Arrighi contended that in this the settler community opposed the interests of international capital. His view may, however, be contested on this point, since the multinational involvement was almost exclusively in a primary sector whose concern was with cheap and unskilled labour.

Malaba (1980) added to Arrighi's thesis, contending that the capitalist sector, not content with the alienation of the Black population from the land, also tried to restrict competition from Black capital, ensuring that the indigenous population's sole means of support outside the reserves would be the sale of its labour. The point at issue here is that both writers agreed that there had been sufficient time for the Black population near the major centres to accumulate the equipment to establish petty enterprises. Indigenous entrepreneurship is, therefore, neither new nor culturally alien to Zimbabwe's indigenous population; it emerged there as naturally as it did elsewhere in Africa. (See, e.g., Iliffe, 1983).

Malaba's central assertion, however, is that the suppression of indigenous enterprise was a deliberate act on the part of White capital to reduce the entire Black population to the status of a

pool of unskilled labour. It was not a result of competition for a limited local product market, or for factors of production between different production sectors. Rather, it constituted an attempt by the White settlers to subordinate the Black population to their needs and to appropriate their land following a pattern set by conquering and occupying forces through history. To find evidence of intersectoral relations between the (Black) informal and the (largely White) formal economies, one must look at more recent time periods. Moreover, with the progress of time, the racial nature of these relationships has become blurred<sup>stained</sup>. Increasingly, African entrepreneurs have entered the formal sector and often proved vocal in their objection to informal competition in the townships.

It must be stressed that an assertion like Theresa Chimombe's (1983) that

"Due to colonialism in the country's past, industry remained a structure designed for the needs of a white minority." (p.1)

cannot be substantiated except, perhaps, when discussing the very earliest days of White settlement. As soon as the African population entered the cash economy, they created a market for industrially produced goods. The purchasing power of the country's Black population has long been sufficient to justify the existence of enterprises catering almost solely for their needs. The question should rather be asked whether the produce of the formal sector was adequate for the needs of the local African population.

Mkandawire (1983) has asserted that,

"...historically the Zimbabwe economy was so devised as to make the informal sector virtually non-existent by encouraging provision of goods and services entering the wage basket by the formal sector itself. Whatever emerged of the informal sector was therefore marginal to the accumulation process in the formal sector." (p.19)

The implication of this statement is that White capital strove to underdevelop an extant informal sector, and to prevent the emergence onto the market of informally produced commodities. To attribute such intentions to the country's early capitalist economy would seem rather far-fetched.

That it was organised capital which dominated the country's economy (and continues to do so) is beyond dispute. The formal sector constituted the centre of the economy while the informal sector, in terms of output and employment provision, was a mere ancillary. It seems doubtful, though, that the informal sector was ever "virtually non-existent", or that any aspect of the nation's economic structure should have rendered it so. Amongst the interviewees in the Makokoba survey, a number indicated that they had been operating since the 1920s, while a substantial group had inherited their enterprises from, or been trained by, parents who had been in business between the Wars. Certainly the Jackson Commission of 1930 recognised that after 37 years of White settlement in Bulawayo, there was already a foundation of indigenous entrepreneurship which could be encouraged.

(See Ndubiwa, 1974, pp.19-24).<sup>1</sup>

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1. A similar enquiry into "conditions affecting the Native Locations in Salisbury and Gatooma" was convened under the chairmanship of H.M.G. Jackson in 1934.

What this amounts to is an assertion that formalised indigenous non-agricultural enterprise has never been effectively curtailed. Arrighi and others have suggested that access to the market was limited. However, this was in specifically agricultural lines and the objective of the early administration seems to have been increasing the land holdings of the settler community rather than any reduction in the competition facing European entrepreneurs in the provision of goods and services.

## II.2 TOWNSHIP ENTERPRISE - POST 1930s

The cut-off point for discussion of the "modern" period has been taken as 1930, this having been the year in which the Jackson Commission presented its findings. The significance of the Commission lay in its implicit recognition of the benefits of self-employment. With this as a background, they recommended the exclusion of all non-African traders from the townships in order to open avenues for the satisfaction of indigenous economic aspirations.

While the Jackson findings are in line with my belief that the authorities did not have the suppression of indigenous enterprise as a direct aim, the informal economy was nevertheless subjected to official constraints. Those impinging directly on it will be covered in the next chapter. However, indirect influences via the official curbs on township accommodation must be noted at this point.

The authorities have long frowned on squatting, successive medical officers of health and since independence, central

government, having tried to curb landlords' overcrowding of rooms with rent-paying new migrants. Official controls proved much more difficult to enforce in home ownership areas than in those suburbs where all accommodation was rented from the municipality - which had the power to refuse renewal of leases if dissatisfied with a tenant.

The result was the concentration of informal activities which had substantial negative externalities into the home ownership suburbs such as Luveve (which was opened in 1935, and only incorporated into the Greater Bulawayo area in 1971). Those informal activities which did not involve substantial negative externalities, and were therefore not prejudiced by municipal checks and controls tended to accumulate in the older suburbs such as Makokoba, which was the sole township in the municipal area until 1942.

Eight new townships were developed between 1950 and 1963, largely to cater for the industrial expansion which took place during the Federal period (1953-63). The accompanying inflow of new migrants, attracted by the prospect of urban life as an alternative to low status work in agriculture and mining, resulted in an increase in demand for goods easily supplied by informal operators. This was enhanced by two factors. The first was the municipal insistence that only African entrepreneurs be allowed to trade in the Western townships, resulting in a situation where monopoly profits could be made by those given licences to trade in these areas (premises were owned by the council and allocated by tender). The second factor has been the establishment of four markets, the largest being in Makokoba with 149

registered stalls. The visible profitability of these enterprises, and the status accorded to successful entrepreneurs (Murphree et al, 1975) must have acted as a substantial inducement to enter into commercial activity, although recent developments may have made these conclusions questionable. (See Chapter III).

Dorsey (Murphree et al, 1975) showed that six months after leaving school students with four years of senior schooling tended to be employed according to expediency rather than preference, due to the shortage of openings in the formal economy. This "surplus of unskilled - but not necessarily uneducated manpower" together with the visible leadership rôle adopted by traders in the townships, may well have been one of the roots of the informal enterprises in the townships. Enterprise appears, therefore, a natural consequence of a crisis of expectations generated by education in the face of unemployment.

### II.3 LINKAGES

The 1972 ILO Report on Kenya includes an input-output model describing the relationship between the informal and the formal economy. Their recommendations are geared at -

- (1) increasing the sizes of the direct and inverse input/output coefficients, and
- (2) shifting the composition of future increases in demand towards the sectors where the coefficients are highest.

(See ILO, 1972, pp.507/8).

There seems little possibility of accurately estimating such input/output coefficients in Zimbabwe. However, some idea of the extent of intersectoral linkages can be achieved by observation.

The ILO looked at informal linkages with government, the formal private sector and agriculture. They noted that there was almost nothing with regard to the first mentioned, and the Zimbabwean experience seems no different in this regard. The remainder of this chapter will, therefore, deal with linkages to the private sector, and to the rural areas including agriculture.

The urban informal sector can be disaggregated in a number of ways. For the purposes of this section, two groups will be identified: firstly, operators who informally retail goods made by others (often factory made), and secondly, those whose labour time is spent directly in the informal manufacture of goods, or the provision of services.

The backward linkages from the formal sector to the first mentioned group are direct. Goods are purchased by vendors for re-sale in the township. Generally, the trade is in high turnover, low-priced items such as foodstuffs purchased in bulk from the markets and then divided into smaller units. In addition, items such as reject garments and second-hand goods from auctions and door-to-door purchasing are handled. A further, and not inconsiderable traffic, is that in stolen goods. While pilfering by workers for their personal use affects the profitability of formal enterprises, the widespread organised theft of raw materials and finished goods, which are passed

from workers to accomplices outside the factory or shop, constitutes a direct linkage to the informal sector. A number of the factory owners interviewed mentioned the problem, adding that their difficulties were compounded by the employment legislation currently in force which, while allowing dismissal for such activities, involves a substantial administrative burden. This situation will be amplified later in this chapter.

While the informal economy's backward linkages are clearly visible, its forward relations to the formal sector are less obvious. Certainly, formal businessmen do not buy from the townships' petty retailers, but their workers do. Thus, although a number of factories have built canteens for their employees, others still have workers cooking over open fires at midday. The result is a market for the foodstuffs hawked in the streets of the industrial sites every day. Whilst this is easily perceived, the two following points are less clear:

- (a) To what extent do informal retailers keep the lower income group's cost of living, and hence the minimum wage rate, down?
- (b) Are the petty retailers largely members of families of formal sector employees, i.e., is an inadequate family income (where only the breadwinner is in formal employment) being eked out by recourse to the informal sector, which raises incomes through employment provision (as well as increasing real income by offering goods at lower prices)?

The former question is the easier to clarify: Zimbabwe may be a labour surplus economy. However, salaries are not set by

market forces exclusively. Lowering the cost of reproduction of the workforce will, therefore, have a limited effect on nominal wages.

In order to evaluate the significance of the second question, however, some estimate must be made of the number of women in the informal economy who are not family heads, and the nature of their involvement. Unfortunately, there is a built-in downward bias in many surveys of the economic activities of females and minors. Although the current government has expended considerable effort on improving the status of Zimbabwean women, their primary occupation remains domestic. Petty production and retailing by women are frequently only spare time activities, often unlicensed, low profile and hence understated in the surveys. With this caveat in mind, the following figures remain illustrative:

Table II.3.1      Percentage Distribution of Repondents  
by Sex and Marital Status.  
(Informal operators, Mazaba, Harare, 1982)

	Male		Female		Total	
	No.	%	No.	%	No.	%
Single	20	15,0	2	3,9	22	12,0
Married	98	73,7	17	33,3	115	61,5
Widowed	8	6,0	26	51,0	34	18,5
Divorced	7	5,3	6	11,8	13	7,1
Total:	133	100,0	51	100,0	184	100,0

Source: Brand, 1982, p.5.

In the cases of both sexes, it can be seen that family breadwinners were in the majority: 74% of male respondents were married, while 63% of women were widows or divorcees and hence remained family breadwinners. The group with whom we are concerned at the moment, however, are the 33,3% of female respondents whose activities will generally have remained subordinate to the husbands as a result of the dominant status of the male in Zimbabwe's African society.

Sr. Veronica's figures suggest that informal supplementation of family incomes by women is a feature of the local economy, although the table does not give details of spouses' occupations. Similarly, the Bulawayo data, evaluated in Chapter IV, showed a substantial level of female informal activity. (See also Chapter V, Appendix I). It was, however, apparent that relatively few women engaged in clothing manufacture entered the "intermediate" economy. Bespoke tailoring, for example, seems a largely male preserve, with those women involved being frequently former teachers, nurses or shop assistants, who have been liberated from traditional social patterns by a more affluent and westernised lifestyle.

The apparent tendency for women and children to operate in the highly competitive retailing activities of the urban informal economy, or in low capital handicrafts such as crochet work, may be attributed to capital shortages. These are to some extent explained by sociological factors, in particular patriarchal control over family earnings. The immediacy of the working wife's awareness of family needs, and her husband's ostensible control over her earnings, encourages a tendency

to spend her income on goods for current consumption as soon as it accrues. Savings, and therefore capital accumulation propensities, are thereby lessened and women are largely confined to low capital, low profit informal retailing. By contrast, male participants in informal retailing benefit from socially enhanced access to capital, and are often able to acquire handcarts and barrows which allow scale economies by decreasing the travelling time per unit sold; allowing bulk buying and larger turnovers.

The use of child labour in production and retailing, while less obvious, is also a feature of the informal economy. In Zimbabwe its use is largely within the home or in petty retailing, and concern is only expressed when children retail food and cigarettes in the township beergardens. Observation suggests that women and minors do make up at least a substantial portion of the petty retailing sector. Certainly, many of the women in it are breadwinners, although the general impression remains that this form of activity is primarily an income supplement.<sup>1</sup>

In summary, while there are substantial direct linkages backwards from the formal sector to informal retailing, there is no related reciprocal linkage. However, petty commodity retailers could have an indirect effect on the availability of labour at prevailing wage rates. Given that there is a shortage of commercial and industrial employment opportunities at the

1. In this connection, see Gadzanwa, R.B. "The Policy Implications of Women's involvement in the informal sector in Zimbabwe", and the Draft Paper, "The rôle of women in the informal sector", both presented at the Informal Sector Study Seminar, Harare, 1983.

prescribed minimum wage, the current economic impact of such an effect may be wholly discounted. Rather, one can regard the informal retailer as the provider of a useful service adding efficiency to the distributive function of the market.

It has till now been assumed that informal sector retailing of foodstuffs would result in only subsistence incomes, due to the highly competitive nature of this activity within the context of a labour surplus economy. The assumption seems justified, despite the existence of an apparent imperfection in informal price fixing. The existence of price collusion (or at the least of a general two-part tariff) was suggested in an interview with Dr Eric Gargett, then of the Bulawayo Department of Housing and Community Services, and was later confirmed by observation. Prices in any single vending area were held at relatively constant levels till late afternoon, when the flow of returning workers was over. At this point, the apparent supply curve steepened and prices fell sharply. It is noteworthy that this was less distinct at those vending sites which offered storage facilities.

In the sphere of manufacturing, intersectoral linkages take a noticeably different form. Leaving aside intersectoral competition which will be treated later, the relationships are both more extensive and more bilateral.

The conspicuous feature of the linkages is that they extend beyond the boundaries of the country. The raw materials of both sectors frequently have an imported component. In the past, it

was practice to allow foreign currency allocations first to produce manufacturing for export. The remaining foreign exchange was then distributed largely on the basis of the allocations of the preceding year. The system's prime flaws were twofold:

- (a) Enterprises needing foreign exchange to obtain the raw materials to allow entry into foreign markets were frequently unable to obtain it. Moreover, replacement of capital was often delayed past the optimum period by the necessity to use all available foreign currency to purchase raw inputs for immediate processing and re-export, thereby generally lowering the long-run efficiency of the productive process.
- (b) Foreign exchange could only be made available to registered enterprises after they had applied to the Reserve Bank via their own commercial banks. It was found that the bulk of informal interviewees did not have accounts with commercial banks. No matter how limited their needs, informal operators were therefore constrained to purchasing whatever imported materials they required at the inflated prices prevailing within the country. (While mark-up controls on imports have existed for some time, they were not adequate in this regard.)

The result of the system has been an unnecessarily labour-intensive production process for reasons which will be elaborated later.

The post-independence government changed the system markedly in an attempt to establish new African owned enterprises. The results

however, were frequently unsatisfactory. Exporting manufacturers found themselves short of the wherewithal to continue competing overseas, and despite the lifting of sanctions, foreign aid, record tobacco crops and the end of the civil war in the country, the economy appeared increasingly short of foreign currency. It seems fair to say that there was a tendency for the new owners of foreign exchange allocations to try to profit out of them with the minimum of effort. The result was the importation of finished consumer goods, or the sale of the allocation, with a suitable mark-up, to a manufacturer with export orders to meet. These practices reduced the viability of domestic industry and seem to have been a major factor in the fall in business expectations and sentiments post-1981. The informal sector, however, did not benefit at all from the new system of foreign exchange allocation, the application of exchange controls having been no less rigorous on it than on the formal economy.

A well-known example is that of African crochet workers. The crochet hooks used are available locally, the cotton produced by the Zimbabwean spinning companies is of a high standard. There is, therefore, a simple forward linkage from the formal to the informal sector. The sales of the items produced to a degree are local; however, it was soon found that a substantial demand for high quality handicrafts of this sort existed in South Africa. As a result, a substantial informal export trade emerged. Reject items are purchased from factories and shops, unravelled by children or new apprentices, and then reworked.

Initially, as will be described in the chapter on government and the informal sector, exporting took the form of informal operators

transporting their wares by bus to South Africa, selling them there, and using the resulting revenues to purchase any inputs needed for their next production run, as well as easily resale-able consumer goods with a high value/weight ratio to be smuggled back to Zimbabwe for sale at a profit. Following the government's intervention, and the rigorous clampdown on this sort of activity, the only outlets other than the limited local market were visiting tourists (few in number since 1981) and formal sector agents. It is the relationship with this latter group that constitutes the major forward link between informal handicraft producers and the domestic formal sector.

The effects of the entry of middlemen into a market are twofold: they achieve scale economies in marketing, while allowing the produce they handle to reach a wider market, potentially boosting effective demand. On the other hand, however, they may reduce the direct and indirect returns to labour in that informal producers no longer have the additional income derived from smuggling operations.

Moreover, despite the advantages intermediaries can offer to particularly skilled craftsmen's access to markets and the Reserve Bank, and frequently also higher and guaranteed prices, the very notion of such a practice is anathema in a socialist system. For this reason, co-operative marketing is thought to be a solution to the official dilemma.

The potential benefits of a co-operative marketing structure seem clear, the co-op being a participant in the formal economy,

but acting on behalf of its members. There are, unfortunately, a number of flaws in such a solution, principally the members' requirement for immediate returns, the difficulty in finding office bearers (since the opportunity costs of administration are high), and the too frequently observed dishonesty of such administrators as are found. (The most dramatic instance of this was the alleged misappropriation of Z\$150 000 by officers of the Hawkers and Vendors Co-operative Society between 1981 and the beginning of 1984. The Herald, April 16, 1984.) The functions and problems of the co-operative system will be treated in greater detail in Chapter III.

The potential of informal production, especially in the export sector, has not gone unrecognised. However, at the moment is largely confined to export via intermediaries, as described above, and to the sale of handicrafts as curios in the tourist market. There is, however, scope for a formalisation of this position which would also enhance the level of sectoral interdependence.

### II.3.2 SUB-CONTRACTING

Barring the formation of co-operatives, the simple mechanism for the development of intersectoral linkages would be the evolution of a putting out system (such as that mentioned earlier in connection with Lenin's views on direct exploitation). Such a system might overcome some of the problems which industry has faced since 1981.

The formal sector's viability has been constrained by the employment legislation of the past few years, and even though the inflation rate has resulted in the real minimum industrial wage being only marginally above that prevailing at the beginning of 1980, the benefits of this have not filtered through to producers whose prices have been curbed by additional controls.

Putting out, as currently practised in England and the Far East, would mitigate some of the difficulties mentioned above. It is a system which could be particularly appropriate to the clothing and crochet industries. While it has the advantage, in Marxian terms, of not alienating the worker from the product of his labour to the same degree as factory work does, the already cited Leninist counter-arguments may well count higher in official esteem than the profits of industrialists. Nonetheless, there is some evidence that this practice is being employed on a minor scale, although not openly acknowledged by the authorities.

The central issue in a putting out system is quality control, and by implication, the ability of the home operator to produce the goods required. The informal clothing producers interviewed were most frequently using manual or treadle-operated Singer or Harrison machines, the latter brand being locally produced. Whilst both durable and cheap, they are limited in the range of functions they perform. Until such time as the national foreign exchange situation resolves itself to the extent that more advanced machines are generally (and more

cheaply) available, the 'putting out' system in the clothing industry seems unlikely to extend beyond the production of goods aimed at the bottom end of the market. Production methods similar in scale and quality to those in Europe and the Far East, do not yet seem likely.

A totally different relationship, and one with no connotations of exploitation, is that which has been observed in a clothing factory running on short time due to depressed demand for its specialised products. Workers were given access to their machines during the remainder of the week in order to produce, on their own behalf, for the informal market.

A further variation in production methods has come with the emergence of entrepreneurs who have been buying up job lots of fabric and having them made up by ex-factory workers on a CMT basis. These workers have not yet organised themselves to a significant degree and are therefore unable to buy fabric etc. on their own account at reasonable prices, or to produce lines of goods and market them efficiently. They are, moreover, generally short of business expertise. A few of them have been organised by retailers on a CMT basis and seem to be prospering. Given greater independence, a grouping of such workers, with machines purchased from insolvent factories, could undercut establishments operating more conventionally, since they have more direct incentives and lower overheads. The caveat attached to this is that they would ultimately have to break free of CMT operations, producing and marketing their own goods in the same way as other firms. (The difficulties

attendant on such transactions have been widely discussed. See, e.g., Kirkpatrick et al, 1984, pp.129-142; Hoselitz, 1959; Anderson, 1982.)

Although capital constraint is one of the major reasons for the non-viability of any putting-out system in Zimbabwe, a less tangible, but still significant factor is the social climate of the country. To succeed, putting-out requires high levels of organisation, strict quality control and rigorous costing. Moreover, the worker must be willing to subordinate himself to these requirements. Currently neither formal sector factory owners, nor clothing workers in the two sectors, satisfy these prerequisites in sufficient numbers to justify a change in the organisation of production.

Inter-firm sub-contracting is, perhaps, the most visible linkage between the sectors, and with the exception of the CMT operations just mentioned, is conspicuously absent between large-scale producers and their small-scale and informal counterparts. This is easily accounted for by the already mentioned shortage of the required capital in small-scale enterprises. However, it does appear to a degree between individuals in the formal sector and artisans with specific skills who are informally based. These are few in number, but specific instances are the building trade, which sub-contracts work to stonemasons and thatchers, both jobs requiring skills relatively rarely used, hence it is not in the interests of a contractor to keep such workmen in fulltime employ, unless they have alternative and more frequently-used skills.<sup>1</sup> Township

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1. A similar experience is reported for Lesotho, see Setai, B.P. "Technology and Small Scale Enterprise in Lesotho", Paper delivered to Informal Sector Seminar, Harare, 1983.

welders occasionally provide door frames and burglar bars to order for contractors, and specialist workmen are sometimes found with the "building brigades", although this is not strictly a form of intersectoral sub-contracting.

Small-scale enterprises operating on a formal basis make regular use of the services provided by some of the intermediate sector operators in the townships. Backyard mechanics and panelbeaters are a case in point. However, these services are rarely demanded by European-run businesses, the lack of adequate market knowledge being a major contributory factor. Information on the quality of work, prices, and the honesty of the workmen is not generally available to the businessman, who lacks experience of the townships. In addition to this, the social cues mentioned in Chapter I, are lacking. The businessman's non-usage of these facilities is, therefore, rational and hence unlikely to change until the circumstances alter.

More indirect indices of sectoral interaction are sources of raw materials and skill formation. It should be clear from previous discussion that informal manufacturers in Zimbabwe, contrary to the ILO's Kenya findings, do not rely primarily on indigenous resources. Furthermore, skill formation is largely in the formal sector from which workers shift, with their skills, into informal enterprise. (Contrary to ILO findings in West Central Africa, (Nihan et al, 1978, 1979; Demol, 1982)).

Intersectoral relationships in Zimbabwe extend beyond the backward and forward linkages already discussed, and the competition

for limited urban markets between major enterprises and informal producers. There is a major, and vigorously pursued, conflict between emergent licensed business and illegal vendors of similar goods and services. This conflict is neither new, nor confined to Zimbabwe; Garlick (1971) observed that,

"...in Ghana...for many commodities competition was severe for most of the time....The small trader in store premises, with rent, telephone and watchman costs, often regarded the hawker with no overheads as his competitor." (p.73)

The rent-paying stallholders at the Lobengula bus terminus, for example, make monopoly profits when ZRP action keeps illegal vendors away. A letter, dated 3/4/84, from the office of the Director of Housing and Community Services to the Acting City Treasurer of Bulawayo, gave the following responses at interviews with six stallholders:

Table II.3.3: The effects of police control of illegal vending on legal vendors' profits

Interviewee	Estimated daily profit with police (ZRP) patrols (Z\$)	Estimated daily profit without ZRP patrols (Z\$)
1	10	3
2	6	0 (estimates a loss)
3	11	4
4	5	1
5	10	4
6	10	5

Even taking into account probable bias in the results, it should be clear that vested interests are at stake here and, since the shopkeepers and stallholders of the townships have traditionally provided the bulk of the high density suburbs representation on local government bodies, this seems unlikely to change.

The reaction of registered taxi drivers to the informal sector gives a further indication of the forms competition may take. In a letter to the Town Clerk, quoted in the Minutes of the Engineering Services Committee meeting of 19/3/84, they objected, not to direct competition from emergency taxis, but to the indirect competition provided by handcart pushers offering a service related to that provided by taxis. The letter began by repeating a request first expressed in 1980, that Council ban handcarts from the Renkini country bus terminus, on the grounds that they disrupted normal taxi operations. They complained that

"As legitimate operators we need protection against these aggressive people who will stop at nothing to get a cent into their pockets."

There followed a list of alleged practices by the informal operators, ranging from misrepresentation of taxi fares to plain coercion of potential taxi customers. They concluded:

"We believe that there has to be an end to this practice in order that our operations remain viable....We pay sales tax to the Government while these people pay nothing at all."

In general, competition seems a far more widespread characteristic

of the relations between illegal vendors and small-scale legitimate enterprises than it does of the more tenuous connections between large-scale commerce and industry and their informal counterparts, (even though these may be substantial in specific instances, e.g. the bus services and the emergency taxis).

Thus The Bulawayo Chronicle (12/1/85) reported the chairman of the Fruit and Vegetable Association as saying that unless illegal vending were curbed, it would be impossible for legal vendors to pay their rents on time. The report added that at Luveve market, only eight of a previous twenty-eight vendors were left paying rent for stalls. A representative of those remaining attributed the success of illegal vending to its flexibility of access to the public; not being confined to a stall, illegal vendors can sell at bus stops, beerhalls and on the roadside, following their buying public rather than waiting for them.

There are obvious elements of vested interest in stallholders' demands that competitors, especially those with no licence or rental expenses, should be controlled by the authorities.

These generalisations, however, cannot be applied throughout the small-scale sector. This is clear if one looks at the clothing and footwear producers in the townships. Bespoke tailors and informal producers are catering to very different markets, the bespoke tailor feeling the effects of competition from the factories far more acutely than competition from informal operators, largely producing for a rural clientele. Similarly, competition is insignificant between the factories and the great majority of informal producers.

Two factors contribute to lowering the degree of competition between large-scale enterprise and petty producers in the clothing industry. The first has been implied already, namely that they often produce for different markets. Goods intended for sale in the urban market have, of necessity, to achieve levels of quality not required of rurally marketed goods. Excluding bespoke tailoring and, to a degree, the production of children's wear, the informal sector cannot seriously compete with the formal, since it does not generally provide the level of finish required by increasingly sophisticated urban consumers. Overlocking of seams, for example, is mandatory, if garments are to be sold in urban markets. Essentially, it is therefore the non-homogeneity of outputs and the separation of markets that prevents clashes of sectoral interests.

The second point is the protected nature of the industry. If every worker feeds 2,6 dependants (See Chapter III.1), the social implications of widespread factory closures would be substantial, especially in an industry such as clothing, in which single factories employing over five hundred workers are not uncommon. Official awareness of the sensitivity of the industry in a period of depressed demand has grown recently, and untoward worker behaviour has been increasingly curbed by ministerial action.

Foreign competition on the domestic market has been precluded by stringent exchange control, the only competition remaining on the domestic market being from emergent producers and the informal sector.

In the case of emergent producers, both the industry and the authorities have been willing to assist workers left redundant by retrenchment or closure. The ownership of factories closing down have, on occasions, been transferred nominally to still viable firms to facilitate showing a short-term tax loss, thus improving the cash flow. However, the machinery etc. is generally auctioned and typically bought up by ex-employees who have then entered the market.

The relationship of these workers with the remaining firms in the industry is an interesting one and still in a state of flux, as was described earlier in this chapter (p.61).

At present, it appears that the only direct competition between large-scale formal enterprise and informal operators is generated by the sale of stolen goods. The incidence of theft of finished goods and fabrics from the industry has already been mentioned. It is worth noting, however, that the industrialists' losses are not merely in terms of the goods stolen or the delays in payment of insurance claims, but also include the difficulty of competing with their own stolen (and therefore discounted) items on sale at low prices on the market.

Stolen goods are sold at discount and therefore contract the market in the legitimate product. This is of particular relevance since one of the major problems which have afflicted industry since 1982 has been the low level of real domestic demand. The opinion of the producers interviewed was that this sort of problem had increased in magnitude in the four

years since independence. They indicated that this was not a result of falling police standards (a view put forward frequently in the Western Townships) but rather of a change in social ethics and of the increasing rates of urbanisation and decreasing per capita employment of the urban population.

The series of major clothing industry failures in 1983/84 brought about a number of changes in the retail and production aspects of the industry, including the first steps to a "putting-out" system, as already mentioned. A further significant change has been the introduction of factory shops. Producers have engaged in both direct marketing of their goods to the public and in wholesaling. The products of these enterprises seem aimed largely at the low-priced urban market. This is not to say, however, that they are necessarily competing with informal producers. The townships' residents cannot simply be dismissed as the target group for low-priced commodities. They are increasingly discerning consumers who frequently pay high prices for high quality products. Low priced informally made garments seem aimed at the rural market, into which the factory shop can only penetrate through the inadequate mechanism of country stores.

#### II.4 URBAN/RURAL LINKAGES

By contrast with bespoke tailoring, the informal production of low priced clothing for women and children, often from fabric offcuts, while an urban occupation, is aimed at a rural market.

There is an established demand throughout the country for cheap garments; this market was the first catered for by the formal sector, the country's factories having been almost wholly geared to the production of cheap cotton goods until the 1950s. Since then the range of tastes and incomes catered for by the formal sector has expanded substantially. In addition to low distribution costs in the urban areas, factory-made products have had the advantages of status and often quality on their side.

In recent years, the urban demand for low priced goods has, therefore, been largely satisfied without the involvement of informal manufacturerers, although a small market remains for informally produced children's wear.

There are, however, inefficiencies in the urban retailing of factory-made clothing, which provide a limited opening for informal involvement. The purchase, repair and resale of second-hand clothing is a labour-intensive and relatively remunerative example, the retailing being performed by both mobile hawkers and by vendors with stands at the various townships markets.

By contrast, when selling in the rural areas, the informal urban-based manufacturer of clothing experiences little competition from the factories. Retailing in rural areas is confined to farm stores, mine concessions and privately-run shops selling a wide range of products, often including fabric and ready made garments. The bush war in the late 1970s left many of these stores in ruins, both physically and financially. The result was the expansion of an already sizeable market for low priced goods produced by the urban informal sector.

In the past, many rural traders employed or commissioned a tailor whose function was the manufacture of clothing for customers purchasing fabric in the store. This custom seems to be fading, even where shops have been unaffected by the pre- and post-independence disorders. The rural market is instead being catered for by largely female informal operators, working in town and entering the rural areas purely to sell. They are, in other words, extending the market to serve a group with no normal access to these goods.

The case of the informal clothing manufacturer should not be regarded as unique; there are significant commercial links between the townships and the communal lands. The urban informal producers of goods in iron, steel and galvanised metal, supply a largely rural based demand, as do the suppliers of scotch carts, water carriers, and reconditioned packaging.

The return flow of agricultural produce to the township markets is sizeable, although there are indications that farmers in the former tribal trust and African purchase areas are increasingly growing maize etc. for the control boards and entering the formal cash economy. Palmer's belief that there has been "...an almost complete cessation of inter-African trade" (in Palmer and Parson, (eds.) 1977, Chapter 9), does not stand up to empirical observation. Indeed, Beach, in a study of the Shona economy presented in the same volume, summarised the position by stating that

"The establishment of a capitalist economy...has led to great changes in the 'traditional' economy, but has not destroyed it."

Modern marketing and transport systems have provided the solution to the storage problem faced by traditional farmers. Surpluses can be, and are sold, as the output of the African farming community in the drought season of 1983/84 showed. As a result, the traditional economy of the rural areas is providing higher levels of demand which are being catered for by urban-based informal manufacturers who thus link the rural subsistence sector to the remainder of the economy.

The relevance of two-way informal sector linkages between rural and urban areas in Zimbabwe becomes clearer by reference to Lawson's findings in Ghana (Lawson, 1971). She found that, even in the face of rapid population growth, the supply of retail services kept up apace in the cities, and as a result the rate of increase in prices was moderated. (These retail services included hawking and vending). By contrast, rural prices rose significantly faster than urban ones over the same period. She concluded that where there was no capital constraint, the supply of urban marketing services was perfectly elastic, a situation likely to continue for as long as labour-intensive (i.e. informal) means of retailing were acceptable. The greater level of imperfection in marketing and the scarcity of entrepreneurship, in the rural areas, means that although there may have been significant underemployment in the countryside, the elasticity of supply of marketing services there was finite, leading to the higher observed rate of rural inflation.

The mobility of city-based entrepreneurs in Zimbabwe should, therefore, be a factor in keeping the rate of increase in rural

prices under control, although a premium to allow for transport and other expenses would still exist.

The level of imperfection in the Zimbabwean rural market is, however, only reduced, not eliminated, by the current relations between town and country. Two factors seem primarily responsible for this:

- (a) the requirement of local authorities, especially in the Lowveld and in mining areas, for hawking permits which have to be paid for, and
- (b) the existence of family links giving informal operators preference in their home areas, acting as barriers to entry of others and therefore allowing for some degree of monopoly profit.

The mobility of the urban-based entrepreneurs with a rural market is likely to increase markedly as the rural road network improves and the unrest in the Western portion of the country subsides. The Government's programme of decentralisation and the escalation of output from African agriculture are likely to increase disposable real incomes in the countryside. Once these have risen beyond a critical minimum, the rural areas will constitute viable markets for the formal sector and the relative importance of informal operators in the distributive process will decline. This point seems, at the moment, a long way off and its arrival will be predicated on the official effort to develop the rural infrastructure. As the next chapter will attempt to illustrate, however, Government has other, and more

fundamental, relationships with the informal sector.

In essence, this chapter has attempted to illustrate the relationship pertaining between the sectors, and between the urban and rural informal economies. I hope I have demonstrated my belief that, illegitimate activity excluded, intersectoral articulation is symbiotic rather than exploitative, since the effect of the informal sector on the cost of living is not manifested as an increased surplus value. Both parties derive benefit from informal activities: the total market is expanded, distribution is rendered more efficient, linkages are extended and amplified, and National Income is increased.

Doubt remains, however, as to the future of the informal sector. The examples of Europe and the U.S.A., which have extensive informal components to their economies, suggest that it will not disappear. However, its rôle, especially vis-a-vis the rural areas, must alter as agriculture and the rural infrastructure evolve.

CHAPTER IIIGOVERNMENT AND THE INFORMAL ECONOMY

The official view of informal activities is bedevilled by a primary problem, the inconsistency between the government's espoused opposition to the petty bourgeoisie, and its pragmatic recognition that small-scale enterprises may provide a solution to the country's economic ills. After a general statement of the problem, this chapter will describe the economic contribution of the informal sector to Zimbabwe, the government and party political reaction to it, its interaction with local authorities and the theory and reality of the aid available to it.

In essence, the benefits of the informal sector may be presented under three headings: employment, output and manpower training. Counterbalancing these, are five negative features, familiar from Chapter I, most of them being doctrinal.

1. Informal entrepreneurs may become (if they are not already) members of the "petty bourgeoisie", a group vilified in Marxist rhetoric.
2. Informal activities may increase capitalist profits by decreasing the minimum cost of reproduction of the labour force.
3. The informal sector may prove a super-exploitative employer of labour.

4. Being capitalist in form, the informal sector can only provide short-term relief for unemployment.
5. Certain informal activities impose negative externalities on the public (and on the authorities).

### III.1 THE INFORMAL SECTOR'S ECONOMIC CONTRIBUTION

Any government's treatment of a sector within its economy depends, to a large extent, on that sector's lobbying power, its size, contribution to national product, and capacity for future employment creation. Since the problem of greatest moment facing the current Zimbabwean economy is the creation of employment, it seems appropriate to begin by looking at some of the estimates of the numbers of individuals involved in the urban informal economy.

In his 1973 study of Hartley (Chegututu), Davies found only 75 informal operations in a population of 10 000 (Davies, 1978, p.10); projecting this into the Zimbabwean population of the time, an informal sector of only 6 000 would have been estimated. He concludes that this

"...clearly understate(s) the overall size of the sector in the urban areas for a number of obvious reasons. First, the survey did not locate any members of two informal activities which are known to be important, at least in larger towns: pirate taxi operators and shebeen operators. Their exclusion means that not only is the size of the sector understated, but the average earnings are considerably underestimated. Second, it is incorrect to assume that the proportionate size of the sector directly relates to the size of the town. In other words, although the sector comprises only 0,75 per cent of Hartley's Black population, one would expect to find that Salisbury's informal sector constitutes a larger proportion of its Black population."  
(Davies, 1978, p.11)

Davies goes on to infer from the Kenyan figures, a possible estimate for the Zimbabwean informal sector. He quotes the I.L.O. finding (I.L.O. 1972, p.225) that between 28 and 33 per cent of African urban employment in Kenya is provided informally. He goes on to say:

'Applying these figures to Rhodesia would give an urban informal sector of approximately 150 000. Considering the extent of rural unemployment, one could conservatively estimate that at least twice that number work in informal employment in the rural areas. This would mean that the informal sector offers greater employment opportunities than any other single sector.' (p.12)

Davies thought that the more stringent official controls in Rhodesia would keep informal employment levels proportionately lower than in Kenya; he predicted, however, that with the repeal of 'racially-specific laws relating to the urban area', there would be a considerable influx into the cities, and a corresponding surge in informal activity. This has proved to be the case with urbanisation proceeding apace, despite the repeal in January 1979 of the Land Tenure Act, the injunctions of government that people should remain in rural areas, and policy enforcement by stringent anti-squatter action in urban areas.

A comparison of the 1982 census returns with those of the previous population survey in 1969, shows that the population of the country's seven major centres (excluding Hwange (Wankie)) rose by 69,3% in the intervening 12 years, while formal employment rose by 49%. The disparity may be seen more clearly if it is recognised that in 1969 an urban population

of 792 100 in these seven cities and towns, was being supported by 340 600 wage earners (2,32 dependants per worker), while in 1982 a population of 1 341 100 was being supported by 508 000 workers (2,64 dependants per worker).

Unfortunately, the official figures regarding unemployment are of little real value. As pointed out by Hawkins (1972), only those defined as active workseekers unable to obtain employment were regarded as unemployed. The definition of an active workseeker being the extremely restrictive one of someone '...who actively sought work in the week before Census enumeration.' Low domestic unemployment was a stated belief of government and also apparently of Dr C.A.L. Myburgh, the then Director of the Central Statistics Office.

Using this assumption, the C.S.O. estimated total African unemployment in 1969 at 30 330. Hawkins's estimate was 59 960 unemployed African males, approximately double the official estimate.

Clarke (1977), using official figures, made the following estimates the past and future male workforces:

African adult males: population estimates

	1969	1975	1982	1985
Stock of 16-60 year males, excluding emigration	1 162 733	1 388 954	1 788 328	1 995 391

Source: Clarke, 1977, Tables 3 & 4, pp.23,27.

Given these figures, it is possible to estimate the number of adult African men not in informal employment:

	1969 ( '000s)	1975 ( '000s)	1982 ( '000s)	1985 ( '000s)
a) Stock of 16-60 African males	1 162	1 389	1 788	1 995
b) African males in formal employment	651	780*	785*	790*
a-b) African males out of formal employment	512	609	1 003	1 205

\* Figures marked (\*) are personal estimates based on figures in the Quarterly Digests of Statistics, and in Brand, 1981, Table 1)

Sister Veronica (Brand, 1981) found that between 1969 and 1979 there had been a 61% increase in the number of African adult men not in formal employment. She went on to say:

"In view of the fact that the tribal areas were already heavily overpopulated in 1969, and that by 1977 they were carrying some 2½ times the number of cultivators recommended in terms of the Agro-Ecological survey, it is not unreasonable to estimate that the majority of these additional 300 000 men were either drawn into the informal sector or remained 'unemployed'."

These estimates have taken no account of women, juveniles or of men above the age of 60 who are still economically active. If the figure were adjusted to include these, then the total number of people engaged in informal employment may well be in excess of the 450 000 suggested by Davies.

The figures put forward thus far indicate that a substantial portion of those workers deemed 'informally employed' must be in the rural areas. The concern of this thesis is, however, primarily with the urban informal sector.

Zimbabwean cities lack the extensive shanty towns which surround so many third world cities, and which have provided the focus of so much literature on the subject. Moreover, the option of return to the rural subsistence economy, limited though it is, has not been lost to the urbanised black population. Those controls which remain in force to curb the rate of urbanisation, together with the rural option, indicate that the genesis of the Zimbabwean urban informal economy has lain, not in absolute poverty, but in the desire to supplement incomes and to provide stability of incomes for those in unstable employment. Thus Sister Veronica (Brand, 1982) found that 25% of the respondents to her survey entered the informal economy to supplement family earnings, while 57% entered after failing to secure formal sector work, i.e. as an alternative to a return to the rural areas.

The informal economy's contribution to the national product presents even more difficulties in estimation than does its contribution to employment. At best, the following generalisation seems valid: the contribution of informal activity to the GDP, while perhaps substantial, is less than proportional to the employment it provides, i.e. the average product of informal labour is less than that of formal labour. The reasons are multiple but outstanding amongst them are, a generally lower capital/labour ratio, limited markets, inferior raw materials and lack of managerial skills, resulting in a low value added per capita.

The informal contribution to the national product is not, however, merely an aggregate of goods and services produced. Indirectly, by developing technical and managerial skills it affects the productivity of all factors and hence the national product over time. The training rôle of the informal sector is, therefore, of significance to the authorities.

B.J. Dorsey (Murphree et al, 1975) pointed out that in Zimbabwe, "...there is a surplus of unskilled - but not necessarily uneducated - manpower". In the past this state of affairs, largely a result of official discriminatory practice, was opposed by industry. Since the late 1970's, however, the rate of African apprenticeship has risen partially as a result of the apprentice bonding system which has made training in the trades less attractive to White Zimbabweans. With increased vacancies for Blacks in formal apprenticeships, the significance of the informal sector in the provision of skills has, to some extent, fallen.

Despite the increase in the training of artisans through formal education and apprenticeship, there has been a fall, through emigration, in the number of experienced tradesmen capable of giving useful on-the-job training to apprentices. The informal sector does therefore still serve a function, although its significance is distorted by the following:

- a) The refusal, after training, of many informally trained artisans to take on formal employment for religious reasons. (The M'Apostoli).
- b) Under-utilisation of training skills. Artisans qualified to work and train others formally in their own vocation, leave formal employment in favour of the independence and high returns of independent production where the facilities

and official recognition for training accorded in the formal sector are absent.

- c) Government action: The authorities have spent much effort on reducing the status of the petty bourgeois class, although still providing a substantial amount of practical support for it. It is, therefore, quite probable that a re-evaluation of Dorsey's tests on work hopes of Black schoolchildren (Murphree et al, 1975, pp.69-71) would place ownership of a business lower down in the "prestige" ratings. She had found that businessmen were regarded as being on a par with politicians, and were inferior in status only to doctors and lawyers. Even then, however, business ownership was only placed eighth in order of preference amongst potential careers, and fifteenth in order of actual aspirations. With the present education system and the public media currently espousing a strongly socialist ideology, there can be no doubt that the status of entrepreneurs is waning. In terms of the inculcation of managerial skills, official propaganda must, therefore, act to the detriment of the informal sector's contribution.

The training capabilities of the informal sector were strongly emphasised by Nihan and Jourdain in their study of "The Modern Informal Sector in Nouakchott" (Nihan et al, 1978) and by Nihan, Demol & Jondoh, in the parallel study of Lomé (Nihan et al, 1979). They made the point that the informal sector provides a cheap and effective way of imparting skills, especially to workers with little formal education who would otherwise be condemned to employment as unskilled labourers. Despite the points raised in

the three preceding paragraphs, this argument should hold some weight in Zimbabwe, especially in the light of the limited success of the adult literacy campaign.

The confusion attached to the training rôle of the informal sector, and in particular the response of the authorities to emergent entrepreneurs, becomes particularly relevant in the light of Sutcliffe's comments (Sutcliffe, 1971) on the entrepreneur as a creator of employment. The commentaries on the dualistic economy models generated by Lewis and his successors, pointed out that unlimited labour is not necessarily a valid basis for industrial growth, since most capital requires a given allocation of skilled labour, for which unskilled rural migrants may not be substituted. (See also, e.g. Eckaus, 1955, and Pack, 1976, who point out the non-substitutability of factors, once capital equipment has been installed.)

By contrast, Sutcliffe warns (Sutcliffe, 1971, p.125) that industrialisation may lead to a decline in the demand for skilled labour, since the machine operator requires less skill than the craftsman making the same product with inferior tools. He further suggests that skilled labour should be treated as a separate factor of production, whose absence will restrict output, and follows Baer & Herve (1967) in separating it into two categories: labour skilled in the use of capital, and labour skilled in the use of other labour.

The long-term development function of informal and small-scale enterprises is thus an aspect of a much broader process of

economic natural selection. The economy evolves as those entrepreneurs that successfully handle both capital and labour, graduate to the status of petty bourgeoisie.

How might government react so as to derive the maximum benefit from the small-scale African entrepreneur? Sutcliffe holds that direct aid (in the IDC/DFC manner - see the first Appendix to this chapter) can only be successful if there is a stock of viable entrepreneurs looking for capital. He quotes (Sutcliffe, 1971, p.133) the example of Nigeria where despite 82% of applicants being screened out, "the number of successful projects is approximately balanced by the number of unsuccessful projects." From a development perspective, the shortage is therefore of managerial talent rather than of capital. That this pertains in Zimbabwe is shown in Chapter V by the comparison of sectoral production functions. The significance of these observations should be appreciated after these figures are substituted into Equation 8 of Appendix I to this chapter.

The Zimbabwean authorities seem aware of this issue. Speaking to a group of emergent businessmen, Sedco's senior project analyst insisted that

"Business people should come to us for advice, general business information and counselling."  
(Chronicle, 17/8/84)

At the moment, the Zimbabwean small business faces much the same problems as did the African entrepreneur in Kenya after independence (Marris, P., 1968), on top of which must be added varying and contradictory levels of official support and hostility.

In his Kenyan survey, Marris found the two most frequently enunciated needs among small-scale entrepreneurs were for capital and knowledge. He pointed out, however, that supplying these had not served as a stimulus anywhere else in the world, and that where they did exist in Kenya, there seemed little correlation between them and business success. Rather success seemed to be predicated on an ability to separate self from firm, the entrepreneur paying himself a salary rather than living off profits. This approach is a logical by-product of organised accounting. There seems little doubt that Marris's observations are also valid for Zimbabwe, the problem being that small enterprises often provide too little return to allow it to be divided into distributed and retained earnings. Moreover, the observation does not necessarily indicate a flow of causality; teaching book-keeping need not lead to increased viability.

Marris found that emergent businessmen's major problem was a lack of social cues in their dealings with members of the European and Asian controlled economy, and even with the Westernised African sector. In addition, they lacked business contacts, knowledge of the market mechanism, and a viable sales policy. His suggested rôle for the authorities would therefore be:

"To find and develop points of contact, so that the opportunities for a wide-ranging economic interdependence can be realised through a corresponding network of social familiarity."

This would be manifested in the establishment of a marketing service - not an agency! - to relate consumer and producer needs, and provide an advertising mechanism for small-scale entrepreneurs. Clearly, the Zimbabwean official reaction to the informal and

small-scale entrepreneur is far from this, although the activities of Sedco may amend this to a degree. (See Appendix I to this chapter).

## II.2 PARTY POLITICS, CENTRAL GOVERNMENT AND THE INFORMAL SECTOR

The magnitude and potential power of the informal sector as a political force, should it ever be organised, explains a certain amount of the government's concern with it. At the same time, however, the official commitment to a Marxist ideology, rather than a simple short-run basic needs approach, provides a rationale for the apparently negative response to petty production that is increasingly being evinced. There is no doubt that a substantial body of thought exists amongst leftwing economists and sociologists, particularly of the dependency school, which is opposed to the informal sector. (See, e.g., Gerry, Leys, Davies, Sandbrook, Quijano, etc.)

The ideas of such students of the African informal sector as Leys (Kenya) and Davies (Zimbabwe) seem to have been especially influential. Both have opposed "informal sectorism"; the notion that the economy can be split into two sectors which may be treated separately. In particular, they opposed the I.L.O.'s 1972 recommendation that the Kenyan government should support the informal sector by purchasing directly from it.

A central problem for members of the informal sector is the instability of the official view of them. Originally, the informal sector was a major feature of party rhetoric, as was

subsistence agriculture. These two areas of the economy contain the bulk of the electorate, and any successful government subject (for a time at least) to the rigours of a national ballot every five years, must take its proletariat into account.

From an economic perspective, the problem was recognised immediately. The Riddell Commission insisted that "...as soon as possible a comprehensive study of the informal sector be undertaken." It took government two years to heed the advice, and the results are still (April 1985) unavailable to the public although the full report was compiled and printed in the first half of 1984.

Soon after independence, government began officially to stress the so-called "self-help" approach to development concentrating much of its attention on the rural areas, but laying a certain emphasis on the urban informal sector. It is significant, however, that Sister Veronica's Magaba study (Brand, 1982) showed only 4,9% of respondents giving the desire to engage in the self-help effort as a reason for embarking on their current activities.

Certainly, the major opposition party was aware of the voting power of the informal sector from the early days of independence. Joshua Nkomo's ZAPU party almost immediately engaged the services of an Harare architect to design a "Peoples Market". The required funds, estimated at Z\$ 15m were available, and permission was sought from the Bulawayo Municipality for a suitable site in Entumbane township.

The market was to be run as an economic proposition administered by a co-operative holding company; producers of informal manufactures and suppliers of agricultural produce were to sell their output to the market, which would then retail it, operating as a central marketing system.

Before anything further could be done, the discovery of arms caches on ZAPU farms resulted in many of the party's assets being confiscated by the government, leaving it unable to continue with the original project. ZAPU's second suggestion - the use of co-operatively purchased vehicles as mobile food vending platforms in an effort to "lift the people out of the dust", was also prevented by official action, this time by the city health authorities, who were not prepared to grant official sanction to an activity which was then frowned upon. Since 1982, the parlous state of ZAPU finances, and the more immediate problems it has had to face, have effectively kept the party out of the informal sector.

In ideological terms, the informal sector presents a real problem to the government, even though it seems to satisfy the requirements of a basic needs approach to unemployment. However, as was stated at the 1983 informal sector seminar convened by the Minister of Labour and Social Services:

"It is equally clear that an equally large number of informal sector participants must properly be regarded as petty capitalists. The dilemma is this: how does one provide support to the sector so as to utilise fully its capacity to sustain people without in the long run supporting the rise of an indigenous capitalist class

which will constitute an obstacle to the government's stated aim of achieving socialism?"

And further,

"...The inability of the formal sector to provide adequate employment is, in our view, primarily a consequence of its capitalist character. Promoting capitalism in the informal sector might speed up job creation in the short run, but in the longer run, once the sector moves from petty to full capitalism, the unemployment problem will still be here."

("Policy towards the Informal Sector in the Transition to Socialism".)<sup>1</sup>

The policy which emerges hinges on the formation of informal co-operatives. A second recommendation is that, where co-operation is not feasible, the government should avoid giving aid

"...in forms which can be privately appropriated. The intention of assistance is to help the participants in the sector collectively not individually."

Despite the ideological appeal of the co-operative movement, its weaknesses in the local context have been recognised. Thus the authors of the paper, "Policy towards the Informal Sector in the Transition to Socialism"<sup>1</sup> wrote:

"We have already mentioned that there is a substantial amount of ignorance as to what co-operatives are. In most cases they are seen as being organisational structures which will help to raise individual returns.

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1. Presented at the Informal Sector Seminar, Harare, 1983, which was convened under the auspices of the Ministry of Labour and Social Services.

Co-operation is seen as good when it helps me to appropriate a higher income, not when I am expected to share that higher income with those who helped to make it possible.

We have to come to terms with the reality that there is in fact little desire to see co-operatives as an alternative form of social organisation as opposed to a different type of joint stock company." (p.3)

On top of this, the failure of the Harare-based Hawkers' and Vendors' Co-operative Society has brought home the potential weakness of the system when the bulk of participants are ingenuous and easily defrauded. (Herald, 26/4/84). In practical terms, the weakness of the co-operative movement in Zimbabwe has a three-fold foundation:

- a) The potential it provides for a dishonest hierarchy to defraud the rank and file membership;
- b) the general lack of administrative competence of those running new co-operatives;
- c) where the hierarchy are both honest and competent, the clash of interests which exists between that hierarchy (socialist) and the members (accumulative), the former aiming at the reinvestment of proceeds, while the latter seek the distribution of profits.

It seems that the government has been aware of these problems for some time. The dilemma of the official stance has been visible in both the passage of legislation and in official pronouncements about the informal sector and emergent businessmen.

In terms of central (as opposed to local) government legislation, four Acts reflect the official viewpoint.

i) No.43 of 1981, the amendment of the Shop Licences Act (1976)

This followed an earlier amendment (no.34, 1977) which had imposed a minimum fee of \$20 for a "Licence restricted to the sale of specified goods only, upon issue or renewal". The licence was ostensibly for one area only, as denoted under either the Rural Councils Act (Ch.211) or the Urban Councils Act (Ch.214) and gave the authorities considerable powers over "hawkers and street vendors".

Until 1981, these powers were not vigorously enforced, and many vendors went from area to area, with only one licence, often issued in their home town. Certain areas, notably Triangle and Hippo Valley, took advantage of the legislation to prevent non-resident vendors competing with stores established on the sugar estates. However, these seem to have been exceptions.

With the 1981 amendments, however, the local authorities began to increase their policing of vendors' licences, and the price of such a licence rose to \$120. The result was a sharp decrease in the viability of the informal sector operations by city-based vendors selling in rural areas. These changes certainly restricted the viability of the informal sector, but they gave the co-operative movement an advantage in that a co-op. with many producing members, nevertheless now paid the same licence fees

as a sole trader. Average fixed costs were, therefore, correspondingly less for members of co-operatives than for members of the private informal sector.

Other recent pieces of legislation seem to have concentrated on the small or emergent businessman, rather than the informal sector, although they have generally added suitable socialist statements as riders.

ii) The Zimbabwe Institute of Development Studies Act, No.12 (1984)

1. "To serve...as a leading instrument for the socialist transformation of Zimbabwe" (Part II, para.14). There is no reference to the stimulation of enterprise with the information gathered, the closest being a general warrant:

"...to study and conduct research into:-

- (i) the process of the establishment and development of a socialist society in Zimbabwe;
- (ii) the problems of development and under-development."

Nevertheless, government legislated into existence the Small Enterprises Development Corporation (SEDCO) No.16 of 1983, (See Appendix I to this chapter) and the Zimbabwe Development Bank, Nos.7 and 38 of 1983. The following extract from the SEDCO Act serves to illustrate the dichotomy in the government's position:

"Part II.

Functions of Corporation

18. Subject to the provisions of this Act the functions of the corporation shall be-
- a) to encourage and assist in the establishment of co-operatives and small commercial or industrial enterprises;
  - b) to provide assistance, whether in the form of financial assistance, management counselling and training, information, advice or otherwise, to co-operatives and small commercial or industrial enterprises;"

Thus far, all is as one would expect to find it. However the Act continues shortly thereafter:

"20(i) The Corporation shall -

- a) when granting assistance to co-operatives and enterprises, give priority and preference to co-operatives and enterprises established by or under the authority of the State or statutory bodies;
- b) ensure that all applications and proposals put before it are considered and dealt with strictly in accordance with government economic policy;
- c) ...;
- d) conduct its business on sound commercial principles having due regard, however, to Socialist principles;
- e) generally direct its activities towards implementing government policy in the fields of commerce, industry, construction and development."

It is significant that the co-operative movement, which operates within a capitalist framework, is seen here as contributing to the partial solution of the Government's dilemma. Also significant is the focus of this sort of legislation. None of it is intended to foster the private informal enterprise, or to promote

its development into organised small-scale operations. Thus the Zimbabwe Development Bank is only empowered

- "a) to mobilize internal and external resources for economic development and to finance development projects in all sectors of the economy;
- b) to provide capital which is needed for the expansion or modernisation of existing enterprises or the creation of new enterprises;
- c) to engage, alone or with other persons or institutions, in financing loans or bonds, whether medium or long term, guaranteeing loans, underwriting and related activities."

(Part III, Nos.17-38, 1983, Zimbabwean Development Bank Act and Amendment, as amended.)

As may be seen, there is an ambivalence in official attitudes to informal operations, with some of the negative reactions traceable back to an official desire to develop the co-operative movement rather than encourage the emergence of a petty bourgeois class. Much actual policy, however, is derived from the substantial body of legislation curbing informal activities which was inherited from previous administrations. Its principal components may be summarised as follows:

1. Land Apportionment Act No.11, 1941 (abolished by the Transitional (Muzorewa) Government in 1979, although its influence is still apparent in patterns of land ownership.)
2. Shop Licences Act, 1976.
3. The Co-operative Societies Act, Ch.193.
4. The Control of Goods Act, Ch.180.
5. The Factory and Works Act, Ch.283.
6. The Liquor Act, Ch.289.
7. The Industrial Conciliation Act, Ch.167.

In addition to which may be added those also mentioned before, i.e.

8. The Urban Councils Act, Ch.214.
9. The Rural Councils Act, Ch.211.
10. The Companies Act, 1973.

The last-mentioned of these Acts prescribes the limitations on partnerships and limited liability companies and has been included despite its significance for the informal sector being open to dispute. For example, Makamure comments that,

"The partnership, although on the face of it, possible for members of the informal sector, is essentially a device requiring the setting up of a formal business in the first place; in practice, it requires considerable capital outlays on both the partners. In addition, it is a formal business arrangement which is not the normal way people in the informal sector usually get involved in business activity. For them, it is usually a way of earning enough money to subsist, and not to accumulate in the normal business sense."  
(Makamure, Conference Paper No.5, p.6, 1982)

Makamure's argument is based on the concept of partnership as a physical entity; by contrast a standard text on Zimbabwean company law makes it clear that this is not the case,

"...the word 'partnership' cannot be used to describe a legal entity or persona, because there is no such animal;...The word can therefore be used only to describe the relationship between partners, or perhaps the contrast between them."  
(Christie, pp.180/81)

In other words, if a written contract is not necessary to the formation of a partnership, then this form of enterprise can

come into its own within the informal sector. The frequency with which joint operation of enterprises was seen to exist, especially where high (by the standards of the informal sector) minimum capital expenditures were required, is at odds with Makamure's comments. The Companies Act in no way prevents two individuals from raising capital by entering into an informal partnership agreement; rather it clarifies the common law situation should one partner institute litigation against another.

The ambivalence of official attitudes to the informal sector has been primarily expressed thus far in ideological terms of the contradiction between socialism and the emergence of a petty bourgeois class. This ambivalence has extended itself to the level of local as well as central government. The underlying sources of conflict at a municipal level are, in general, less ideological than pragmatic. The relationships prevailing at this level are of particular note since the relationships of petty entrepreneurs with the authorities are far more often in the sphere of local than of central government, although the two tiers of administration are operating in parallel to an increasing degree.

### III.3 LOCAL GOVERNMENT AND THE INFORMAL SECTOR

It is clear that the relationship between the central authorities and the informal sector are at best ambivalent. This situation seems to prevail amongst certain local authorities as well, (notably the Harare City Council), while others, including

Bulawayo, are maintaining a more open relationship with informal enterprise.

The bye-laws governing the informal sector are rooted in two chapters of the old Rhodesian Statutes: the Rural Councils Act, Ch.211, and the Urban Councils Act, Ch.214. The following extract from the former has its parallels in Ch.214 (see particularly, Sections 149 and 180).

"Ch.211, Section 87, Schedule III.

Purposes for which Council make make byelaws:

- 18(1) For registering, restricting, regulating and supervising hawkers, pedlars and street vendors, whether licensed or required to be licensed or not, and for imposing different restrictions on different types of hawkers, pedlars and street vendors.
- (2) For prohibiting the carrying on of business by hawkers, pedlars and street vendors otherwise than in specified areas or at fixed places or allocated stands or at specified times and for providing that where fixed places or stands are allotted at which such business may be carried on to the exclusion of other places or stands that shall be sufficient notice if notices are put up in such places or stands."

Clearly, wide-ranging and potentially restrictive powers were vested in the local authorities by this sort of legislation. The response of these authorities, in the shape of byelaws promulgated, and their interpretation, therefore, reflects the level of official sanction accorded to the informal sector.

In the context of Bulawayo, the following are of especial note: Rhodesia Government Notice 668 of 1977, RGN 902 of 1976 and RGN 953 of 1978.

The first of these specifies that hawking and vending are prohibited

- a) "within a radius of 100 metres of any premises licensed in terms of the Shop Licences Act 1976";\*  
and b) "in a denoted area of 1 400 hectares covering much of the suburbs and the central city."

RGN 902 of 1976 gives the byelaws in terms of Chapter 214 of the Statutes. Amongst the points of particular note were the requirements that:

"Any person who, whether as the holder of a licence himself or as the agent or servant of another, wishes to carry on the business of selling food as a hawker or street vendor, shall obtain a certificate from a medical practitioner or the medical officer of health, certifying that, at the date of certification, he was examined and found not to be suffering from any contagious and infectious disease."

Secondly, and more significantly, the power of the Council to

- "a) restrict the applicant to dealing in goods listed in his application;  
b) restrict the applicant to dealing in certain goods, whether listed in his application or not, if, in its opinion, not to make such restriction would -
- (i) adversely affect any existing trade or business carried on in the area of jurisdiction of the council;
- or
- (ii) be undesirable in the interests of public health, public safety or public morality."

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\* The corresponding distance in Harare is 10 metres.

It is added later in the notice that the Council may refuse to grant or renew a licence if, in its opinion

- "(iv) there are sufficient hawkers or street vendors dealing in the goods in respect of which the applicant requires the licence."

The byelaws also detail the licence requirements affecting employers of hawkers and vendors, a group whose status will be appraised in more detail in the chapter on intersectoral relations.

The provision of facilities for use by vendors is severely curtailed by a shortage of funds and the strains of other commitments. Thus the Bulawayo Municipality is committed to certain major expenditures, (e.g. housing), through government pressure. It also has recurrent commitments to meet and is facing declines in the real value of its revenue from rates and taxes. Despite the weak condition of the economy, there are free funds available, excess liquid assets having been held by all branches of the monetary/banking sector since before independence. However, the Reserve Bank of Zimbabwe has placed major restrictions on municipal borrowing from the public.

As a result of these financial limitations, the Bulawayo Municipality has become increasingly constrained in its provision of assistance to the informal sector. Thus, in 1981 the Bulawayo Municipality allocated 54 sites for development into vending locations; all were close to established shopping centres, and all new shopping centres since then have included

such sites. However, lack of funds has precluded the development of these sites. The policy implications are revealed in a letter from the office of the Medical Officer of Health to the Department of Housing and Community Services, dated 18/5/84, in which the M.O.H. insisted that, while recognising the financial problems the Council faces in 1984/85, the 54 sites selected in 1981 remain undeveloped and that

"...some start should be made in the very needy places...

The present illegal vending sites consist of a bare patch of dusty ground so any improvement, concrete slab, concrete tub with water connection, reasonable weather protection would be a big step in the right direction."

This approach has replaced the earlier strict adherence to the regulations governing public health which typified the policy of earlier M.O.H.'s in their dealing with the informal sector. This new flexibility in municipal dealings with the informal sector is even more clearly enunciated in a letter of 11/5/82 from the City Engineer to the Director of Housing and Community Services, in which he writes:

"Local Development Plan no.1 permits service industrial uses at the discretion of the council, within zoned commercial and residential areas, i.e. *not on residential stands but on new planned sites* /my italics/. Service industrial use is defined as any light industrial use which is required to meet the day to day domestic needs of persons resident in the locality.

The majority of concerns should be classified as service industry and *I believe we should permit a certain degree of flexibility in the definition as these activities have a local service function.* /my italics/.

However, certain manufacturing processes including the use of heavy machinery should be confined to light industrial areas,...."

Despite the new latitude in the official approach to petty producers and retailers, there have been recent prosecutions for illegal trading from residential premises, although the normal practice is to issue a warning first, unless there is a direct threat to public health.

The criterion which the authorities claim to use is whether or not the public weal is adversely affected. This, in particular, applies to backyard brazing and arc welding, where there are frequent complaints that these activities are draining current and preventing local residents from receiving adequate power.

Members of the Department of Housing and Community Services expressed the opinion that informal operators could not be forced away from their localities into organised rented premises. It was felt, however, that success might be obtained with the building of a roofed and fenced open market along the lines of the present Makokoba farmers' market, at which stands or floor space could be rented either privately or co-operatively. Indeed, some progress in this line has been made with the opening of a market on Lobengula Street, on the boundary of the Western township and the city proper. There is also pressure for allocation of stands suitable for informal operators at the currently under-utilised market facilities in Tshabalala. The extent of the demand for this sort of facility may be judged by the 168 responses submitted to Council when 23 stands at the Lobengula Vendors' Hall were put out to tender. A point which must, however, be borne in mind is the extensive competition stallholders face from pavement-based vendors. (See Chapter II.)

Where an informal service seems inevitable, but unacceptable in an uncontrolled form, the authorities have occasionally intervened directly in the provision of the service. Thus the Council beer gardens naturally call forth an informal response in the sale of single cigarettes, matches and foodstuffs. The former has presented a social problem, many of the sales being conducted by young children. However, the sale of cooked food was regarded more seriously as being a potentially serious health hazard. The result has been the institutionalization of food sales with the vending of sadza (stiff maize porridge) and relish being performed by female welfare cases under the supervision of the Department of Housing and Community Services.

The beerhalls are of further significance in that their profits provide a major portion of municipal revenue in the township areas. However, the existence of shebeens, and of unlicensed brewers of opaque beer, in urban and peri-urban areas, poses a real threat to municipal revenues. Official reactions may be seen in the agreement between the Gweru Council and the rural council of the surrounding areas, to try to impose strict controls on illegal brewing and selling of beer.

(Financial Gazette, 4/5/84).

It must be argued that the official response to the informal sector is, to some extent, not purely based on maximisation of the public welfare, but rather on the preservation of benefits accruing to certain interest groups. This has been particularly evident since the extension of the municipal voters' roll to

include residents of the Western Townships. (See Section III.4.3 below). The significance of this was increased after 1980 with the introduction of party politics into the sphere of local government. Opposing parties alleged that town councils, dominated by their rivals, were engaged in unethical practices to maintain or reward political support.

#### III.4 CONCLUSION

The areas of conflict between the Zimbabwean authorities (at all levels) and the informal economy may be divided between doctrinal opposition and pragmatic considerations. The former was mentioned in the introduction to this chapter, the latter are essentially fivefold:

1. Government, both local and central, has the maintenance of public weal as one of its prime concerns. It may, therefore, oppose the existence of an informal enterprise purely on grounds of public welfare.

The examples which seem most appropriate to the Zimbabwean experience are those related to public health: factory conditions, foodstuffs and public transport are typically subject to official controls. The Zimbabwean Factory Act only applies to enterprises employing over five workers, hence there is little check on injurious work practices in small enterprises. This is particularly apparent when watching informal metalsmiths at work with welding tools, but wearing neither mask nor gloves; and tailors' employees sewing in poorly lit rooms.

By contrast, strict controls, extending to the informal sector, do apply to the marketing of foodstuffs and to transport. This raises the questions: Is public welfare raised or lowered by such legislation? Is the welfare gain provided by these services greater or less than the welfare loss that might be caused by accidents or disease?

If one could assume full public knowledge of the non-pecuniary costs of dealing with informal operators, then a Pareto optimal solution could only be achieved by allowing freedom of choice. The prices of informally provided goods and services would be discounted by the appropriate risk factor, till the marginal consumer was indifferent with which sector - formal or informal - he dealt. In the Zimbabwean situation, however, where even moderate notions of transport safety and of prophylaxis and hygiene are rare, one can see that the authorities might have justification in attempting to exercise control over potentially hazardous informal sector transactions with the public.

In terms of food sales and public health, this naturally puts the best possible construction on the behaviour of the authorities, but one which the behaviour of the various M.O.H.s would seem to warrant. However, an alternative interpretation could be applied to the behaviour pattern of other officials. It can be argued that the object of a municipal official is to achieve promotion, or sufficient status to justify transfer to a similar post in a larger centre. Given that the public have little actual say in

the rise or fall of officials, their votes being only for council members, the officials engaged in public health will be more concerned with prevention of visible disease - their ostensible concern - than with raising more remote and less dramatic benefits such as levels of nutrition, especially under conditions which might lead to epidemic disease.

One would expect, in terms of this logic, to find stringent municipal clamps on sales of fruit and vegetables, cooked foods and unpasteurised milk. The current reality reflects these expectations, although to a lesser degree today than was the case under previous administrations.

2. The informal sector may be regarded by those newly-appointed to authority, as an embarrassing indication of poverty. Thus, when an Harare city councillor, John Chiweshe, announced a clampdown on sales of maize cobs and sadza at the Mbare Musika bus terminus, two primary reasons were given:

Firstly,

"...there are no strict hygienic conditions in the preparation of these things....It (Government) is doing this to ensure that people do not kill themselves for the need of money."

and secondly,

"The continued existence of the open cooking sites 'is bringing down the standard of living' and, therefore, places Zimbabwe in a shameful position."  
 (The Herald, Thursday, 17/11/82)

Councillor Chiweshe went on to develop a political theme, insisting that operators of hotdog stands should come together in groups of four or five and establish co-operative "corner shops". "In about a year's time, the Government does not want to see any hotdog stands in the city."

Clearly, the City Council has been concerned with its appearance, both as an "enlightened" administration and - before Central Government - as a suitably socialist body.

3. A third reason for the controls over the informal sector exerted by local government may lie in the uneven allocation of lobbying power affecting Council decisions. The reasons for this are threefold: historical, electoral and financial.

a) Historical:

The City Councils of Zimbabwe have only had Black representation since 1979. Prior to that, it was the White population, whose links were strongly with the formal economy, that elected the Council. Local government, like central government aimed at the satisfaction of the needs of the formal economy.

b) Electoral:

The distribution of votes in Zimbabwean cities is skewed in favour of owners of commercial property, hence this interest group is particularly strongly represented in official decision-making by city councillors.

c) Financial:

Rates, rents and municipal taxes are largely paid by formal enterprises. The informal operators' sole contribution to municipal revenues lies in nominal payments for licences. Formal commerce and industry, therefore, have a louder voice in municipal debate than do their informal counterparts. (The financial relationship between the authorities and the formal sector was touched on in the chapter devoted to intersectoral relations.)

4. Control of rural/urban drift: One of the points strongly made by central government since 1980, is the need for the population to remain "on the land". Faced with three years of drought, and with political conflict in the Western half of the country, the rural population has increasingly been driven to urban areas. Official responses, especially in Harare, have been brutally direct. Squatter settlements have been promptly bulldozed. It seems, however, to have been recognised that for as long as earning expectations are greater in urban than rural areas, the drift will continue. Part of the solution lies in the development of employment opportunities in rural areas. Meanwhile, formal sector employment in the cities is static, with few firms taking on replacements for workers lost to natural attrition (a result of official wage and employment legislation and the depressed state of the economy). The sole legal alternative is therefore the informal sector. Stringent controls, including police action against unlicensed

operators, serve to make this an increasingly insecure source of employment. Strict enforcement of anti-informal sector legislation, especially when this enforcement is well advertised (as in the anti-prostitution drive in 1983) will therefore reduce expectations of higher urban incomes, but at the same time it will remove the buffer to unemployment which informal operations could provide. It should, therefore, operate as a curb on the current trend to urbanisation.

5. Conflict with Government's own financial interests: To an increasing extent, the central authorities in Zimbabwe are obtaining a majority holding of the equity in public companies. Where the interests of such companies are in conflict with those of the informal sector, the result has been direct action against informal competitors. The most clearcut example has been the status of "emergency taxis" in the period following the official takeover of the Zimbabwe Omnibus Company. In the period prior to independence, the efficiency of the Western Townships' transport system was enhanced by the existence of "pirate taxis", privately owned vehicles which cruised rather than waited at ranks. They were a definite feature of the informal economy, and suffered severely at the hands of the police, prosecution being based on the conveyance of passengers for gain,
- (a) without a permit,
  - (b) in a vehicle not checked for roadworthiness as a source of public transport, and
  - (c) in an overcrowded vehicle.

Despite these controls, the pirate taxis were recognised as performing a public service, and the prosecution tended to come in bouts. Moreover, with the burden of proof resting on the State, it was difficult to obtain convictions without the evidence of the passengers that the driver was being paid for the service. Post-independence, the pirate taxis were formalised in status, as "emergency taxis". However, shortly after the Government's take-over of Zimbabwe Omnibus, which controls all the urban 'buses in the two main centres, the Deputy Minister of Roads and Traffic announced that,

"Emergency taxis were not meant to be a business venture and the Government is determined to curb their operations so that they don't disrupt regular transport in urban areas."  
(The Chronicle, 9/12/83)

He further added that, when the authorities felt there was adequate urban transport, "We will completely phase out emergency taxis."

The emergency taxis are still functioning. However, the following curbs have been placed on their operation: each car must be owner-driven (precluding expansion into fleets), and undergo vehicle inspection every six months. Licences to run emergency taxis are valid for six months, renewable to a year, and require a Z\$50 revenue stamp. Operators of the taxis are liable for both sales tax on fares and income tax on profits. Each taxi may run on a single designated route only, the pick-up and terminal points being designated. Finally, operation in rural areas is prohibited. In addition

to these restraints, emergency taxi operators are functioning in an atmosphere of uncertainty about official attitudes, an uncertainty which may preclude them from realising their full potential.

Looking at the vacillation in official policies regarding the informal economy, two major points have emerged: firstly, it makes a considerable contribution to employment, output and training in the country, albeit that the full extent of these contributions are not easily computed. Secondly, the negative aspects of the informal sector, perceived by the authorities are multifold, ideology and negative externalities being the two central ones.

Thus far, the official constraints on the informal sector have been central to the presentation. However, support for the sector is provided by both the public and private sectors. The following appendix provides a brief overview of the general theory underlying such aid, and of the actual structures and organisations involved.

APPENDIX IPUBLIC AND PRIVATE FINANCING OF SMALL-SCALE ENTERPRISES

Since the mid 1970s, a number of organisations have become involved in the financing of informal and small-scale enterprises, funding particularly their expansion, but on occasions concentrating on their establishment - e.g., Christian Care, Zimbabwe Projects, and World Vision. The involvement of the government in this sort of activity has been increasingly evident, although the point has already been made that the official standpoint is far from consistent.

The increasing amount of funding being directed at small enterprises requires some analysis of the effects on the rate of return of the costs of industrial expansion and of business failure rates, i.e. how the use of objectives other than the traditional maximization of returns practised by commercial banks affects the loaning agencies. In addition, there must also be developed some theory of official intervention in the capital market.

Given  $N$  firms within an industry which receive financial aid,<sup>1</sup> if the average increase in their revenue is  $R$ , and in their variable costs is  $C$ , the net benefits of the assistance will then be

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1. This analysis is based on that used by Anderson & Khambata, (1981), pp.60-75.

$$N (R - C) \quad (1)$$

Provided that there is no loss due to closures, the present value of such aid at some point in the future ( $t$ ) is found by simply discounting Equation (1) by the rate of interest ( $r$ )

$$\frac{N (R - C)}{(1 + r)^t} \quad (2)$$

However, a certain proportion ( $\lambda$ ) may be expected to fail every year and not resume operations. Given the nature of the informal sector, it is unlikely that many entrepreneurs will withdraw permanently, although the small-scale entrepreneur might find it more difficult to return to his previous position after bankruptcy. After adjustment for the "propensity to fail" ( $\lambda$ ), the present value of aid in year  $t$  would then be:

$$\frac{N (R - C)}{(1 + r + \lambda)^t} \quad (3)$$

The net present value of the flow of benefits until year  $t$  would therefore be:

$$\frac{N (R - C) | 1 - (r + \lambda)^{-t} |}{(r + \lambda)} \quad (4)$$

The total expenditure on aid by government is given as:

$$N (1 + e) K \quad (5)$$

where  $K$  is Average Total Cost, and  $e$  is the proportion of  $K$  given by government for purposes of expansion.

Equating (4) and (5) the rate of return ( $r$ ) is found to be:

$$r = \frac{(R - C)}{(1 + e) K - \frac{1}{t} - \lambda} \quad (6)$$

Of this,  $(R - C)$  represents returns without depreciation  
 $(1 + e) K - \frac{1}{t}$  being depreciation  
 and  $-\lambda$  being losses due to closures

If there are no closures and no extension costs, the value of  $r$  will be ( $r^*$ )

$$r^* = \frac{(R - C)}{K - \frac{1}{t}} \quad (7)$$

i.e. The effect of extension costs and closures can be shown by:

$$r = \frac{r^*}{(1 + e) - \lambda - \frac{e}{(1 + e)t}} \equiv \frac{r^*}{(1 + e) - \lambda} \quad (8)$$

Arrow and Lind (1970) showed that in the evaluation of risky investment opportunities with a view to subsidisation,

"...where costs are borne publicly and benefits accrue privately, this procedure will qualify fewer projects than the procedure of using a higher rate to discount both benefits and costs."

This view originates from their conclusion that where the returns on an investment are independent of the remainder of

national income, then its present value will be the sum of expected returns discounted at a rate appropriate for investments yielding that rate. They make it clear that this result presupposes that risks are perfectly evaluated and discounted, i.e. there is a Pareto optimal distribution of risks and investment patterns. The existence of uncertainty means, however, that reality is likely to be sub-optimal.

By contrast, Hirshleifer's original proposition (1966) had been that the market rate of discount was the most appropriate for the evaluation of public investments.

Alternatively, it had been hypothesized that since government can cater for risk better than the private sector, the same criteria should not be used for both. Arrow and Lind quote Samuelson and Vickrey's argument that government should ignore risk and evaluate investments purely in terms of expected net returns discounted at the appropriate private rate.

Mayshar (1977) follows Arrow and Lind's reasoning, but arrives at a conclusion close to Hirshleifer's. Like Arrow and Lind, he appears to implicitly use the Kaldor-Hicks principle of potential compensation to evaluate alternative courses of action. He adds, however, that where the opportunity exists for government to aid a firm via subsidised loans, it should do so provided the firm pays company tax. In this situation, it is in the authorities' best interests to see that the firm acts optimally since the Treasury is, in effect, a partner in the enterprise. In this situation, paying tax is acting as a

form of insurance: if the scheme succeeds, both parties benefit, and if it fails, losses will be written off against tax. He holds, therefore, that

"...subsidisation of private risky projects is a justified, even necessary, practice, given two conditions: that the capital markets are incomplete and that income taxation exists." (p.21)

Given that one of the preconditions for official assistance for small-scale enterprises is an analysis of the firm's books, it seems likely that enterprises thus aided are thereafter liable to income tax and that Mayshar's conditions are therefore satisfied.

The background to this Appendix lies in the Schumpeterian distinction between the entrepreneur and the capitalist. The latter provides funds, while the former directs them. Thus, while neo-classical theory stresses the rôle of individual and corporate savings in the expansion of capital, Schumpeterian theory extends it to venture capital obtained via the credit-creating banking system.

National poverty may suggest inefficient utilisation rather than absolute shortage of factors of production. LDCs have a typically lower proportion of their populations engaged in entrepreneurial activity than do developed states. As a result, the stimulation of entrepreneurial activity seems a logical approach in the attempt to reduce underemployment of all factors.

One of the problems attached to the stimulation of entrepreneurship is the establishment of a method which will minimize any

ensuing misallocation of resources, and distortion in the internal terms of trade, especially between agriculture and the manufacturing and distributive sectors. Thus, Meier and Baldwin (1984) contend that the prerequisites for growth include:

- . An indigenous base for development
- . Minimisation of market imperfections, especially the reduction of monopoly practices and the expansion of the money market so as to facilitate the efficient allocation of factors of production
- . Capital accumulation through:
  - (a) increases in real savings
  - (b) redevelopment of the credit system, and
  - (c) investment in the production of capital goods

A further point to note in Marsden's (1984) contention that loan facilities offered by State agencies would not be priced at a lower rate than those offered by private enterprise and recipients may well lack the skills and motivation to be efficient, thus imposing costs on society. One should also take into account Marris's (1968) observation that loan agencies can be counter-productive in that, trying to secure their investments, they may curtail the flexibility of operation of recipient firms, insisting that funds be strictly applied to the use for which they were initially intended, a use which may not be optimal if the economic environment changes.

SMALL ENTERPRISE FINANCE IN ZIMBABWE

Despite being under-banked, Zimbabwe has a well developed financial infrastructure which gives the authorities a solid foundation upon which to expand the current programme of assistance to small-scale enterprise, should it be desired. Two of the five banks in the country (Zimbank and the Zimbabwe Development Bank) are Government-controlled. They compete for funds with the Post Office Savings Bank (also Government-controlled), the various privately run banks, building societies, other financial institutions, and with informal saving systems, such as the revolving credit associations (R.C.A.s) found in the informal sector. Money lending is not a common feature of the Zimbabwean township economy, but R.C.A.s certainly are. There is the potential for them to play a far greater rôle in the financing of emergent enterprises, provided the authorities do not regard them as a hindrance to the functioning of the formal financial sector. (A fairly extensive discussion of R.C.A.s in practical terms, was presented in The Financial Gazette, 10.2.84).

The theoretical foundations of the linkages between those demanding credit, and the various institutions supplying it, were analysed by Akerlof in his well-known article on "The market for lemons" (1970). Basing his argument on the extent and accuracy of the market's knowledge about would-be borrowers and lenders of funds, he observed that:

1. Where credit facilities are provided by communal groups, outsiders may be "bilked". A reputation for honesty therefore allows a loan agent to make a monopoly profit.

2. A local money lender has greater knowledge of his clients' ability to repay loans than has a commercial bank. By charging a premium over the rates charged by commercial banks he is therefore acting paradoxically. The paradox is resolved, however, if one takes into account the possibility that the recipients of his loans would not be likely to obtain bank credit at all, i.e. the premium is accounted for by the absence of a collateral requirement.
3. Banks operate with a foundation of imperfect knowledge, and the only way to ensure the efficient allocation of loanable funds is to allow onto the market small lenders who rely on their greater client knowledge to survive.

By implication, a money lender's more exact knowledge of the risks attached to each loan enables him to determine an appropriate interest rate accurately. Where a relatively ignorant party (such as a development bank) enters the market, it will naturally attract the "lemons", i.e. those borrowers who are intrinsically flawed, lacking the collateral to borrow from commercial banks, and the project viability to borrow from money lenders.

In practical terms, the structure of the Zimbabwean official aid network concerned with informal and emergent business is confused. Excluding overseas and church-based associations, interest focuses on three models: direct financial aid, assistance via the commercial banking sector, and technical aid. These are represented, respectively, by the Development Finance Corporation (DFC), and the Small Enterprise Development Corporation (SEDCO),

the Finance Trust for Emergent Businessmen (FEBCO), and the Zimbabwe Industrial Advisory Service (ZIAS) (formerly SIAS - the Small Industries Advisory Service).

The DFC, and more recently SEDCO which took over its responsibilities, have both been organisations with a reservoir of funds to be made available to applicants in the form of direct loans, particularly in the rural areas. The reservations about this sort of scheme, expressed by Sutcliffe, have already been mentioned (see p.84 ). Their weaknesses in the specific context of Zimbabwe seem threefold:

- a) Their ability to evaluate loan recipients was necessarily doubtful, the applicants being gauged in terms which may be alien to them, (Marris's "social cues" may be lacking). The applicant is also judged by the situation represented by his books, as he would be if applying through a commercial bank. One advantage of this sort of system, however, is that it allows benefits to accrue to enterprises on the basis of linkage effects as well as simple cash flows. (e.g. the Industrial Development Corporation Act insists that recipient schemes should not only be viable, but also contribute to the expansion of the national economy (Chimombe, 1983, p.9).
- b) The activities of this sort of institution are constrained by finance. (Thus the DFC, with a capital of \$1m received applications for \$61,6m from Harare alone in 1981. (Chimombe, 1983, p.10).)
- c) The lack of private sector involvement in direct aid

schemes does little to enhance future relations between private financial institutions and emergent business.

By contrast, the FEBCO system is centred on the development of links between commercial banks and entrepreneurs who would otherwise not be considered for loans.

The system dates back to the Wilshire Committee Report (October 1977) whose terms of reference were,

"To examine the current provision of financial and related assistance to small-scale entrepreneurs who would not otherwise qualify for Bank credit, and to make recommendations as to how the Banking sector, including businessmen, particularly in Commerce and Industry would qualify for loan facilities and related service."

Amongst its findings, the Wilshire Report noted the resentment among African businessmen at apparently discriminatory lending practices by commercial banks. (Private African time and demand deposits at commercial banks came to \$28,8m, while lending to them stood at \$1,5m (5,4%), deposits by private European customers were \$115m against which \$31m were on loan (27%)).

The rationale presented by the banks for this policy was based on the following major points:

- a) Lack of reasonable collateral;
- b) Emergent businessmen tended to apply for funds for capital projects, i.e. larger sums and longer repayment periods than the banks' typically short-term lending policy allowed for;

- c) Poor preparation of projects;
- d) Weak financial controls and management;
- e) Unsound pricing;
- f) Propensity to overstock in lines with slow turnover; and
- g) Propensity to take too much out of the business -  
subsistence management.

These remain the observed weaknesses of many small-scale enterprises in Zimbabwe. In response to these, the FEBCO scheme was inaugurated in 1978 as a trust, comprising representatives of the Reserve Bank and the (then) four commercial banks. It aims to guarantee loans by commercial banks to emergent businessmen, the loans being made at a rate of prime plus one per cent, repayable over up to 36 months. Although the scheme guarantees half the loan (the rest of any unrepaid debt being met by the lending bank), the borrower is still required to provide some collateral, the reason being that this provides a punitive motivation to the borrower as well as the usual profit incentive. The criteria for loan advance, may be found in the following Appendix.

In practical terms, the most significant recent development in government relations with small-scale enterprises has been the formation in April 1984 of the Small Enterprises Development Corporation (SEDCO), whose ostensible aim was to "encourage and help in the establishment of co-operatives and small commercial and industrial enterprises". (Chronicle, 17/8/84). The organisation employs development officers who

offer management training courses and advice, as a supplement to loan provision which is its primary function. Significantly, while loan provision is at competitive interest rates, it depends on the estimated viability of the project rather than on the collateral offered. (Herald, 3/5/84; Financial Gazette, 207/84; Chronicle, 13/7/84). As with the commercial banks, however, one can anticipate that the greatest difficulty which will surround the loans side of SEDCO will be the selection of viable projects from the mass of applications.

ZIAS (SIAS) provides an advisory service to entrepreneurs requesting aid. This is not necessarily a free service, although some of the organisation's activities are provided without charge. Unlike FEBCO, whose officers only provide advice to recipients of loans, ZIAS's services are available to all small enterprises, and to the authorities for whom they provide reports. (e.g., their five year programme for small industry centres. (The Herald, 14/5/82)).

Private aid agencies do not suffer from the same problems as the official projects, primarily because their assistance is not in the form of repayable loans, but of training and capital donations. Moreover, the value of the assistance provided to individual small-scale enterprises by these groups tends to be limited. Thus, in 1982, Christian Care was providing one new hand-operated Harrison sewing machine, Z\$100 worth of fabric and - where required - instruction in dress-making, to ex-political detainees and widows of war victims.

With over 75% of the group's funds being foreign in origin, there has been a tendency to aid co-operative groups, thus satisfying overseas pressures and remaining in line with official ideology.

The bulk of private aid seems to be going into capital projects in the rural areas. A potentially significant exception is "Zimbabwe Project", a welfare organisation funded primarily by the business community and offering managerial expertise in a similar vein to that provided by SEDCO. The central rôle of the entrepreneur in any such project makes its evaluation too complex for treatment here.

APPENDIX IIFEBCO Criteria for Loan Advance (1982)

"Given the fact that an individual qualified as an emergent businessman and wishes to borrow funds for use in agreed types of business and given the readiness of a Bank Manager to accommodate such a client, the criteria for loan advance are as follows:

- i) Project viability and profitability within the shortest period of loan advance.
- ii) The amount in demand.  
Advances Committee is currently free to approve loans of up to \$15 000 maximum, any larger sum requires the endorsement of the Board of Trustees.
- iii) Period of repayment.  
This ranges from four to thirty six months. Periods of over three years may only be sanctioned by the Trustees.
- iv) Projects' viability and profitability.  
The project in question must be able to generate enough cash to meet monthly loan repayment requirements within the first month of operation.
- v) Borrower contribution.  
The borrower must be seen to be making a considerable financial contribution to his project or to have done so in the past instead of relying on a Bank for the entire capital.
- vi) Freedom from indebtedness.  
In any consideration of loan applications, the applicant must be free of crippling prior indebtedness.
- vii) Trade references.  
Credit rating of an applicant running business must be good, so must be that of borrower operating a current account if he already has bank account as this indicates degree of sound financial control. Business past performance represented by balance sheets.

## viii) Management.

The appropriate experience of the applicant in his chosen line of business or the availability of an employable individual with required track records in running of the enterprise. The applicant or his Manager must be a person with actual or potential ability to business operate. He must be an individual of character and integrity.

## ix) Security.

Readiness to provide acceptable collateral to ensure the loan in the following forms:

Bond over loans, swelling or business premises; cession of trade bills, marketable securities, permanent building society shares, Fixed Deposit receipts issued by registered financial institutions, Life Insurance Policies preferably with appropriate surrender value, guarantees from third parties plus notarial general covering bond over machinery and other business assets.

Security requirements is about the most common element subject to attack by emergent businessmen who feel this should be dispensed with altogether. We do not concur with this attitude for two reasons. First, borrowers who have been most problematic under the Scheme are those who had not pledged any of their property to secure loan advances.

Secondly, we see the security condition as generating negative as well as positive effects which induce the borrower to endeavour to meet repayments. The borrower endeavours to satisfy loan advance conditions for fear of losing any property pledged; at the same time he strives to make his business successful both in order to repay the loan and to realise increased profits from borrowed funds.

We see the security requirements as having punitive and incentive effects - punitive in the sense that the borrower compels himself to hit target for fear of losing pledged collateral - incentive in the sense that the borrower seeks funds in order to realise increased profits from existing or new enterprise to be established. We have therefore decided to call all factors associated with the possible effects of security stipulations, as PUNICENTIVE, to cover efforts to succeed generated by fear as well as effort due to the satisfaction deriving from success."

CHAPTER IVEMPIRICAL OBSERVATIONSIV.0 INTRODUCTION

The remainder of this thesis comprises the details of collection, analysis and interpretation of a survey conducted into the formal and informal sectors of the post independence clothing and footwear industry (both formal and informal) in Zimbabwe. The object was twofold.

- (i) the collection of descriptive data on informal production, and
- (ii) collection of information which could be used to determine the natures of the production methods in the two sectors and hence to ascertain whether or not a sectoral reallocation of scarce resources within the industry studied would serve any economic purpose.

Two points must be cleared at this stage with regard to the micro-economic foundations of this study. The first is the justification for the use of a single industry cross-sectional production function. To generalise about an entire sector, it might be held that an aggregate function should be used, with data being provided by representative firms from all branches of the sector. While this approach was still popular in the late 1950s, it has fallen from favour in more recent years with the recognition that non-homogeneity of inputs (and outputs) is too great a problem for the results

of the analysis to be worthwhile. Data has, therefore, to be collected from a single industry where this problem is less conspicuous. In this case the clothing industry was chosen, being extensive in size, and involving both production and marketing. This has naturally restricted the generality of the result, although observations of other informal activities were made in order to provide some basis for comparison and evaluation.

This leads to the second problem, the assumption of symmetry. The acknowledged heterogeneity of the enterprises which provided the data, albeit within one industry, renders this assumption particularly suspect. This constitutes a caveat which has to be borne in mind before any of the results of this research are extended to any particular firm or situation.

Why select the clothing industry? The reasons are, first, that it is one of the major contributors to manufacturing output and employment in Zimbabwe. This is confirmed by the figures in the Census of Production, which show that in the first year of independence the clothing and footwear industries (excluding textiles, carpeting, etc.) provided 6,42% of gross manufacturing output, 8,3% of wages and salaries and 11,93% of employment in manufacturing. (These figures reflect only the contributions of the formal sector.) In addition, it has a substantial informal sector involved in manufacture and retailing as well as a measure of illegal activity. It is, therefore, a substantial and, insofar as this is possible, a representative example of Zimbabwean manufacturing.

A copy of the questionnaire used in the fieldwork may be found in the first Appendix to Chapter V. It will be seen that it aimed at establishing

- a) The economic characteristics and trading practices of the enterprises in the survey.
- b) The rôle of the informal sector in cushioning temporary unemployment among retrenched workers and the newly urbanised.
- c) The potential of the informal sector interviewees to expand into formal production - by using ex post data from those who had already done so.
- d) The details of production required for a production function based comparison of the formal and informal sectors.

A summary of the responses to the questionnaire may also be found in the first Appendix to Chapter V.

#### IV.1 DATA COLLECTION AND APPRAISAL

In order to minimize the possible extraneous variables in the data, all collection was done by personal interview, the questionnaire being completed by the interviewer rather than the interviewee. Where necessary, use was made of an interpreter provided by the Bulawayo City Council's Department of Housing and Community Services.

The same questionnaire formed the foundation of interviews with both sectors (see p.186), the information being recorded with further details, and where possible interviewee comments.

While the responses from the formal sector can therefore be regarded as reasonably representative, some doubt may be attached to the representativeness of the informal sector sample in that the only operations covered were those of which the township administration were aware, or which were renting market space when the survey was conducted. It must be stressed, however, that in neither sector was the survey affected by an outright refusal to provide information, although a system of internal data checks via the sales dollar breakdown did eliminate certain information as unreliable.

Where data from an enterprise has proved consistent, the production and costing details concerned have not been used in the analysis. Other details concerning the operation, e.g. the existence of bank accounts or the keeping of books, to which a simple yes/no answer was adequate, have nevertheless been utilised. This problem is reflected in the use of only 91 of the 103 obtained for the analyses performed in Chapter Five.

The choice of enterprises from which to collect data was on the basis of random selection from a list of formal sector enterprises provided by the Clothing Council. Since all enterprises in the industry employing more than fifteen workers are mandatorily members of the Council, the only potential source of bias lay in the refusal of a small number of those approached to provide all the data required. The informal sector has no co-ordinating body which could offer a service like that provided by the Clothing Council. The administrators of the high density suburbs covered in the survey were nevertheless able to provide abundant information, including the names of all individuals renting commercial stands in the townships from which to run tailoring enterprises, while the municipal staff in the townships organised access to informal enterprises run from individuals' own homes.

#### IV.2 CHARACTERISTICS AND TRADING PRACTICES OF INFORMAL SECTOR ENTERPRISES

This section describes the details of informal sector management and production, as observed, and provides a basis against which Hart's (1973) view of the function of the sector might be judged. The following aspects will be covered: credit, savings, management, raw materials, previous work experience, ages of enterprises and their owners, employment, social factors.

One of the most conspicuous problems facing the informal sector appeared to be the unavailability of credit. While established

formal and frequently also emergent businessmen, were generally offered thirty days for payment on fabric, etc., with discounts for payment in under seven days, the informal entrepreneur generally had to pay cash. Moreover, in 45% of the responses, he or she purchased the fabric from retail outlets at a correspondingly high price. (See Table IV.2.3).

Two solutions to this problem are available:

- i) Bespoke tailoring. This is the informal sector's equivalent of "cut, make and trim" (C.M.T.) The tailor is, in effect, selling his labour and the use of his capital, to a customer who provides fabric, etc., thereby reducing the expenses of the tailor by the cost of the materials.
- ii) Formalisation and expansion (entry to the intermediate sector). The home clothing producer who requests credit on his own recognisances has little hope of success. Once he rents a property from the municipality for the explicit purpose of manufacture and trade, and is registered by them as a trader, his official status enhances his credit-worthiness.

Not only in terms of credit, but also of loan finance, the registered emergent businessman seems to be in a far stronger position than his informal counterpart. However, the Small Enterprises Development Corporation (SEDCO) recently stressed that actual title to property is not a prerequisite for loan funds (Financial Gazette, 2/7/84), loan extension being based

instead on

"...employment creation, skill formation and development, promotion of national savings, foreign currency earnings or saving, utilisation of domestic resources and provision of necessities to under-developed areas."  
(Herald, 3/5/84)

Despite the vagueness of these criteria, one point is clear. Few funds will be forthcoming to the applicant whose organisation is informally run, since it is far more difficult for the informal operator to indicate how he can fulfil the loan criteria than it is for his formal counterpart whose records are subjected to annual audit.

The cash basis of all purchases by the informal entrepreneur makes expansion difficult. CMT operations offer a partial solution, but many operators wishing to expand have preferred to do so by offering customer credit instead, trying to capture or maintain a market share in extremely competitive conditions. The questionnaire yielded the following figures for credit received and offered by informal producers:

Table IV.2.1: Credit received by informal interviewees

Days of credit received	Number of enterprises N = 69	% of total enterprises
0	62	90
30	2	2,9
60	1	1,5
90	1	1,5
inc. CMT (partial or complete)	14	20,3

Table IV.2.2: Credit offered by informal interviewees

Days of credit offered	Number of enterprises (N=69)	% of total enterprises
0	29	42
7	1	1,5
30	30	43,5
60	5	7,5
90	3	4,5
180	1	1,5

The second table is, to some extent, misleading. Many clothing producers aim at a wholly rural market, travelling from town to a selected mine or tribal area, where goods are sold on a cash basis. The figure are, therefore, not representative of conditions facing petty producers operating in the urban market.

Where output is intended for urban sale, the degree of market competition is greater, both between the informal enterprises, and between the products of formal and informal producers. Sale on credit seems a widespread feature of the urban though not the rural informal markets for such consumer semi-durables as clothing. It is not a feature of the sale of foodstuffs, although credit is reportedly available at shebeens. For many of the interviewees, illiteracy was a major restriction on expansion by granting credit since lists of creditors could not be drawn up.

Bad debt was mentioned by a few as a problem, but by and large small-scale operators seemed selective about offering customers credit. One of the advantages of a strictly localised operation is the operator's personal knowledge of his customers' financial circumstances. In addition, most interviewees who provided credit extended it no further than the end of the month, although 13% offered sixty days or more. These individuals often suffered extreme cashflow difficulties.

Formalisation of production is not an option open to all, hence a consequence of the credit problem facing the informal operator is a need to accept lower rates of profit in exchange for reduced initial costs. This may be achieved in two ways: the first, already mentioned, is bespoke tailoring; the second, is the use of factory offcuts and reject materials. With the adoption of this method, the production process becomes far more labour intensive, i.e. the proportion of final value added by labour input rises significantly.

Some of the operators obtained their offcuts direct from factories in which they were already holding down fulltime jobs, while others established an agreement with management for the purchase of offcuts. By and large, however, offcuts were purchased by wholesalers who sorted them into approximately equal packages by weight and fabric, although not by colour. These were then offered for sale to the informal sector. Operators purchased them principally for the manufacture of cushions and children's garments, although low-priced women's wear was also involved. Such clothing is

primarily sold in rural areas, the urban buyer being more conscious of appearance, and urban prices of new garments manufactured from whole fabric being far lower than they are in rural areas.

Table IV.2.3: Sources of fabric used by the informal sector

Fabric source	Number (N=69)	Percentage*
Factory-bolts	9	13,05
Wholesale - offcuts	28	40,55
Customer - CMT	29	42,00
Imported	1	1,45
Retail & ) Wholesale) whole fabric	31	44,95

(\* Many operators had more than one source of fabric.)

Related to the problem of credit is that of savings. Zimbabwean banks are unwilling to extend finance to the applicants who do not bank with them. The informal operator is distinguished from his formal counterpart in two respects here:

Firstly, he rarely differentiates his personal assets from those of his enterprise. This is a business failing which frustrates expansion to a significant extent, especially when combined with inadequate bookkeeping.

Secondly, many savings tend to be in the P.O. Savings Bank or a building society, neither of which offers a loan facility.

Bank accounts, where they existed, were savings rather than current accounts. The significance of this lies in its effects on the operation of the development agencies. Thus the Finance Trust for Emergent Businessmen (FEBCO) operates by providing collateral for approved projects, thereby permitting the applicant to receive a commercial bank loan. Before anything can happen though, the individual has to approach his own bank, who refers him to FEBCO, and submit his accounts for their perusal. Such an organisation clearly cannot cater for the needs of the informal operator, nor even those of many emergent businessmen. The average loan value of applications passed by commercial banks as suitable for FEBCO scrutiny, was approximately Z\$836 in the first four years of operation. (September '78 - June '82). Clearly, this was beyond the scope of the average small enterprise.

The full breakdown is as follows:

Table IV.2.4: Details of savings and other accounts kept by a number of firms (N=69)

Separate accounts for owner and firm	2	2,9%
Single account (bank savings)	18	26,2%
Single account (building soc. or P.O. savings bank)	18	26,2%
No account	31	44,7%

The problems presented by the absence of the concept of separate corporate identity extend beyond inability to obtain loan finance; the operator who makes no distinction between money in his pocket and his enterprise's assets will not regard as a personal debt money taken from his business. There is, therefore, a propensity for this sort of enterprise to fail, due to liquidity problems.

The concept of the informal sector as a root stock from which vigorous emergent entrepreneurs can shoot, is further disturbed by the nature of the records kept in it. The illiterate individual can keep control of a small operation without difficulty, but with expansion comes the need for records, not merely to satisfy the formal requirements of the authorities, but to permit access to credit, since any credit-granting institution will require an insight into, at least, the cashflow position of a potential debtor.

Amongst those operators who were trying to expand, there was a definite awareness of these problems, and a number of those using double entry were doing so with the aid of a bookkeeper. Also conspicuous was the number who had learnt to keep a ledger or cashbook during their formal schooling. A bookkeeping system is naturally not a prerequisite for an informal enterprise running on a cash basis. However, as soon as credit sales are entered into with a view to expanding urban turnover, the operator has to have some measure of his financial situation. The emergent businessmen's awareness of this is reflected in their support of schemes organised through groups like the

Small Industries Advisory Service (SIAS, now ZIAS), which aim at teaching the entrepreneur the elements of bookkeeping.

Among the younger participants interviewed during the survey, most were literate and kept at least a list of creditors. However, as Table IV.2.5 shows, 48% of interviewees kept no records whatever, although some of these made a point of keeping receipts and invoices in case of future problems.

Table IV.2.5: Business records of informal sector interviewees

Bookkeeping method	Number (N=69)	Percentage
Double entry	6	8,7
Single entry	6	8,7
Cashbook, ledger, memos, etc.	24	34,8
None	33	47,8

Despite the high proportion of interviewees keeping no records, the bulk were still able to analyse their production costs. Asked to break down their sales dollar, 80% (55) were able to do so accurately, while only 13% (9) could not do so at all. Costing and pricing of production were clearly subjects to which the majority paid some attention, even though not all kept records.<sup>1</sup> Those working on a pure cash basis were able

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1. The results of each individual's claimed sales dollar breakdown were checked by computing a similar breakdown, using the individual cost components of production obtained from the questionnaire.

to keep their mark-up constant in the face of regular changes in input prices.

One of the hallmarks of the informal sector was that operators did not ascribe a value to their own labour in their sales dollar, treating it as synonymous with profit; whereas the small-scale entrepreneurs within the formal sector often distinguished themselves sufficiently from their enterprises to be able to isolate a wage from a corporate profit figure. One of the reasons for this may well have been the employment of non-family members in these businesses, and hence an awareness of wages as a production cost. The ability of an entrepreneur to distinguish between himself and his enterprise seems to lie at the heart of the division between truly informal production and the intermediate sector, as found in Zimbabwe.

The hazards of attempted expansion in the absence of either business experience or acumen were made apparent by interviews with a number of informal operators who, following Independence in 1980, shifted their operations from the townships to the business area of the city. High rents, limited clientele and absence of books were combined with sales dollar breakdowns that suggested imminent bankruptcy. By contrast, bespoke tailors of more experience chose sites close to or on the two axis roads serving the northern portion of the townships (6th and 3rd Streets) where rentals were lower than in the city centre but where business was brisk. They were not poorly capitalised, generally employed bookkeepers, and as a rule had

experience in the formal sector, not always in the clothing industry, but often as storekeepers, schoolteachers and nurses.

A further notable characteristic of this group - those in the transition between informal and formal enterprise - was their age. Most were over 40, the few younger exceptions being generally individuals with qualifications and experience from the formal sector and the schooling system, but with a confessed penchant for entrepreneurship which took them into self-employment. It was in this group that one typically found such diversely qualified individuals as sewing machine technicians, state registered nurses, schoolteachers and storekeepers. Few had training in clothing manufacture, but many had taken on employees with extensive experience, their own contributions being largely entrepreneurial. If there is to be inter-sectoral movement, it seems likely that this is the area in which it will take place.

Among the informal clothing producers, the ages of one-or two-man enterprises and their owner operators clearly indicated that this was not a buffer occupation adopted during periods of frictional unemployment as suggested by Hart (1973), although this may well be the case for food sellers, cigarette vendors, etc., whose initial endowments of skill and capital can be lower, and whose transactions, being purely cash, bring in an immediate income. The result in Bulawayo seems to correspond with that of Schmitz (1982) in Brazil,

"...characterising employment in the small-scale sector in terms of workers unable to find a job in a large enterprise or 'in terms of the source of employment or the urban poor' (Sethuraman, 1976, p.75) would be very misleading." (p.255)

Table IV.2.6: Ages of informal enterprises employing under five workers

Age of firm	Number N=69	Percentage
< 5 years	21	30,4
5-10 years	15	21,8
10-15 years	11	15,9
15-25 years	6	8,7
> 25 years	16	23,2

Table IV.2.7: Ages of informal sector operators interviewed

Age of operators	Number N=69	Percentage
< 25 years	2	2,9
25-30 years	5	6,75
30-40 years	16	23,2
40-50 years	20	29,0
50-60 years	18	26,1
> 60 years	7	20,15
Unknown	1	1,45

Table IV.2.7 shows that only 9,5% of interviewees were under 30 years of age. By contrast, Sister Veronica (Brand, 1982) found that 26,1% of respondents in her survey of informal

operators in Magaba, Harare, were under 30 years of age, with 54,9% being between 30 and 50 years of age. This generally younger distribution may be attributed to the broader focus of the Magaba study, including vendors as well as informal manufacturers and processors. Even given the possibility of hire-purchase, the need for capital investment in a sewing machine is a significant exclusion factor, which keeps unemployed youth out of clothing manufacture. No such barriers exist in the vending of raw foods, etc., hence a lower age distribution may be reasonably expected.

It has been suggested (Fields, 1975) that the informal sector provides an avenue of employment for new migrants as well as the fractionally unemployed. The former group constituted only a small component of the total number employed in informal manufacturing of clothing and footwear. Those interviewed who were tailors in rural stores, or had attended sewing classes in town. The implication is that this sort of informal activity is not immediately available to the bulk of newly arrived urban residents. In this, petty manufacturers seem to differ from vendors, many of whom, especially near the Makokoba market, have rural connections.

Although few operators were new immigrants, a number employed trainees, in particular newly urbanised family members. This system of informal apprenticeship seems to escape the minimum wage legislation covering established industry, and provides a refuge for migrants, albeit at extremely low wages. Such wages

ranged from zero, with board and lodging provided, to \$15 per month. In addition, a few operators used to put out work to other members of the informal economy, the going rate in 1982 being \$2.00-\$3.50 per garment. This was pure piece-work, the worker providing his labour and his own machine, but all materials being provided by the employer.

Where operators had expanded into formal tailoring, they were not subject to the wage prescriptions of the industry, which are above the national minimum, until they employed fifteen workers. The result was that few machinists employed by emergent tailors, were paid the Clothing Council's official wage, but rather the government minimum for industrial workers.

It has become clear from the frequent press reports on the subject that the wages paid by African employers are more often below the prescribed minima than is the case with European employers. This could be ascribed to the Europeans' awareness of the delicacy of their political position in the country. Observation amongst the small businessmen in the townships suggested that the wages paid were often below the legal minimum. In addition, the shortage of employment opportunities in the cities puts the employer in a strong position, should he wish to force wages to the lowest possible level.

Sister Veronica (Brand, 1982) found that 77,7% of respondents in her Magaba survey had previous informal sector experience;

86,5% of the men having been involved in it, although only 54,9% of women claimed previous formal sector experience. The figures seem surprisingly high, as she noted. However, included in the category of formal sector experience were both domestic and farm employment, the former contributing 26,5% of positive responses. Excluding those with only domestic experience, the figure would have been a joint 57,1% with formal experience. This is virtually identical to the result found in the Bulawayo survey, where domestic service was disregarded.

Table IV.2.8: Formal sector experience among informal sector employees

Formal sector employment experience	No.	%	In clothing	%	Other	%
Yes	44	63,8	32	46,4	23	33,4
No	25	36,2	37	53,6	46	66,4
Total	69	100.0	69	100.0	69	100.0

(A number of interviewees had formal sector experience in clothing and other employment, hence the apparent overlap when adding across Table IV.2.8)

Although a large proportion (largely women, as in the Harare study) had no formal sector experience, they had often had some training in the informal sector, generally with their parents. A further group had been taught basic skills by friends or at handicrafts centres and in women's groups organised by the City Council's Department of Housing and Amenities. These individuals

were largely involved in crochet work and manufacture of cushions and canvas bags.

The larger crocheted goods presented for sale locally (and those taken for sale in South Africa) were not generally made by one worker alone. They tended to be manufactured by women supplementing their family incomes, the more skilled amongst them making the central patterns, while the filling and joining was done by children and others learning the skills. This system of manufacture leads to variations in quality within items which seem to detract from their marketability when offered for sale to a European clientele. While it seems certain that better prices would be achieved with lower output and higher quality, this does not imply that the current system fails to maximize the returns to skilled labour.

Specialisation within the informal manufacture of crocheted goods, whilst lowering prices, need not reduce profits to the group involved. The same cannot be said of the informal production of knitwear.

There has been a shortage of imported knitting yarns for all the post independence period; this deficiency has been partially remedied by the purchase of reject items from the factories. These are unravalled and the wool reused. Unravelling, while uneconomic in the formal sector with its high minimum wages, is feasible for informal enterprises in which the opportunity cost of labour is relatively low. By and large, children do the unravelling while actual knitting is done by adults using a

domestic knitting machine. The result is a more labour-intensive product which, however, has a lower mark-up potential than the factory-made item.

Two social factors seem to particularly affect informal sector operators - their religion and their sex. The religious factor was apparent in the type of manufacturing performed. Almost all the small-scale producers of zinc buckets and tins and of iron cowbells and other smithed goods were male members of the Apostolic faith (M'Apostoli) whose members do not allow themselves to take work under an employer, and are therefore largely confined to the informal sector. The manufacture of canvas bags and satchels, etc., was similarly the virtual preserve of M'Apostoli women. Since this sect forms a significant portion of Bulawayo's informal sector, and since they have acquired their skills in the informal sector, they skew downwards the number of informal operators with formal sector experience.

Looking at the sample group, there were roughly the same proportions of men and women running informal clothing and footwear operations (41,7% male, 46,7% female and 11,7% mixed). A disparity did exist in that, by and large (although not universally), women were working to supplement family income rather than acting as the major breadwinner. This aspect has, however, been covered in more detail in Chapter II.

APPENDIX ICASE STUDIES

Some further insight into the individuals involved in the informal manufacture of clothing may be gleaned from the following case studies:

1. The interviewee is a male of 50, who comes originally from the Tjolotjo area where he has left his children and cattle. He works alone, using a treadle-operated Singer purchased secondhand for \$50. He estimated his turnover in the previous year at \$960, all of it in repairs and alterations which are his speciality. For this reason, only 25% of his turnover is estimated by him as going to expenses - primarily zips, buttons and thread. He pays no rent for a workplace, as he places his machine daily under a tree on 3rd Avenue Extension, close to his room. Working on a purely cash basis, he finds that he has no need for books, and does not keep a savings account of any sort. He opened up in 1979, when the war pushed him into town, and he finds that he is doing better there than he had done as a store tailor in Tjolotjo, or as a machinist in town, both of which were one-time occupations of his, although he had no other formal sector experience. He added that self-employment provides greater job satisfaction than formal employment, should it be available, as well as a better income. In spite of subsequent increases in minimum wages, this may still be the case, as real

earnings have not shown substantial rises. Furthermore, with the raised prices of new garments, a repair enterprise like his may do commensurately better.

2. This enterprise is run to supplement family incomes, although the head of the household and two of his sons are employed in the formal clothing industry - at the time of writing, the firm for which they work has gone into liquidation, but no follow-up has been possible. At the moment, the enterprise is run by the mother of the family, who does all the selling, and her three sons, who make up garments at home, sharing their one machine (a treadle-operated Singer) in four-hour shifts. The machine is over 30 years old, but is still run 12 hours a day for a 6-day week, without problems. Current production is between \$40-\$50 worth per day, fabricated from offcuts bought from the factory in which members of the family work. The estimated profit on any item was 23%, suggesting an annual profit of between \$2 760 and \$3 450. The bulk of sales are made locally and in an area within a radius of 30 miles from Bulawayo; although on occasion, goods are taken as far afield as Shangani. Although some credit is offered in local sales, where the client is known, the enterprise keeps no books, nor is there a savings account. The enterprise has now been established for 23 years, and the mother of the household is 57 years old. Aside from the family members, who are currently working in the clothing industry, none has any formal sector experience, though the family was spending money on the education of those sons still at high school.

3. The interviewee rents one of the Council shops at the back of the Makokoba Market, rental at the time of the interview was \$22.50 per month. He is 62 years of age and in failing health, but his son is helping with the work. He has two machines, one electric and one treadle, purchased for £52 and £32.10s. respectively, in 1961, following the destruction of all his equipment in the inter-party riots of that year. He buys his fabric from a local European wholesaler who, when interviewed, knew him as a regular client of many years' standing. He also operates as a bespoke tailor. All dealings are in cash and although he keeps notes of customers, fabric and of income, there is no formal book-keeping, nor does he keep any savings account in his, or his enterprise's name. He has been self-employed for 44 years now, and has also worked as a machinist in the formal sector, as a storekeeper and as a government messenger. In the past, he used to sell his products in the Plumtree and South Nata T.T.L.'s, but has not done so since the beginning of the war in that area of Matabeleland (1976). He makes up both men's and women's clothing, but finds the latter more lucrative, the respective returns on his work being 15% and 40%. The value of total output last year was \$7 200, suggesting an approximate profit of \$2 000.
4. The interviewee runs the most highly capitalised informal operation in the survey. He and his wife comprise the entire labour force, but they have four electric machines, one of which is an overlock and one a heavy duty. Originally from Malawi, where he worked as a fishmonger,

he came to Rhodesia and worked as a machinist. Ten years ago, he went into self-employment and is now 40 years old. He does a large amount of bespoke work, but prefers to take on orders, particularly for school uniforms which he turns out in bulk for mission schools. Despite the nature of his work, he and his wife operate in their own home, a two-room flat in Makokoba. Fabric is obtained either from customers or retail outlets and he operates wholly on a cash basis. He has neither savings accounts nor records of any sort and has paid off his machines, which were bought on hire-purchase. He estimates his total revenue at \$2 600 per annum, much of which is clear profit on bespoke operations; rent constitutes 20% of his expenses, and thread, buttons, etc., the remainder. This gives an approximate profit of \$1 950 per annum, after paying the rent.

5. The interviewee is a married woman with children, but does all the production and selling of goods herself. Her machine is a hand-operated Singer, which she purchased for \$145. Monthly output fluctuates markedly from a low of approximately \$80 in January/February, to a high of approximately \$500 in November/December. (There are two peaks - mid-year, i.e. winter, and pre-Christmas.) She buys fabric etc. retail, paying cash, and expects payment in cash, although occasionally extending credit up to 30 days. Her sales are split about evenly between Bulawayo and Gweru, and she has not noticed any difference in demand for her products in the past five years (despite

the immediate surge in general levels of demand after independence). She keeps a bank savings account and a set of double-entry books, having learnt book-keeping from her father who was a storekeeper. Aged 37, she has been self-employed in this way since she was 17, although she had a brief spell in a clothing factory (not as a trainee or machinist), and has no other formal sector experience. She concurs with operators producing for rural markets in disliking cotton as a fabric, but for different reasons. The rural demand is specifically for crimplene and polyesters, which although less comfortable are durable and easy to wash. The interviewee serves an urban clientele, but objects to the local fibre as the fabric comes in 36 inch bolts, which are narrower than the bolts of synthetic fabrics. The result is a greater proportion of wastage. She estimates her return on labour at 53%, including a deduction for household rent which she meets. This gives an estimated annual profit of \$1 200 per annum.

6. The interviewee and her sister have been in business producing low-priced dresses and knitted goods for 12 years. She is 38 years old and neither she nor her sister has formal sector experience of any sort. Their operating capital comprises an old treadle Singer, purchased for £158 and a second-hand knitting machine, purchased for \$200. The fabric used is, to a large extent, offcuts purchased in bags from wholesalers. Where whole fabric is used, it is purchased retail. In addition, they are prepared to make up goods on a bespoke basis, where the

customer provides the fabric. They pay cash for all inputs, but offer up to 3 months' credit, although they prefer cash payment. They operate a single bank account and, although there is no formal book-keeping system, they do keep notes detailing purchases, sales and credit. Sales of dresses occur largely in the Kadoma (Gatooma) area (estimated value \$2 400 per annum), while jerseys are sold in Bulawayo (estimated value \$840 per annum). Returns on labour vary between 40% and 50%, according to the fabric used, giving a profit of approximately \$1 450 per annum.

The first points of note in these six studies are the diversities apparent in production methods applied, in markets catered for, and in skills used. What the six appear to have in common is the flexibility to cater for the public's diverse needs, as they appear, adapting their own allowances of human and physical capital to allow for the efficient satisfaction of public wants. They have an advantage over formal enterprise in that they are closer to the market. Its immediacy, combined with their lack of bureaucracy, allows new trends in demand to be satisfied speedily. In addition, much of their work is performed on a bespoke basis, thereby reducing cash-flow problems.

The production methods used varied sharply in terms of capital/labour ratios, and in the quality and nature of each producer's output. There was, however, little sign of an active urban marketing strategy, despite the competitive conditions within the township.

Other features were the voluntary nature of participation in the sector, and also the rôle it plays, given the absence of a generalised social security system. This latter point has been raised with regard to the problems of income maldistribution which might follow the introduction of a social security scheme that did not take cognizance of workers in subsistence agriculture and the informal sector. (Brand, 1981, p.8).

Thus far, this thesis has been concerned with the operation of the informal sector, its relations with the public and private sectors and the manner in which it could (and does) contribute to the development of the economy. A fundamental question remains, however: granted that the informal economy should be encouraged (and I have tried to show that this is not accepted in all development circles, either internationally or domestically) should such stimulation be passive - the lifting of the burden of legislation which the sector currently bears - , or active through the investment of scarce resources in it?

In an attempt to answer this question, the survey data giving details of production, factor inputs and outputs, was subjected to a production function analysis.

The following chapter presents a synopsis of the theory involved (which may be omitted without loss by those already au-fait with it), and then gives the results, together with an analysis of their implications.

CHAPTER VPRODUCTIONINTRODUCTION

It has already been mentioned that one of the problems in the analysis of intersectoral articulation is ascertaining whether, in fact, there is a formal/informal duality at all. Writers such as Leys and Gerry have held that there is only one system of production, leaving as the sole dichotomy that between worker and capitalist, or perhaps more appropriately, wage labourer and profit earner. The intricacies of this approach have already been described in Chapter I, but no clearcut response can be provided without recourse to empirical observations.

With this in mind, a survey of one hundred and three enterprises engaged in the clothing and footwear industry was conducted, just over half being from the informal sector. A synopsis of the results is given in the tables in Appendix I of this chapter. (See also p.129-130).

The crucial points at issue in the debate are:

- a) the production method - are the factors of production combined in the same way in large- and small-scale enterprises?
- b) the rôle of the owner of capital - to what extent is the owner (i.e. the informal sector operator) an employer of wage labour?

- c) is the productivity of factors of production a function of enterprise size?

The first and third of these points may be determined in theory, by the use of production functions. There are, however, numerous practical problems in such an analysis. This chapter is largely an attempt to resolve the difficulties of a production function approach, evaluate the validity of its use, and provide an acceptable treatment of the data collected. To this end, the chapter is broken down into the following sections:

- V.1 Data selection problems
- V.2 Production function theory
- V.3 Results of data manipulation
- V.4 Conclusions

Section V.1 and V.2 cover the problems attendant on production function analysis and the principles underlying it. They have been placed in the body of the text for the sake of continuity. However, the reader who is aware of the issues and theory involved may treat them as appendices.

## V.1 DATA SELECTION PROBLEMS

Numerous caveats exist governing the data fit for use in a regression analysis intended to determine the parameters of a production function. The bulk of these revolve around the assumption of factor homogeneity which is implicit in the notion of the production function. Thus, in an ideal situation, one could either use the number of units of capital, or their market value, since in a perfectly competitive profit-maximising environment, the market price of new or second-hand capital will equal that capital's marginal product.

A second problem is that of Leibenstein X inefficiency (see Leibenstein, 1966; Lecraw, 1979). Lack of information and poor control give rise to "inert areas" within a firm, i.e. sub-optimality and use of inappropriate technology. These bias the production parameters and may prevent any estimation of the elasticity of technical substitution, since the use of regression analysis for this purpose requires a variety of strong assumptions, including profit maximization and the equality of marginal productivity and factor price ratios.

Clearly, not all units of capital are homogeneous and there are sufficient imperfections in the market over and above managerial inefficiency, to ensure that price and marginal product are not equal. The Zimbabwean economy is suffering presently from foreign exchange shortages and the after-effects of sanctions, while further distortions have been introduced by Government regulation of mark-ups on imports and prices of second-hand capital.

Ward (1976, pp.207-221) pointed out that over and above these difficulties, the capital stock was not strictly the correct variable to use. If one is trying to explain growth, he said, concern should rather be with the flow of capital services.

One frequently mooted escape from these difficulties is the use of surrogate valuations, the most obvious being use of electric current, a method which additionally accounts for variations in the intensity of capital utilisation.

Unfortunately, application of this method proved impossible in the context of the Zimbabwean clothing industry, many of the machines in use by the smaller operators being manual or treadle-operated, or electrified, but drawing on only the normal 220 volt household current. The result is that an estimate of capital usage, based on electricity consumption, would be difficult, as there is no way to separate the various components of a household's aggregate power account. Additional sources of difficulty are the varying inter-area tariffs and peak loading, i.e. variation in tariffs according to time of day, in an effort to level the rates of electricity consumption.

The use of capital surrogates being impossible, it was felt that direct valuation was the next best alternative. In order to escape some of the caveats pertaining to capital, three valuations were used for the informal sector's machinery: purchase price, current second-hand valuation and current replacement price in South Africa.

The rationale behind the latter two was as follows: In a competitive market, the price of any factor will be determined by its marginal product. The prices of second-hand machinery would, therefore, be related to its productivity. The effects of artificial capital scarcity are not taken into account in such an analysis, however. Thus, although Harrison manual and treadle machines are assembled in Zimbabwe, the prices differ sharply from those in South Africa, where restrictions on imports are less stringent. The following table of prices quoted by Berzack Brothers,<sup>1</sup> the major agents for these machines, gives some idea of the distortions in the market.

Table V.1.1: Current, second-hand and shadow prices of sewing machines in common use by informal producers<sup>1</sup>

Machine	Zimbabwe (Z\$)		R S A New (R)	R S A New (Z\$)*
	New	Second-hand 10 years old		
Manual Portable	134	80-90	85	78.25
Treadle	177	120-130	180	166
Treadle & Motor	217	‡160	215	198

\* Assuming Z\$ 1.0 = R1,085

1. Unpublished interview with Berzacks, Bulawayo, January 1983.

On top of these price differentials, one must add the discrepancy in sales tax rates in Zimbabwe, which currently (1984) stand at 18% and 23% for necessities and luxuries respectively. Both rates are applicable, the former being charged if the machine is purchased from the agents or a sewing machine centre; the latter rate applying if it is purchased from a furniture shop (furnishing being regarded as luxuries).

Labour also presents problems in measurement, because of non-homogeneity, varying work hours and non-uniform wages. The best option would have been man hours worked per unit of time. However, informal sector information was too unreliable for such figures to be used. The proxy used has, therefore, been number of individuals involved in all aspects of production (including management) at the time of the survey, i.e. there has been an implicit assumption of labour homogeneity.

Griliches and Ringstad point out that the value of the  $R^2$  coefficient tends to be far higher if value added is used as the dependent variable rather than labour productivity (their choice of labour measurement). They add, however, that

"Such transformations do not, of course, 'improve' the fit in any real sense. They just change the base against which it is measured." (op.cit., 1971, p.64)

Output was measured in terms of current prices, and converted to value-added, where required, by subtracting raw material costs. (Not total costs, excluding wages and interest, since this would reduce the comparability of the two sectors,

water, power, municipal rates, etc., seldom being part of the informal producers' costed expenses.) The variability which often results when questionnaires are completed by interviewees was avoided by having only one interviewer, the data being supplied in the course of a structured conversation, additional information being noted on the return.

## V.2 PRODUCTION FUNCTION THEORY

The concept of the production function as a tool of inter-firm comparison is not a new one. Cobb & Douglas (1928) started a movement which was soon taken up in the field of agriculture, to which it seemed ideally suited (e.g., Tintner, 1944; Heady & Pesek, 1960), and even in industry (Murti & Sastry, 1957; Katz, 1969; Griliches & Ringstad, 1971).

The results of production function studies may be used to show such diverse points as:

1. the major sources of growth;
2. the rôles of technical progress, returns to scale and elasticity of substitution, as opposed to changes in volume of factors of production, in increasing output;
3. whether factors of production have operated with even intensity over time;
4. whether technical progress has been neutral or biased;
5. the relationship between market structure and factor productivity;

6. distribution of income between factors, and
7. the effects of increasing output on employment of labour.

The second, third and fourth of these require the use of time series data, and are, therefore, precluded from a study involving the informal sector in which many enterprises do not keep records. In order to demonstrate how the others may be estimated, the following few paragraphs will describe a comparatively simple model, the Cobb-Douglas, which has the advantage of being linear in its log transformation. It takes the form:

$$Q = AN^{\alpha}K^{\beta} \quad (1)$$

where  $Q$  represents output,  $N$  labour and  $K$  capital.  $\alpha$  and  $\beta$  are the respective elasticities of output with regard to labour and capital. They are the parameters obtained when estimating the linear form of the equation.

$$\ln Q = \ln A + \alpha \ln N + \beta \ln K \quad (2)$$

The equation is homogeneous of degree  $\alpha + \beta$ . Hence, when  $\alpha + \beta > 1$  these are increasing returns to scale, while conversely, when  $\alpha + \beta < 1$  there are decreasing returns. If the function is linear homogeneous ( $\alpha + \beta = 1$ ), it indicates that given perfect competition, factors are paid their marginal revenue products, with the revenue being distributed between labour and capital, according to the

values of  $\alpha$  and  $\beta$ . (Euler's theorem, see Henderson & Quandt, 1980, Chapt.5.1).

Unfortunately, under constant returns and perfect competition and assuming fixed factor and product prices, the optimal size of the firm is indeterminate. Moreover, Marschak & Andrews (1944) pointed out that, given these assumptions, all firms should be combining factors of production in an identical ratio, irrespective of firm sizes. The result is that, while the production function yields an expansion path, the isoquant map degenerates to a set of points on this path, hence no information may be deduced about the marginal rate of technical substitution. Clearly, the prices of output and factors of production will vary in reality as the level of output changes. This being the case, neither the total cost nor the total revenue functions would be linear, and a profit maximizing output could be determined.

Maximizing profit,  $\pi = Q(K,N)P - (Nw+Kr)$  where  $P$ ,  $W$  and  $r$  are the constant unit prices of finished goods, labour and capital respectively, shows optimal utilisation of capital where

$$N = \alpha \frac{QP}{W} \quad (3)$$

$$\text{and } K = \beta \frac{QP}{r} \quad (4)$$

These show proportionality of capital, labour and output; substitution of these values of  $N$  and  $K$  into the profit

equation yields no determinate optimal output. This result is consistent with the non-satisfaction of the second order necessary conditions for profit maximization.

In an attempt to escape this problem, Walters (1963) alludes to Kaldor's observation that the inclusion of entrepreneurship, which is not evenly distributed, would result in variations in the size distribution of firms, even given a single optimal capital/labour ratio.

In more practical terms, Griliches & Ringstad (1971, p.5) provided four explanations for intra-industry size variations between firms:

1. Firms are constrained by their stock of inherited capital. At reasonable prices, this can only be changed slowly.
2. Factor prices facing different enterprises are not constant. According to size, there may be variations in access to credit, and there may be regional variations in wage rates and other costs of production.
3. Capital/Labour ratios may be determined in the light of expectations of future prices, rather than current factor price ratios. Variations in expectations will occur from firm to firm.
4. While under perfect competition, with every factor being paid its marginal product, there should be only one efficient size of firm, empirically, there are wide fluctuations in capital/labour ratios, and sizes of enterprise within clearly defined industries. This is

a justification in itself for the validity of a single equation O.L.S. treatment.

The Cobb-Douglas model is open to attack on a number of grounds, many of which are shared by the constant elasticity of substitution (C.E.S.) models to be discussed next, and of which the Cobb-Douglas is a special case.<sup>1</sup> Griliches & Ringstad mention the problems of both single and simultaneous equation estimation

"...we are likely to be subject to both 'simultaneity' and 'errors in variables' problems. There isn't much that we can do about it,...except to investigate the possible magnitude of such biases and convince ourselves that much of the interpretation that we shall put on our results is correct, nevertheless."  
(pp.15,16).

It should now be clear that these forms of the production function have grave limitations as analytical tools. However, precedent has given them authority, and it appears that, despite their theoretical flaws and the frequent limitations of the data used in their estimation, they may serve as useful heuristic devices.

The restrictions of the Cobb-Douglas function in its homogeneous form  $Q = AN^{\alpha}K^{1-\alpha}$ , or even in the more general form  $Q = AN^{\alpha}K^{\beta}$  are clearly severe. While the C.E.S.

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1. Only if  $\alpha + \beta = 1$ , i.e. under CRTS. If  $\alpha + \beta \neq 1$  the Cobb-Douglas no longer has constant elasticity of substitution. See Henderson & Quandt, 1980, Ch.5.1.

function operates under many constraints, common also to the Cobb-Douglas, it does have the advantage of additional free parameters. Furthermore, as can be seen most clearly in Equation (8), the C.E.S. format embodies the simpler model as a special form. Hence, if the Cobb-Douglas is realistic, this will be evident on the estimation of the C.E.S. function.

The model eventually chosen was Kmenta's (1967) linearisation of Brown & de Cani's (1963) formulation. The advantage of this model over the earlier A.C.M.S. (1961) version being that it included directly a scale parameter, while Kmenta's work allowed for ease of computation. It must again be stressed that the Cobb-Douglas function is merely a special case of the C.E.S. with isoquants equidistant from one another, with a homothetic expansion path and unitary elasticity of substitution.

Brown & de Cani's formulation of the C.E.S. function was:

$$Q = \gamma \left[ \delta K^{-\rho} + (1 - \delta) N^{-\rho} \right]^{-\frac{v}{\rho}} \quad (5)$$

$$\text{i.e. } \ln Q = \ln \gamma - \frac{v}{\rho} \ln \left[ \delta K^{-\rho} + (1 - \delta) N^{-\rho} \right] \quad (6)$$

The parameters in Equation (5) and (6) may be interpreted as follows:

$\gamma$  is an "efficiency parameter" indicating by how much output will change, following a given change in inputs with the capital/labour ratio unchanged; in a time series study  $\gamma$  would, therefore, be a measure of neutral technical progress.

$\delta$  is the "distributive parameter". Just as  $\alpha$  and  $1-\alpha$  represented factor shares in the constant returns case of the Cobb-Douglas, so  $\delta$  and  $1-\delta$  represent the factor shares of labour and capital in the C.E.S. model. Thus, if two regressions yielded the same estimates of  $\sigma$ , a change in  $\delta$  will mean a change in the distribution of income.

$v$  is the "scale parameter" indicating the degree of homogeneity of the function, corresponding to  $\alpha + \beta$  in the Cobb-Douglas. Thus

$v > 1$  - increasing returns to scale

$v = 1$  - constant returns (linear homogeneity)

$v < 1$  - decreasing returns

$\rho$  is the "substitution parameter" used in the calculation of  $\sigma$ , the elasticity of substitution:

$$\sigma = \frac{1}{1+\rho} = \frac{\left[ \frac{d(K/N)}{K/N} \right]}{\left[ \frac{d(\delta K/\delta N)}{\delta K/\delta N} \right]}$$

which shows the way factor proportions react to changes in the marginal rate of technical substitution,  $\frac{\delta K}{\delta N}$ . Thus, if one assumes factor pricing by marginal revenue product

$$\frac{\delta K}{\delta N} = - \frac{w}{r}$$

it is clear that the Leontieff type input/output case will give  $\sigma = 0$ , while perfect substitutability will give  $\sigma = \infty$ .

The Cobb-Douglas case has  $\rho = 0 \Rightarrow \sigma = 1$ .

The problem with Equation (6) is that in this form it cannot be estimated, using O.L.S. It was in an attempt to overcome this problem and ease the computational difficulties of determining the flow regression parameters, that Kmenta (1967) presented a linearisation of the C.E.S. function, based on a truncated Taylor series expansion in which third and higher powers were omitted.

$$\text{Thus, } \ln Q = \ln \gamma + v\delta \ln K + v(1-\delta) \ln N - \frac{1}{2} \rho v \delta (1-\delta) (\ln K - \ln N)^2 \quad (7)$$

or alternatively,

$$\ln Q = \beta_1 + \beta_2 \ln K + \beta_3 \ln N + \beta_4 (\ln K - \ln N)^2 \quad (8)$$

If  $\beta_4 = 0$ , Equation (8) is simply a Cobb-Douglas function; if  $\beta_4 \neq 0$ , the squared term is a correction for non-unitary elasticity of substitution.

One could, of course, provide successively higher order terms to obtain a closer approximation to the original function. However, the evidence of Griliches & Ringstad (1971, Table 4.4, pp.71/2) shows that even the inclusion of the second order term

"...does not improve matters greatly. Its coefficient is significantly different from zero (at the conventional 5% level) only in 6 out of 27 cases."  
(p.70)

A result which was borne out by regression in this study (see Section V.3).

To obtain the C.E.S. parameters from the regression coefficients of Equation (8), the following substitutions are performed:

$$\begin{aligned}\gamma &= e^{\beta_1} \\ v &= \beta_2 + \beta_3 \\ \delta &= \frac{\beta_2}{\beta_2 + \beta_3} \\ \rho &= \frac{-2 \beta_4 (\beta_2 + \beta_3)}{\beta_2 \beta_3} \\ \sigma &= \frac{1}{1 + \rho}\end{aligned}$$

A potential source of problems at this point was demonstrated by Kennedy (1983). The estimation of a dependent variable from the calculated regression parameters of the independent variables, can be subject to bias, if the original equation was linearised logarithmically, the problem being particularly evident, if the figures used in the prediction are outside the original data set.

It will be noted that Equation (8) is only an approximation to the C.E.S. function. The closer the value of  $\beta_4$  is to zero, the better the approximation. There are a number of reasons for this: firstly, the higher order terms become increasingly important as one moves away from the Cobb-Douglas case, which Griliches and Ringstad suggest will have unpredictable effects on the value of  $\beta_4$  (p.9). Moreover, they point out  $\beta_4 \neq 0$  means

that the production function is not Cobb-Douglas, but not that it is C.E.S.; hence a more generalised function may be in operation. To test for constancy of elasticity of substitution and homotheticity, Griliches and Ringstad suggest that subsets of data be fitted to the Cobb-Douglas function, regressed, and the regression parameters compared. (pp.10/11). (This was done as a matter of course, when performing the Chow Test, see Appendix to this chapter.)

### V.3 RESULTS OF DATA MANIPULATION

In order to ascertain the elasticity of substitution in the clothing industry, and the validity of a Cobb-Douglas treatment of the data for any subsequent analysis, three regressions were performed, using, respectively, capital measured at purchase, current and shadow prices.

Kmenta's linearisation of the C.E.S. function was used in all three cases, with the results in terms of Equation (8) being summarised in Appendix I of this chapter.

#### 1. Capital valued at purchase price\*

This regression was used both as a control and as a source of estimates of the production parameters, although the values have neither been inflated to current prices, nor corrected for depreciation.

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\* The data for this, the roughest of the estimates, was obtained directly from the questionnaire where the value, plus the date of purchase and details as to the condition of the capital (new or second hand), were recorded.

The correlation matrix for the entire industry indicated substantial multi-collinearity with a partial correlation of 0,9 between labour and capital. As a result, the model's ability to isolate the production parameters must be regarded with suspicion. Unfortunately, no real escape from this problem is available. The high level of correlation between the factors of production is, nevertheless, informative, indicating in advance of any further results, that whatever the elasticity of substitution, capital/labour ratios are not likely to alter significantly for the bulk of producers, irrespective of the volumes of capital employed.

Accepting the caveat of high levels of multicollinearity (the constancy of the variance will be treated separately), the following were the results for the industry as a whole, obtained for the equation:

Table V.3.1:

$$\text{Ln}Q = \beta_1 + \beta_2 \text{Ln}K_1 + \beta_3 \text{Ln}N + \beta_4 (\text{Ln}K_1 - \text{Ln}N) + e$$

$$\beta_1 = 5,183 \quad (14,710)$$

$$\beta_2 = 0,349 \quad (2,424)$$

$$\beta_3 = 0,855 \quad (5,949) \quad (\text{t statistics in parentheses})$$

$$\beta_4 = -0,017 \quad (-0,973)$$

Since  $\beta_4$  is not significantly different from zero at a 95% confidence level, the result could have been written in Cobb-Douglas form as

$$Q = 178,2 \quad N^{,85} \quad K^{,35}$$

showing clear evidence of increasing returns to scale across the range of enterprise sizes since  $\alpha + \beta > 1$ .

In terms of the C.E.S. parameters, the results were as follows:

Table V.3.2:

Efficiency parameter ( $\gamma$ )	=	$e^{\beta_1}$	=	178,163	(14,720)
Distribution parameter ( $\delta$ )	=	$\frac{\beta_2}{\beta_2 + \beta_3}$	=	0,290	(7,715)
Returns to scale parameter ( $\nu$ )	=	$\beta_2 + \beta_3$	=	1,204	(19,846)
Substitution parameter ( $\rho$ )	=	$\frac{-2\beta_4(\beta_2 + \beta_3)}{\beta_2 \cdot \beta_3}$	=	0,137	(0,855)
Elasticity of factor substitution ( $\sigma$ )	=	$\frac{1}{1 + \rho}$	=	0,88	

(t statistics in parenthesis)

The low value of  $\rho$  and its low  $t$  statistic indicate that  $\rho$  only becomes significantly different to zero at an 80% confidence level. This suggests that the clothing industry does not provide significant efficient opportunities for variation in the input mix. This does not mean that such variations cannot take place, but that production is not at minimum cost away from the ideal mix. The value imputed to his own labour by the informal operator is, therefore, crucial to the determination of the actual factor mix.

It is noteworthy that  $\rho$  was low in both sectors, indicating that lack of factor substitutability was common to the entire size range of enterprises.

A problem which appears at this junction is the computation of  $t$  statistics for each of the calculated parameters, the fact that the  $t$ 's of each component are significant being no guarantee that the  $t$  statistics of their products will be so. The theoretical details of these calculations are to be found in Appendix III to this chapter.

It will be remembered that the accuracy of the Kmenta linearisation process varied inversely with the size of the  $\beta_4$  parameter, i.e. the larger the squared term at the end of Equation (14), the poorer the equation it is as a linear estimate of Equation (11). For this reason, it was of interest to note that the estimates of  $\beta_4$ , irrespective of the capital valuation system, were extremely low, being respectively:

Table V.3.3:

$\beta_4$ (1)	-0,017	(-0,973)
$\beta_4$ (2)	-0,009	(-0,593)
$\beta_4$ (3)	-0,011	(-0,715)

None of these was significantly different from zero at a 95% confidence level.

This being the result, the estimates of  $\beta_2$  and  $\beta_3$  would approximate to  $\alpha + \beta$ , the elasticities of output with regard to the two factors, irrespective of the system of capital valuation. The same may be said of the results in the formal and informal sectors,  $\beta_4$  not being significantly different to zero, irrespective of sector or valuation method.

It is possible, in the light of these observations, to compare the results yielded by the two sectors. The greater variation in methods of production, and the significance of the quality of the entrepreneur in the small enterprise, was revealed by

the regression results in two ways.  $\bar{R}^2$ , (the heuristic measure of the goodness of fit of the model as a whole, once corrected for degrees of freedom) was 0,92 in the 32 larger enterprises studied. In other words, 92% of the variations in output can be explained by changes in the levels of inputs. The high degree of multicollinearity revealed by the correlation matrix resulted in a weakening of the power of the regression, made manifest by the extremely low  $t$  statistics obtained. Some measure of relief from this predicament is provided by the high partial correlation coefficients between each independent variable taken separately, and the dependent variable. Thus, although the short run production coefficients of each factor cannot be presented confidently, the long-run equilibrium factor combination along the expansion path can be.

By contrast, the 59 observations of the enterprises employing under five workers showed that the model only explained 40% of variation. (See Appendix I). Moreover, where there was evidence of increasing returns to scale in the larger enterprises, there was apparent linear homogeneity in the production function of the small-scale operators; the parameters for capital and labour being 0,34 and 0,65 respectively, the  $t$  statistics, however, were significant at a 95% level.

It has already been pointed out that the regression coefficients  $\beta_2$  and  $\beta_3$  represent the elasticities of output with respect to capital and labour respectively, i.e. the proportionate increase in output caused by a unit increase in the variable factor, the other being held constant.

The estimates of  $\beta_2$  are virtually identical for both sectors; even though the  $t$  statistics are low for formal production, there

is no reason to believe that capital, added in isolation, would provide greater benefits in either sector. When combined with the associated amount of labour, however, results suggest increasing returns to scale in informal production, and marginally decreasing or constant returns for the informal sector.

The implications of the low  $R^2$  for the informal sector are clear. The mere provision of additional capital, while making a recognisable difference to production, would not necessarily be adequate in itself. The model omits management, a potentially crucial variable. This omission may be the factor behind the lack of explanatory power of the model, as tested. In terms of stimulating the small-scale economy, one implication is that basic business training might be as good, if not a better, investment than subsidised loans for the purchase of new capital.

If the squared term in Equation (8) is assumed to be zero, which is justified for both sectors, then the marginal rate of technical substitution would be  $\frac{\beta_2 K}{\beta_3 N}$ , i.e. the MRTS for the informal sector manufacturers would be 0,86 ( $\frac{K}{N}$ ) while for the formal sector clothing producers it would be 0,42 ( $\frac{K}{N}$ ). These results accord with the theory proposed earlier (Chapter I.2) that technical substitutability should be lower in the formal sector.

## 2. Capital valued at current second-hand market price

If second-hand price estimations were wholly free of bias, and if the market were perfect, this method would have provided the ideal system for valuation of capital. Unfortunately, neither proviso was reasonable, especially in the case of formal sector enterprises, where equipment tended to be far more specialised than that used by small-scale operators and therefore lacked a permanent market from which prices could be drawn. For this reason, the manufacturers' own estimates for insurance purposes had to be accepted as a valuation. (For details of informal sector values, see p.158).

The results did not differ markedly from those using either of the two alternative capital valuation methods, as the following table (and the results appended to this chapter) show.

Table V.3.4: Parameter using capital valued at second-hand and shadow prices (N=91)

	Capital at current prices	Capital at shadow prices
$\gamma$	172,967 (14,544)	181,534 (14,437)
$v$	1,162 (17,387)	1,187 (14,104)
$\delta$	0,272 ( 3,930)	0,258 ( 2,297)
$\rho$	0,0917 ( 0,467)	0,099 ( 0,593)
$\sigma$	0,924	0,910

(t statistics in parentheses)

The standard errors and the coefficients of the three regressions and hence the  $t$  statistics of these estimates, are roughly similar to those calculated for the first valuation system, the small differences remaining indicating the general congruity between the three estimation systems.

### 3. Capital valuation at shadow (South African) prices

This estimation was performed solely on the assumption that the artificial foreign exchange position in Zimbabwe since 1965 would have affected local capital prices, raising them out of proportion to the wage rate and the prices of finished goods. It was, therefore, used only as a control, the similarity between the results of this and the other two regressions indicating that an approach using shadow prices in this manner is not strictly necessary.

For the informal sector, the prices used were those presented on p.158. The formal sector, however, generally imports its machinery directly. The local value corrected for the exchange rate which prevailed in the latter years of the sanctions period (Z\$1 = R1.24) was therefore used. The similarity of the results to those obtained in the other two regressions suggested that no real benefit would be derived from a more detailed shadow price analysis and hence no attempt was made to correct for capital age.

Just as it was shown that the  $\beta_2$  estimates for the formal and informal sectors were not significantly different when capital was measured at purchase prices, so it was found that they did not differ significantly for either of the other two capital valuation systems. (The same applied to  $\beta_3$ ). The policy

implication of this is that any decisions on soft loans to either sector should not be made with a bias in favour of either sector, except insofar as management appeared less subject to variation, and probably caused less "noise" in the formal sector. Where assistance in the form of access to scarce resources (e.g., foreign exchange) is involved, the competence of management should, therefore, be examined particularly rigorously in the case of small-scale enterprises.

The details of returns to scale are also of note.

Table V.3.4: Estimated sectoral returns to scale

$$(v = \beta_2 + \beta_3)$$

Capital Valuation	Combined Sectors $\beta_2 + \beta_3$	Formal Sector $\beta_2 + \beta_3$	Informal Sector $\beta_2 + \beta_3$
Purchase price	1,248	1,1939	1,2231
Current price	1,1091	1,0115	1,0469
South African price	1,0096	1,0396	1,0252

It will be seen that, while there was evidence of increasing returns to scale across the industry as a whole, irrespective of the valuation system employed, the result was closer to constant returns when either of the two sectors was appraised independently. This suggests that there is a sharp rise in productivity with the transition from informal to formal production methods.

In essence, the results of real note in the estimation of the clothing industry's production function were:

- a) the robust evidence of economies of scale with the switch from one sector to the other, although no such major scale economies were apparent in either the informal or the formal sectors alone;
- b) that the regression coefficients did not differ significantly intersectorally, although the variances of formal and petty producers' production functions were not uniform; (See Appendix II, pp.196-200);
- c) that, for practical purposes, a Cobb-Douglas function would not be inappropriate, the squared term of the Kmenta C.E.S. function not having proved substantially different from zero;
- d) capital's share ( $\delta$ ), at estimated current values, was substantially lower in the informal than the formal sector;  $\bar{\delta}$  (informal) = 0,290,  $\delta$  (formal) = 0,492.7; although this was not as clear when  $\delta$  was estimated from capital valued at purchase price;
- e) that there is substantially more 'noise' in the informal production process, made visible in a heuristic sense by the correspondingly lower  $R^2$  for the sector's production function, and implying a more significant rôle for entrepreneurship, the major variable omitted from the analysis.

The points of greatest interest, however, are the productivity- and employment-yielding potentials of a unit of capital in the two sectors, since these have direct implications for development policy.

Looking at the first:

- f) a survey of the non-CMT enterprises in the data set yielded surprising results in terms of values added per worker and per unit of capital, as evidenced by the table below:

Table V.3.6: Value added by size of firm (N = 93)

Size of firm by no. of employees	No. of firms	Value added per year	
		per worker Z \$	per dollar value of capital Z \$
< 2	41	1 036	5,1
3-5	18	883	8,1
6-15	11	2 344	6,5
16-40	3	2 591	4,8
41-100	9	4 047	7,2
> 101	9	3 756	0,6*

Given that the industrial minimum wage at the time of the data's collection averaged between \$80 and \$100 per month, the smaller enterprises could clearly not have been offering returns to labour on a par with those in the larger ones, the labour productivity within the informal sector being comparatively low. The question which is naturally asked is: to what extent can this low labour productivity be attributed to capital shortage? An indication of the answer may be found in the elasticities of output with regard to capital and labour, these being roughly of the order of 0,50 and 0,51 for the formal sector, and 0,30 and 0,73 for the informal sector (valued at current second-hand prices) although cognisance must be taken of the low  $t$  statistics associated with the formal sector figures, i.e. the elasticity of capital with regard to output is greater in the informal than the formal sector. Hence, it would seem that marginal flows of capital would be better directed to petty producers than to formal enterprises, but it must be added, only if the

\* This result has been biased strongly downwards by one major return. For an alternative view, see Table I in the statistical appendix (I) to this chapter.

technology used is the same!

If, however, one wishes to go further and ascertain the optimal firm size in the industry, any constant elasticity of substitution model presents a major difficulty since the very constancy of the parameters makes a profit maximization problem indeterminate. A possible bypass of the problem by using entrepreneurship as a separate factor in production, was effectively countered by Walters (1963) who argued convincingly that entrepreneurship could not be measured independently of the size of the firm. His argument was that entrepreneurship is not a homogeneous attribute, but a heterogeneous set of skills which have to be appropriate to the needs of the enterprise being managed, and are, therefore, correlated with the size of the firm. Thus one is led to conclude that the ideal size of enterprise is contingent on the particular set of skills to be found in its management.

- g) With increasing firm size, the observed capital/labour ratio rose steeply in the formal sector, while the productivity of capital fell. (See Table I in statistical Appendix I to this chapter.) Thus, firms employing between 6 and 15 workers, i.e., small formal enterprises and those in the intermediate range between the sectors, produced the greatest output per unit of capital, having the second lowest ratio of capital to labour and suggesting diminishing returns. Unfortunately, labour productivity was relatively low, although substantially higher than in the informal sector proper. These results still held when the data were treated in terms of value added (see Table V.3.5). What is of note here is that small formal firms are,

on average, providing greater employment per unit of capital, and greater productivity per unit of capital, than either large-scale enterprises or the informal sector - observations which could not be made from the results of C.E.S. production functions, for the reasons already given.

#### V.4 CONCLUSION

The general purpose of this research was to ascertain whether the petty production sector could make more efficient use of capital than could formal enterprises producing the same type of goods. This would also ascertain whether the enthusiasm about the informal sector, which has pervaded Southern African development circles in the past 12 years, has been justified in its central assertions.

Observation and analysis suggested that the more efficient small-scale entrepreneurs, unfettered by the legal constraints governing larger businesses (prescribed wages, safety requirements, audits, etc.) were capable of producing and providing employment marginally faster, per unit of capital, than their formal competitors. (See Table I, in Appendix I, of this chapter and Table V.3.6, p.180). However, it became apparent that there was a substantial body of informal operators whose enterprises lacked a real capacity for growth. Equally clearly, if official policy is excluded, the constraining factor was not capital shortage as much as lack of managerial expertise and entrepreneurial flair. Product differentiation and marketing technique seemed unknown to the townships' producers.

Given these observations, and given too the finding that there was no significant difference between the patterns of utilisation of capital and labour in the two sectors (see Appendix II to this chapter), it seems logical that development funds, if earmarked for the informal economy, should go to what House (1984) termed "the intermedate sector". In purely practical terms, the problem is the identification of those entrepreneurs "most likely to succeed" when there is an inadequate frame of reference for use in an interview situation.

It was clear from the interviews conducted that capital scarcity was not regarded as a major growth constraint by those in the informal sector, but that lack of bookkeeping experience certainly was. The greater variation in production techniques within the informal sector can be explained as being the result of imperfect managerial knowledge. However, given that the capital employed is relatively homogeneous within the sector and that managers are equally competent, inter-firm variations in the capital/labour ratio should only result from discrepancies in the marginal productivity of labour. These would be smoothed out in large firms, but in small enterprises might prove a substantial cause of variation and hence be a factor contributing to the low  $R^2$  of the informal sector production functions.

What of the view that informal sector aid develops business skills? At the moment, the attrition rate within informal sector enterprises is high, and while an advantage of the relatively low capitalisation of the sector is that the entrepreneur can recover quickly after each bankruptcy, it must remain

an extremely inefficient way to learn basic business principles. The introduction of "bookkeeping" and "principles of management" as foundation courses in the schools, and into the adult literacy programme seems, therefore, a more likely way to stimulate the small-scale economy, than the simple injection of capital.

It has been stated already that an optimal firm size, in terms of productivity and employment creation, cannot be ascertained. The missing variable, ascribed to the expertise of the enterprise's management, cannot really be introduced into a production function analysis. However, even if the stimulation of informal enterprises could be shown to result in their transformation into small-scale, but formally run, businesses, the injection of cash as development aid would remain problematic. Not only might it destroy indigenous financing systems, but it might also result in the development of firms past their optimal size. For this reason, it has been given an appendix of its own in Chapter III.

Informal operators certainly appear to make more efficient use of their capital than do their formal counterparts, especially when it is taken into account that the underemployment of factors of production, which characterises a system of production in which there is little division of labour will bias downwards the respective production parameters.

Looking at Table V.3.6 (p.180) and at Table 1-3 of Appendix II of this chapter, it will be seen that the intersectoral comparison of capital productivity is confused by the major differences between value added and simple output data. This is further reflected in the low  $t$  statistics and hence wide confidence intervals of the production coefficients. One point, however, is clear: the range of factor productivities is far greater in informal enterprises than in their formal equivalents (as reflected in the former's substantially lower  $R^2$  figures.).

Moreover, informal production does have a training value in the generation of technical, but more particularly of business, skills. From a purely objective point of view, there is, therefore, a point to be made for such limited development funds as exist to be directed to the stimulation of selected larger and more viable informal enterprises. The side-effects and doctrinal implications of such a policy are not, however, so clearcut, as the first three chapters should have shown.

QUESTIONNAIRE:

1. How many workers to you employ? (Detail)
  - a. Under 5 ( ); b. 5 to 15 ( ); c. 15 to 30 ( );
  - d. 30 to 100 ( ); e. 100 to 300 ( ); f. Over 300 ( )
  
2. According to your balance sheet what is the total value of the capital you employ? i.e., all your machines etc. Alternatively, give type, age and purchase price of machines.
  
3. In the last financial year, what was the total (value) volume of your output?
  
4. In how many days do your suppliers of fabric, buttons, thread, etc. normally expect to be paid?
  
5. How many days credit do you allow your debtors?
  
6. Is the fabric you use obtained through:
  - a. The factories; b. Wholesalers; c. Your clients;
  - d. Import allocation?
 If more than one applies, please indicate this.
  
7. What is the average monthly wage paid to your:
  - a. Designers ( ); b. Cutters ( ); c. Machinists ( )?
  
8. What proportion of your total sales is formed by contracts with:
  - a. Government ( ); b. Private sector ( );
  - c. Foreign buyers ( )?
  
9. If possible, indicate the volume and the value of your output over the past five years. If you do not wish to provide figures, a ratio or percentage worked against the 1980 figure is fine.

10. Do you keep a. Separate bank\* accounts for you and your firm ( ); b. One bank account ( ); c. Not use a bank account ( )?  
(\* If POSB or building society is used please detail this)
11. Is your book-keeping method a. Double entry ( ); b. Single entry ( ); c. Other, e.g. Memos ( ); d. None ( )?
12. Was your firm acquired by a. Purchase as a going concern ( ); b. Development by you from the start ( ); d. Inheritance ( )?
13. How long has your firm been in existence?
14. What is your age, or the average age of your managerial staff?
15. Did you have prior experience in the clothing industry before entering this firm?
16. Did you have prior experience in any other industry before entering this firm?
17. Has any of the machinery you are using been designed specifically for you ( ). If so, was it manufactured locally ( )?
18. What proportion of the fabric you buy has 100% local content ( )?
19. Does your operation work on a shift basis or not?
20. Can you break down your sales dollar? (Detail)
21. How many of your managerial staff are women?
22. What proportion of your management do they represent?

APPENDIX I:1-3. Summary of responses to Questionnaire

Annual output/capital, annual output/labour  
and capital/labour ratios by firm size.\* (N=92)

No. of workers	No. of firms	Q/K	Q/N	K/N
< 2	41	4,80	1539,71	320,74
3-5	18	1,30	200,00	154,06
6-15	11	12,50	3321,88	265,69
16-40	2	9,11	6226,82	683,56
41-100	9	5,74	6008,52	1047,97
> 101**	8	1,37	5370,54	5017,85

\* for value added figures, see main text, p.180.

\*\* this figure excludes data from a company of 1 000 workers whose K/N ratio seemed abnormal at 10 000.

The following results are taken from responses by 69 informal and small-scale operators involved in clothing, footwear and upholstery.

4. Credit received

Pure CMT work	...	...	...	3
Cash with CMT	...	...	...	11
Cash	...	...	...	51
30 days	.	...	...	2
60 days	.	...	...	1
90 days	.	...	...	1

5. Credit given

Cash	...	...	...	...	29
Month end	...	...	...	...	5
30 days	.	...	...	...	26
60 days	.	...	...	...	5
90 days	.	...	...	...	3
180 days	.	...	...	...	1

10. Banking (responses include POSB and building society accounts)

Separate personal and business accounts	...	...	...	2
Only one account	..	...	...	36
No account	...	...	...	31

11. Bookkeeping system

Double entry	..	...	...	...	6
Single entry	..	...	...	...	6
Other (cash book, memos, etc)	.	...	...	...	24
None	...	...	...	...	33

12. Acquisition

Purchased as a going concern	..	...	...	1
Established by owner	...	...	...	59
Inherited	...	...	...	9

13. Age of enterprise

< 5 years	...	...	...	21
5-10 years	...	...	...	15
11-15 years	...	...	...	11
16-25 years	...	...	...	6
> 26 years	...	...	...	16

15. Average age of owner(s)

< 25 years	...	...	...	2
26-30 years	...	...	...	5
31-40 years	...	...	...	16
41-50 years	...	...	...	21
51-60 years	...	...	...	18
> 60 years	...	...	...	7

16. Formal sector experience in the clothing industry

Yes	...	...	...	32
No	...	...	...	37

17. Other formal sector experience

Yes	...	...	...	23
No	...	...	...	46

20. Interviewee's ability to break down their sales dollar

Yes	...	...	...	...	55
No	...	...	...	...	9
Indeterminate	...	...	...	...	5

21. Sex of management

Male	...	...	...	25
Female	...	...	...	28
Mixed	...	...	...	16

SUMMARY OF REGRESSION RESULTS1. Capital valued at purchase priceCombined sample (N=91)

$$\begin{array}{llll}
 \beta_1 & = & 5,1827 & (0,3521) & R^2 & = & 0,910 \\
 \beta_2 & = & 0,3490 & (0,1440) & \bar{R}^2 & = & 0,907 \\
 \beta_3 & = & 0,8552 & (0,1438) & F & = & 220,1773 \\
 \beta_4 & = & -0,0170 & (0,0175) & & & (\text{Std. errors in parentheses})
 \end{array}$$

$$\begin{array}{llll}
 \gamma & 178,163 & (14,720^*) & \rho & 0,137 & (0,855^*) \\
 v & 1,204 & (19,846^*) & \sigma & 0,879 & \\
 \delta & 0,290 & (7,715^*) & & & \text{Correlation of LnK to LnN} = 0,8979
 \end{array}$$

(\* students t)

Formal Sector (N=32)

$$\begin{array}{llll}
 \beta_1 & = & 5,7524 & (1,7313) & R^2 & = & 0,930 \\
 \beta_2 & = & 0,3363 & (0,5624) & \bar{R}^2 & = & 0,923 \\
 \beta_3 & = & 0,7485 & (0,6006) & F & = & 93,057 \\
 \beta_4 & = & -0,0145 & (0,0431) & & &
 \end{array}$$

$$\begin{array}{llll}
 \gamma & 263,813 & & \rho & 0,125 & \\
 v & 1,085 & & \sigma & 0,889 & \\
 \delta & 0,310 & & & & \text{Correlation of LnK to LnN} = 0,9594
 \end{array}$$

Informal Sector (N=59)

$\beta_1$	=	5,3021	(0,3954)	$R^2$	=	0,435
$\beta_2$	=	0,3401	(0,1884)	$\bar{R}^2$	=	0,404
$\beta_3$	=	0,6494	(0,2595)	F	=	10,568
$\beta_4$	=	-0,0192	(0,0266)			
$\gamma$		200,758		$\rho$		0,172
$v$		0,990		$\sigma$		0,853
$\delta$		0,344		Correlation of LnK to LnN = 0,3706		

2. Capital valued at current second-hand pricesCombined sample (N=91)

$\beta_1$	=	5,1531	(0,3543)	$R^2$	=	0,9119
$\beta_2$	=	0,3161	(0,1350)	$\bar{R}^2$	=	0,9089
$\beta_3$	=	0,8462	(0,1347)	F	=	225,173
$\beta_4$	=	-0,0094	(0,0158)	(Std. errors in parentheses)		
$\gamma$		172,967	(14,544*)	$\rho$		0,0817 (0,467*)
$v$		1,162	(17,387*)	$\sigma$		0,924
$\delta$		0,272	(3,930*)	Correlation of LnK to LnN = 0,9125		
				(* students t)		

Formal Sector (N=32)

$\beta_1$	=	5,1227	(1,6002)	$R^2$	=	0,9336
$\beta_2$	=	0,4974	(0,4877)	$\bar{R}^2$	=	0,9265
$\beta_3$	=	0,5137	(0,5415)	F	=	98,371
$\beta_4$	=	-0,0198	(0,0342)			
$\gamma$		167,788		$\rho$		0,157
$v$		1,011		$\sigma$		0,865
$\delta$		0,492		Correlation of LnK to LnN = 0,9690		

Informal Sector (N=59)

$\beta_1$	=	5,2658	(0,4046)	$R^2$	=	0,4356
$\beta_2$	=	0,2957	(0,1889)	$\bar{R}^2$	=	0,4048
$\beta_3$	=	0,7257	(0,2693)	F	=	10,6107
$\beta_4$	=	-0,0104	(0,0273)			
$\gamma$		193,610		$\rho$		0,099
$v$		1,021		$\sigma$		0,910
$\delta$		0,290		Correlation of LnK to LnN = 0,3297		

3. Capital valued at shadow (South African) pricesCombined Sample (N=91)

$\beta_1$	=	5,2014	(0,3603)	$R^2$	=	0,9097
$\beta_2$	=	0,3063	(0,1367)	$\bar{R}^2$	=	0,9065
$\beta_3$	=	0,8812	(0,1357)	F	=	219,011
$\beta_4$	=	-0,0113	(0,01577)	(Std. errors in parentheses)		
$\gamma$		181,534	(14,437*)	$\rho$		0,099 (0,593)
$v$		1,187	(14,104*)	$\sigma$		0,910 (& stats. in parentheses)
$\delta$		0,258	(2,297*)	Correlation between lnK & lnN =		
				(* students t)		0.9036

Formal Sector (N=32)

$\beta_1$	=	5,4938	(3,406)	$R^2$	=	0,9313
$\beta_2$	=	0,3906	(0,780)	$\bar{R}^2$	=	0,9239
$\beta_3$	=	0,6558	(1,215)	F	=	94,889
$\beta_4$	=	-0,0154	(-0,443)			
$\gamma$		243,179		$\rho$		0,126
$v$		1,046		$\sigma$		0,888
$\delta$		0,373		Correlation between LnK & LnN =		
						0,9668

Informal Sector (N=59)

$\beta_1 = 5,3078$  (0,4077)  
 $\beta_2 = 0,3001$  (0,1880)  
 $\beta_3 = 0,7126$  (0,2731)  
 $\beta_4 = -0,0140$  (0,1263)

$R^2 = 0,4260$   
 $\bar{R}^2 = 0,3947$   
 $F = 10,2059$

$\gamma = 201,905$   
 $\nu = 1,013$   
 $\delta = 0,296$

$\rho = 0,269$   
 $\sigma = 0,788$

Correlation between LnK & LnN =  
0,3159

APPENDIX II:

In order to ascertain whether,

- a) the variance was constant across the data set as required for an OLS estimate to be blue (homoscedasticity)
- b) whether the production methods varied distinctly between the formal and informal/small-scale sectors.

Treating (b) first: The data was split into two sections, one of 59 small-scale enterprises and the other of 32 larger ones. The distinction is not a wholly satisfactory one, having been made on the basis of employment, any enterprise employing five or less individuals (including the entrepreneur himself) was treated as small-scale, while any enterprise giving work to six or more workers was treated as large. Initially, it was felt that the capital/labour ratio might prove a better source of division. However, convention and the existence of a few one or two-men enterprises, with abnormally high capital/labour ratios in a distinctly informal establishment, suggested the use of employment figures instead.

The method used (the Chow Test, see Koutsoyianis, 1977, pp. 164-168) is based on the calculation of an F ratio from the squared residuals of the regressions performed on the two subsets and the total pool of data. The ratio is formed as follows:

$$F^* = \frac{[\Sigma ep^2 - (\Sigma e_1^2 + e_2^2)]}{K} / \frac{\Sigma e_1^2 + \Sigma e_2^2}{[n_1 + n_2 - 2K]}$$

The residual values for the three regressions were as follows:

1. For capital measured at purchase price:

$$\begin{aligned} \Sigma ep^2 &= 50,0081 \\ \Sigma e_1^2 &= 36,1135 \\ \Sigma e_2^2 &= 10,2227 \end{aligned}$$

2. For capital measured at current prices:

$$\begin{aligned} \Sigma e^2_p &= 48,9963 \\ \Sigma e_1^2 &= 36,0499 \\ \Sigma e_2^2 &= 9,7071 \end{aligned}$$

3. For capital measured at a shadow price:

$$\begin{aligned} \Sigma ep^2 &= 50,2502 \\ \Sigma e_1^2 &= 36,6591 \\ \Sigma e_2^2 &= 10,0389 \end{aligned}$$

$$F_1^* = 0,9180/0,5583 = \underline{1,6443}$$

$$F_{0,05} = 2,5 \text{ with } v_2 = 83 \text{ \& } v_1 = 4$$

Since  $F_1^* < F_{0,05}$  the null hypothesis, that there is no difference between the coefficients of the two subset regressions, is accepted.

$$F_2^* = 0,8098/0,8513 = \underline{1,4690}$$

again accept  $H_0$ .

$$F_3^* = 0,8881/0,5626 = \underline{1,5784}$$

again accept  $H_0$ .

Irrespective of the method of valuing capital in the equation, the results of the Chow Test therefore indicate that the production parameters would not differ significantly between the sectors at a 95% level.<sup>1</sup>

To ascertain whether the variances of the two groupings of data were significantly different (i.e. heteroscedastic, an

1. The alternate hypothesis can be accepted at a 75% level of significance, however.

$F^* > F_{.25} = 1,37$  for all values of  $F^*$ , hence at the 75% level one can state that the methods of production in the two sectors, as evidenced by their production functions, are significantly different.

F ratio was constructed from the residuals of the two sectoral regressions, each corrected for the number of degrees of freedom.

$$\frac{\left[ \frac{\sum e_1^2}{n_1 - K} \right]}{\left[ \frac{\sum e_2^2}{n_2 - K} \right]}^1$$

where  $n_1 - K = 57$  and  $n_2 - K = 28$

$$\Rightarrow F_1^* = 1,7354$$

$$F_2^* = 1,8243$$

$$F_3^* = 1,7938$$

Perfect homocedasticity would be indicated by  $F^* = 1$ , however the data is accepted as homoscedastic if  $F^* \approx F$ . i.e.  $1 < F^* < F$ .

$$F_{0.0} \approx 1,77, F_{0.1} \approx 2,26 \quad F_{0.25} = 1,56$$

suggesting that at a 95% level of significance one could assume heteroscedasticity, although this would not be assumed at a 99% significance level.

The observation that the variances of the two data subsets are not equal would, under normal circumstances, suggest that

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1. Based on Koutsoyianis, 1977, pp.185/6.

tests of significance, and hence confidence intervals, could not be accurately constructed from the data. The answer would, therefore, be to correct any misspecifications in the regression equation or to weight the heteroscedastic variable, thereby correcting it. In this case, however, the observed change in variance may be informative in itself. It indicates that, with increasing size, firms are apparently constrained by relatively common technology, and perhaps that the quality of the entrepreneur is not likely to greatly distinguish the operational system of one enterprise from that of another.

By contrast, among the informal manufacturers the potential for variation in productivity is greater, given the allocation of factors of production, possibly because of variations in the capital and labour used, but more likely because of variations in marketing (urban/rural) and in entrepreneurial skills. This result stresses, therefore, the significance of management training for the ensured viability of petty entrepreneurs.

APPENDIX III

The parameters

$$v = \beta_2 + \beta_3 ; \quad \delta = \frac{\beta_2}{\beta_2 + \beta_3} ; \quad \rho = \frac{-2\beta_4(\beta_2 + \beta_3)}{\beta_2\beta_3}$$

and estimates of the t-statistics associated with these parameters are required. For small variances, it can be shown that, if a parameter  $\eta$  is a function of two regression coefficients  $\beta_1$  and  $\beta_2$ ,  $\eta = \eta(\beta_1, \beta_2)$ , then

$$\begin{aligned} \text{Var} (\eta) &= \frac{\partial \eta}{\partial \beta_1}^2 \text{Var} \beta_1 + \frac{\partial \eta}{\partial \beta_2}^2 \text{Var} \beta_2 + \\ &+ 2 \frac{\partial \eta}{\partial \beta_1} \frac{\partial \eta}{\partial \beta_2} \text{Cov} (\beta_1, \beta_2) \end{aligned}$$

The variance of the above parameter can then be calculated from the elements of the variance-covariance matrix obtained during the regression as follows:

$$\text{Var} (v) = \text{Var} (\beta_2) + \text{Var} (\beta_3) + 2 \text{Cov} (\beta_2, \beta_3)$$

$$\begin{aligned} \text{Var} (\delta) &= \frac{(\beta_3/\beta_2)^2}{(1 + \beta_3/\beta_2)^4} + \frac{\text{Var} (\beta_3)}{\beta_3^2} + \frac{\text{Var} (\beta_2)}{\beta_2^2} \\ &- 2 \frac{\text{Cov} (\beta_2, \beta_3)}{\beta_2\beta_3} \end{aligned}$$

$$\begin{aligned} \text{Var}(\epsilon) = & 4 \left( \frac{1}{\beta_2} + \frac{1}{\beta_3} \right)^2 \text{Var}(\beta_4) + \beta_4^2 \\ & \left( \frac{\text{Var}(\beta_2)}{\beta_2^4} \right) + \frac{\text{Var}(\beta_3)}{\beta_3^4} - 2\beta_4 \left( \frac{1}{\beta_2} + \frac{1}{\beta_3} \right) \\ & \left( \frac{\text{Cov}(\beta_2, \beta_4)}{\beta_2^2} + \frac{\text{Cov}(\beta_3, \beta_4)}{\beta_3^2} \right) \\ & + 2\beta_4^2 \frac{\text{Cov}(\beta_2, \beta_3)}{\beta_2^2 \beta_3^2} \end{aligned}$$

The  $t$  statistics are then obtained in the normal way, for instance,

$$t_\delta = \frac{\delta}{(\text{Var}(\delta))^{\frac{1}{2}}} \quad **$$

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\*\* I acknowledge the assistance of Drs. G. Barr and J. Whittaker, who pointed out the necessity for this appendix and assisted in its compilation.

## CONCLUSION

This thesis is concerned with the growth prospects of the informal sector in Zimbabwe, and with the factors affecting these prospects. It has, therefore, been necessary that the constraints on informal sector development be identified as either external or internal to the firm. It is exogeneity of growth constraints that leads to involution and the progressive emiserisation of the sector's members, and that is reflected in Seeber's statement that

"...its potential depends mainly on gaining official recognition and encouragement, even to the extent of the authorities actively directing work towards the informal sector."  
(Seeber, 1975, p.2)

If, however, the curbs on the growth of informal enterprises are endogenous, e.g., shortages of skills, capital and expertise, then the prospects for the individual firm need not be gloomy. In this case official assistance in the development of the informal enterprise will only cease bearing fruit when the firm has expanded to the limits of the entrepreneur's ability.

This thesis has suggested that the limits to the expansion and evolution of the informal sector are neither wholly endogenous nor wholly exogenous, but rather a mixture of both. As the third chapter illustrated, the sector's relations with the authorities do constitute a definite exogenous factor, as does the market structure (see Chapter II).

However, isolating the precise nature of the constraint is not always easy. For example, Brand (1982) asserted that "...security of tenure of workplace was found to be associated with higher levels of earnings and greater propensity to save," (ibid., p.41). The direction of the causality here was not clear and hence neither was the nature of the constraint: was the raised propensity to save a function of security of tenure, or did those possessed of entrepreneurial flair (including a greater ability to accumulate capital) strive more than them to achieve such security?

Certainly, features such as market structure and the prevailing legislation are important both to the individual entrepreneur and to the informal sector as a whole. The ability to accumulate capital over time, however, depends on the expertise of the operator and his ability to generate profits. The marginal enterprise will not be in a position to accumulate; it must be noted though that unless the supply function is infinitely elastic, the intra-marginal enterprise should be able to achieve a producer surplus.

There is no doubt that the informal economy as a whole is capable of capital accumulation, though the potential for this is far less in those branches of it which accord with the I.L.O. 1972 features, in particular, "ease of entry" and "unregulated and competitive markets", both of which imply high elasticities of supply. Moreover, Zimbabwe's informal economy has a clear structure for the provision of credit and savings facilities, (loan sharking and RCAs being

prevalent), while interaction with the rural areas provides an institutional framework for investment and for borrowing. In addition, the savings potential of the younger generation of African males as a whole, irrespective of their places of employment, will be further raised if Central Government succeeds in its stated aim of reducing the current high rates of lobola payments demanded by the families of new brides.

To that extent that endogenous factors constrain the informal economy, House's (1984) disaggregation of it into an intermediate sector and a community of the poor is useful.

Conversely, if the constraints are exogenous, then Lebrun and Gerry's (1975) warning must be taken seriously. They commented that even if petty producers trying to accumulate wealth are differentiated from those merely trying to reproduce the means of subsistence, the former group have no real long-term prospects. There is, in terms of their argument, a cycle of development and collapse where,

'...internal growth is almost entirely involutory, taking place against a backdrop of restriction, constraints and distortions imposed by the dominant capitalist mode of production."  
(ibid., p.20)

Despite Lebrun and Gerry's argument having been couched in terms of dependency theory, it is a useful adjunct even to a neo-classical approach. Thus Hall (1983) showed that a combination of capital accumulation in the modern sector and

land reform, together with new techniques and high-yielding seeds in rural areas, may be necessary before the levels of demand can be achieved which are a prerequisite for growth at the warranted rate. Hall's view provides an insight into the development rôle of the informal sector as well, although he himself states that the notion of informality is too vague to be of real use. The informal network of production and distribution appears to result in fewer imperfections and speedier adjustments in both the product and factor markets and thereby enhances both the level of effective demand and the desirability of further investment.

Over and above the standard constraints on the informal economy, legislation, shortage of capital and shortage of skills, which are virtually omnipresent in informal economies, there are three factors which seem particularly appropriate to a discussion of the Zimbabwean situation.

a) Infrastructure:

The nature of the informal sector militates against certain changes in the physical environment within which it operates. Thus competition from pavement vendors is reducing the viability of those operators who make use of officially provided market facilities, and to a degree keeps these facilities under-utilised. (Chronicle, 22/2/85). Moreover, police action has little apparent success when directed at individuals whose activities are accompanied by severe negative externalities (a substantial, but somewhat inconclusive

correspondence on the subject has taken place between the ZRP and the Director of Housing and Community Services).

The implication is that where negative externalities to informal activities exist, which necessitate some sort of official control, those operators trying to expand into "intermediate" operations may also be constrained by lack of legal access to the market. Illegal activities which would be undetected in a smaller enterprise would be conspicuous, given the firm's higher profile, while operation at a fixed site may reduce access to the public. The implication of this observation is that careful thought must be given to the ramifications of legal curbs on the sector, and to the siting of markets, so that entrepreneurs intent on expansion can achieve their end legitimately and successfully.

b) Indigenous Resources:

The 1972 ILO report on Kenya mentioned that there was there a reliance on indigenous resources. While this is not universally a characteristic of the Zimbabwean informal sector, (see p.49 ) there are undoubtedly enterprises which use materials whose content is entirely local, or locally recycled. Where these are purchasable, no problem arises. However, where these materials have to be collected in their natural state,

or sought out as discards suitable for resale after repair, the informal enterprise may be characterised by substantial underemployment unless specialisation takes place, in which case the collecting, preparation and sale of the items would be undertaken by different individuals. Even here, one has to accept that "lumpiness" may be a feature of human as well as physical capital.

The situation is not necessarily ameliorated by the use of imported resources in the production process. The supply of these is often uneven as a result of the strained foreign currency position of the economy, and suppliers naturally tend to direct scarce inputs towards their more valued clients. Catering for this insecurity introduces further excess capacity to the informal sector, while this dimension of risk in the sector's activities constrains initiatives involving specialisation or expansion.

c) Social:

The low propensity to save, especially on the part of married women, and the lack of incentive to reinvest on the part of co-operative members, lead to slow rates of capital accumulation. In urban areas these are offset to a degree by the revolving credit associations etc., already mentioned. The social interaction between urban and rural areas, however, deserves further mention since the countryside plays both a positive and a negative rôle in the accumulation of funds.

Social custom often dictates the movement of savings from the urban to the rural areas for the purposes of (i) lobola payments, which it must be noted may continue over a substantial period of time both before and after marriage, and (ii) diversification of the individual's savings portfolio through the acquisition of livestock. It must be noted that cattle in the rural areas do provide a source of stored wealth, which can be readily realised. The commonly held notion that Zimbabwe's tribal population is unwilling to sell its animals was disabused by the number of interviewees who claimed to have obtained the capital to commence or expand production by either the sale of their own stock, or by borrowing the proceeds of such sales from their families.

In the light of the difficulties which these three factors constitute, and the lack of managerial experience which accompanies an informal apprenticeship, the informal sector's contribution to measured GDP seems likely to remain small. In terms of exogenous factors, its ability to metamorphose into formal business is likely to depend as much on the business climate as on official policy. If the economy recovers from its currently depressed levels to a position equal to that in the two years immediately following independence, then the incentive for informal enterprises to make the transition into formalised business will be increased. For as long as real incomes remain at depressed levels, however, the risks of entry into the formal economy

will remain high. This is not to say that Government could not play a part in speeding such a transition, but rather that this part should not be overrated. The economy must provide the incentive, and the enterprises be able to respond effectively to it before Government assistance can be of general value. Demol (1982) seems to have faced a similar problem in his Youndé study. He concluded it with the following warning,

"It is indisputable that the official environment in which the sector functions could be more encouraging in order to step up national output. Nevertheless, any steps to facilitate access to credit markets, etc. run the risk of being ineffective or even harmful if they are not accompanied by changes in the undertakings themselves aimed at improving the use at present made of the factors of production." (p.87)

Demol's prime concern seems to have been the tendency by the informal producers in his study to regard new capital as a source of wealth in its own right rather than as an asset whose value depends on the flow of earnings it can generate. If the same can be said of Zimbabwean informal entrepreneurs (there is nothing in my data either to support or to dispute Demol's view), then stimulation of capital accumulation might lead only to increasingly inappropriate technology rather than the expansion of output using labour-intensive methods. Viewed in these terms, the economy and the informal sector would be best served by a policy of minimum involvement, official aid being reserved for carefully screened borrowers, and controls

only being placed on activities with excessive negative externalities.

There was insufficient evidence in this survey to make any definitive statement about the level of mobility of entrepreneurs from informal to formal activities. General observation, however, tended to support Bannerjee's (1983) Indian observation that such mobility as did exist appeared proportional to the level of education attained. By implication, an expansion of the adult literacy campaign might be beneficial to the economy, and in the light of the previous paragraph would seem a prerequisite before any official programme of enhanced access to capital could be viable.

Further evidence, that it is the shortage of business skills rather than scarcity of capital which is proving the primary constraint on small enterprises in Zimbabwe, comes from the FEBCO monthly statistical report. Looking at the preceding sixty seven months it summarised the situation with the following comment (note in particular the final sentence):

"Out of the 1830 requests 915 (50%), 106 (5,79%) being readvances were approved by the Advances committee; 25 (1,37%) were pending while 177 (9,67%) were withdrawals, and 713 (38,96%) were regrets.

The average number of applications received per month at 23,8 was a figure slightly below the 25 expected by the Wilshere Committee. On average (the) number of monthly approvals was 11,9 vis-a-vis the Wilshere 20."

It seems clear that the problem, at least as faced by FEBCO, is not a shortage of loanable funds, but rather a scarcity of

worthwhile enterprises for which to make capital available. This in no way diminishes the development function of the informal and small-scale sectors; it does, however, suggest that where capital and foreign exchange shortages are acting as constraints on growth in an industry, the limited amounts available should not be directed at small-scale enterprises in the simple belief that they are best able to use them in the creation of additional employment opportunities. The analysis in Chapter V suggested that, in the clothing industry, the difference between the sectors lay in the increase in efficiency with the transition into formal production. This implies that decisions concerning allocation of foreign exchange between sectors should be made on an individual basis, if effective allocation is to be achieved, despite the difficulties for the Reserve Bank.

For the bulk of this thesis, the development of the informal sector has been at least tacitly equated with its transformation into formal business, as well as its increase in size. In any conclusion it must, therefore, be asked whether (i) an individual informal unit can expand without losing its informal character, and (ii) whether this would be desirable?

Looking first at the second question: while the maintenance of efficient labour-intensive production methods, or at least the use of "appropriate" technology, is to be desired, there is no automatic correspondence between labour-intensity and viability in a labour surplus economy, as the fate of the

Indian home weaving experiment showed. It does not seem desirable to perpetuate a mode of production which is intrinsically inferior in a technical sense, unless it offers non-pecuniary advantages to those who deal with it and in it.

The first question presents an additional problem, in that the answer depends to a large degree on the way in which the informal sector is defined. For purposes of this study, enterprises employing under five workers and not registered in terms of the Companies Act or through any professional council or association of artisans, have been classified as informal. The requirement of a maximum number of employees was, however, flexible to a degree. Certain enterprises involving large numbers of family members, or apprentices employed at rates and in conditions unacceptable to formalised industry, were also regarded as informal. Clearly, many enterprises which fell into the ambit of the informal sector in this study would not have done so, if the characteristics suggested by the 1972 ILO report had been regarded as definitive. The informal sector has, therefore, been taken as including House's "intermediate" grouping. Given this less constrained definition, it seems plausible that stimulation of the sector as a whole might result in an increase in the number of firms falling into the Intermediate category, without immediately increasing the numbers transformed into formal operations.

A further possibility is that stimulation of informal enterprises may lead to formalisation accompanied, however, by all the failings of the initial system. This has been particularly apparent in the case of co-operatives. There have been widespread pressures and incentives brought to bear on informal producers and vendors to co-operativise their activities. Where these stimuli have been successful, the result has been a co-op with all the outward characteristics of a formal enterprise in terms of administration, etc., but nevertheless frequently showing the flaws of an informal enterprise which has expanded beyond the level of its administrative competence. Indeed, Government itself recently advised its ministries that the non-viability of women's co-operatives was due to "lack of planning, managerial skills and transport problems", (Chronicle, 22/2/85), precisely the problems afflicting the informal entrepreneur!

It may be argued in the light of these observations, that the ability of an informal enterprise to expand without losing the rather dubious attribute of "informality" will depend on the individual entrepreneur's managerial abilities. To this extent, one would anticipate, as has been suggested, that the greater the degree of literacy, the greater the probability of expansion being accompanied by a transition into formalised operation. What remains unresolved, however, is why an informal method of operation should be regarded as "intrinsically inferior" and whether this is indeed the case?

To a degree, the answer to these questions must depend on the nature of the enterprise. If it consists of small-scale retailing, expansion need not improve the quality of the service offered and employment provision is unlikely to rise in proportion to the increase in turnover. An increase in enterprise size by an informal manufacturer, however, is likely to result in an improvement in the quality of the goods actually offered. There may well be an upward shift in capital intensity accompanied by an increase in linkages to the remainder of the formal economy. One is led, accordingly, to draw a conclusion for the informal sector similar to that drawn by Sutcliffe (1971) for small-scale enterprises: their long-run rôles will depend on their ability to compete unassisted against existing firms rather than on their ability to soak up the urban underemployed.

A qualification to this view has been provided within the context of a neo-Marxist framework. An example of this is Mkandawire's (1983) statement that the informal sector must either evolve into co-operative organisations or into "fully fledged small-scale capitalist enterprises formally linked to the corporate or state sector", adding that, "Whether this link is complementary or exploitative will depend on the dominant mode of production in the particular social formation."

Free marketeers contend that a policy of minimal direct involvement by Government in the informal sector is probably the most efficient method for the distribution of scarce funds, allocation in this case being done by market forces,

albeit subject to imperfections. One aspect of this recommendation, however, requires expansion. This thesis has suggested that managerial and entrepreneurial skills are the major constraints on the evolution of small enterprises in particular, although also of the Zimbabwean economy in general. Since managerial skills are relatively indivisible, the available supply of this resource is optimally allocated only when each manager is administering an enterprise at the efficient limit of his ability. The identification and stimulation of skilled managers whose talents are underutilised in the informal sector, rather than blanket assistance to small enterprises, should, therefore, be a goal of official policy.

There is no denying that exogenous constraints on the viability of the informal economy do exist; some of these are justifiable on the grounds that the enterprises thereby constrained impose negative externalities on the public, although the specific curbs used to not have an outstanding record of success. Others, however, are a result of conflict with the vested interests of the formal and government sectors. Nevertheless, the dominant constraint appears to be an endogenous one - the shortage of skilled entrepreneurs. It is a constraint which the authorities can only ameliorate indirectly by appropriate official expenditure on education and training, and more directly by the continued use of institutions such as FEBCO which perform a joint rôle in screening and then stimulating small enterprises, while providing advice and monitoring the further progress of the

loan recipient. It must be noted that the loans are extended at market interest rates, a policy which should be maintained. Certainly, there is little to justify Zimbabwe's adoption of the 1972 ILO recommendation for Kenya, that official contracts be extended to the informal sector.

Both observation and the two tests detailed in the second appendix of Chapter V, indicate that manufacturing methods are not the same in the two sectors. Formal production has more productive labour and derives the benefits of not only its own scale economies, but also of the economies resulting from formal production methods. In addition, the training it offers is more widely accepted than similar training offered by the informal sector.

Bearing these points in mind, together with the various caveats raised in the course of this thesis, a tentative answer can be provided to the question, should aid go to the formal or the informal sector?

If officially imposed exogenous constraints are lifted, and informal manufacturers are capable of producing competitively, then the informal sector should be stimulated by making capital available and if possible, widening the markets in which these goods are exposed. It is likely that, unless market-related interest rates are charged, the sole result will be an increase in the numbers of producers involved in the informal branch of the industry, i.e. involution.

The result of charging market rates, and using normal commercial criteria to determine those who should receive loan finance, will probably be the development of an élite within the sector. Such a group would be likely to formalise production methods, being probably composed of "intermediate" producers.

This conclusion does not suggest that such a policy should be abandoned in favour of assistance directly to formal enterprise. The truly informal producer will still produce for consumers who lack access to the formal market in either a financial or a geographical sense. However, the intermediate producer can expand his market and his enterprise more readily, if loan finance is available to him. A policy of selective assistance should, therefore, enhance the allocative efficiency of the industry as a whole. It should not, however, be hoped that both output and employment benefits will result simultaneously from such a policy.

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