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Towards an improved understanding
of how multi-national corporations
manage agency conflicts

The case of ArvinMeritor, Inc.

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the requirements for the degree of
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at the University of Cape Town.

ACC503W

Supervisor

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20 November 2003

DECLARATION

I, Allan Wayne Burton, hereby declare that this dissertation is my own original work and has not previously in its entirety or in part been submitted at any university for a degree.

Signed :

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Date :

20 November 2003

Signed by candidate

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ABSTRACT

Agency theory suggests that separating the ownership and control of a firm results in areas of conflict between the owners and the controllers. This defines the firm as a nexus of contracts between various stakeholders with conflicting objectives. Management's task is to align the stakeholders and their objectives, so that actions taken maximise shareholder wealth and minimise the loss that residual claimants incur. These losses arise from inappropriate management decisions, and the costs incurred by owners to prevent such decisions being taken.

This situation is intensified for multi-national corporations, in that there are conflict areas related to geographical separation, cultural differences, varying levels of economic development, different accounting standards, exchange rate fluctuations and specific financial and operating risks. Despite this, multi-national corporations continue to invest in a variety of countries and developing economies.

This dissertation attempts to improve understanding of *how these corporations manage the agency conflicts* in such scenarios, and in so doing, achieve shareholder value. Given the limited scope of this research, the objective is to analyse the phenomenon of agency conflict in an appropriate real life context, and in so doing, propose answers to the research question. The research can be viewed as a pilot study or precursor to further research.

Case study research, or field research¹, is chosen as the research method. An "explanatory" type case study approach, using a single case, is used to address the research question. The chosen subject is ArvinMeritor, Inc., a multi-national supplier of components to the automotive industry, with investments in various developing economies. One of these investments is ArvinMeritor South Africa (ARMSA), a wholly owned subsidiary of ArvinMeritor (ARM), located in Cape Town.

Using a mental model or theoretical framework of agency theory, the case is analysed with a research methodology that includes a review of the financial performance

¹ Case study and field study are terms used interchangeably in the literature that discusses research methods. For this dissertation, the term "case study" is preferred and used throughout, except where quotations use the alternative.

history of ARMSA, informal discussions with employees, general data gathering and structured interviews with key decision makers. From the evidence in the case, findings are grouped into the areas of agency conflict, monitoring costs, bonding costs and residual claim value.

The conclusion of the research is that ARM is primarily invested in ARMSA at the demand of many of its customers, who seek the financial gains of the Motor Industries Development Program instituted by the South African government. Recognising the financial and operating risks within the inherent agency conflict scenario, ARM have incurred monitoring and bonding costs and have adopted financial policies to suit conditions. In the case of ARMSA, the local management have responded well to these attempts to align objectives and have proactively taken steps to protect shareholder funds and provide returns in excess of the cost of capital.

Agency theory provides a useful framework for the analysis of behaviours and decisions within the real life context. The evidence found in the case is consistent with the contentions of the agency theory literature.

The case study suggests that recognising the inherent agency conflicts present in a multi-national, can lead to effective mitigating actions by managers at all levels. Although costly, these actions can be effective and assist in delivering value to the investing shareholders, in line with their expectations.

CHAPTER ONE

RESEARCH PROBLEM AND OBJECTIVE

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1	PROBLEM DEFINITION AND RESEARCH OBJECTIVE
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CHAPTER ONE

RESEARCH PROBLEM AND OBJECTIVE

1. PROBLEM DEFINITION AND RESEARCH OBJECTIVE

Agency theory suggests that separating the ownership and control of a firm leads to conflicting objectives between shareholders and managers. These conflicts manifest themselves in various undesirable ways and increase costs and reduce income. This reduces the value of the residual claim that shareholders and debtholders have on the assets of the firm. To mitigate against this, the shareholder / owner, takes further actions to align all stakeholders and their objectives, so as to minimise or eliminate the residual loss. These actions result in agency costs and modifications to financial policies.

Research has highlighted that the above is intensified for the typically diverse, multinational corporation (MNC). There are areas of increased conflict and their associated manifestations, additional mitigating actions taken by owners, and the increased risk of shareholders losing residual claim value.

Despite the above, there is a proliferation of MNC's, with broad and diverse product ranges and markets, invested in countries with varying levels of economic development. South Africa has numerous examples of such locally invested MNC's. Considering this in the light of agency theory, some interesting questions may be posed. These include the following:

- Why are these MNC's invested in an emerging market and economy like South Africa, as the risks of investing in South Africa are well known by first world firms?
- How successful have these investments been?
- Having made the choice to invest shareholder funds in South Africa, how do these MNC's manage the inherent risks?

- How do they monitor the performance and the decisions of the locally appointed agents?
- How do they ensure that the local agents act in ways that maximise shareholder value?
- Do the MNC parents calculate these agency costs and assess their effectiveness?
- How do MNC's adapt or use key financial policies to manage the risk?
- How do they use accounting and financial systems in this context?

Then, from the perspective of the lowest level of appointed agents:

- How does a local management team deal with the demands of a global parent?
- How much freedom do they have to act, and how risky is such freedom for the investor?
- How well do they adhere to corporate policy?
- How focused are they on shareholder wealth maximisation? Is the level of focus a function of their stake holding in the business?

There are obviously many more questions that can be posed. Agency theory could provide insight into understanding the behaviour of the various stakeholders in such a MNC, by providing a useful framework of analysis and explanation and, in so doing, facilitate in partially or fully addressing some of the questions above.

The fact that many MNC's continue to invest in emerging markets suggests that the level of returns is adequate to justify continuance. In summary, the enquiry can be condensed into the following research question.

How do MNC's manage agency conflicts to achieve shareholder value?

The objective of this research is to analyse the phenomenon of agency conflict in an appropriate real life context, and in so doing propose answers to the research question. This will, hopefully, assist in a broader understanding of the theory of agency as it is applied in practice.

2. STRUCTURE OF DISSERTATION

Chapter 1 commences with describing the primary assertions of agency theory, noting the heightened tensions associated with multi-national corporations. After listing some of the interesting questions that arise, the research problem and objective are defined.

The second chapter presents an overview of agency theory, to provide the theoretical context for the research. Starting with a theory of the firm, the impact of separating ownership and control is discussed in terms of the agency costs of maintaining and bonding agents, and of debt, equity and free cash flow. The external control of agents and the benefit of separating ownership and control are discussed briefly in order to obtain a more balanced perspective on the problem of agency conflict. Finally, some of the latest research as regards agency conflicts in multi-national corporations is examined. The chapter concludes with a mental model of agency theory. The model comprises the key elements of the theory and is used throughout the dissertation as a framework and reference.

Chapter 3 introduces case study research as an appropriate method for addressing the research problem. The text discusses the merits and pitfalls of case study research and takes the reader through a logical process of determining the appropriate case study type and design. Then the selected case is presented. Besides showing relevant detail on the case, the rationale for selecting ArvinMeritor, Inc. is shown by aligning the firm with the mental model developed in chapter 2. The chapter concludes with describing the research methodology used to study the case. The chosen methodology is related back to the initial discussion on case study design and the key elements of the mental model.

Chapter 4 contains the results of the case study. The evidence is grouped into key areas that relate to the mental model, covering the aspects of agency costs and conflict, financial policies and residual claim effects. The chapter concludes with a summary of the findings, relating each one to the element of agency theory that provides the best explanation for the finding.

The final chapter draws conclusions from the case evidence and poses answers to the research problem. The usefulness of the mental model for guiding the research is evaluated, as well as the applicability of agency theory in practice. The implications for multi-national corporations are discussed briefly. The chapter concludes with a list of suggested research possibilities for the future.

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AGENCY THEORY

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CHAPTER TWO

AGENCY THEORY

1. INTRODUCTION

Agency theory's most fundamental premise is that the management of a typical firm is likely to act in their own interests, which may not be in the interests of the shareholder. This is not a new thought, as the quote below from Smith (1776), when contrasting joint-stock and private companies, illustrates:

“The directors of such (joint-stock) companies, however, being the managers rather of other peoples' money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.”

Agency theory as it is known today is largely based on a set of papers published in the late 1970's to early 1980's. Noting the emergence of professional managers running corporations on behalf of their owners, Jensen and Meckling (1976) integrated the theories of agency, property rights and finance to develop a theory of ownership structures. They defined agency costs and related them to the issue of the separation of ownership and control. This led to a new definition of the “firm”:

“The firm is not an individual. It is a legal fiction which serves as a focus for a complex process in which the conflicting objectives of individuals (some of whom may “represent” other organisations) are brought into equilibrium within a framework of contractual relations.”

[Jensen and Meckling (1976) p.311]

However, Fama (1980) proposed that the separation of security ownership and control can be an efficient form of organisation. He regarded management and risk bearing as separate factors within the set of contracts, called a firm, and contended that competitive forces in the market drive the evolution of devices to monitor management effectiveness. This work led to a collaborative effort between Jensen and Fama to examine the advantages and disadvantages of separating ownership and control. They published two papers in 1983 where they illustrated these advantages and disadvantages, and examined the relationship between the residual claimants in the firm and the decision makers.

Brealey and Myers (1988) describe how the development of agency theory stood in contrast to the traditional neo-classical economics literature and highlighted that the principles of wealth maximisation are inadequate to explain the decisions taken by many firms with regard to debt and dividend policies. An example of this is when firms pay a dividend and then incur debt for further investing. In studying the control structures and financial policies of firms listed on the Johannesburg Stock Exchange, Uliana (1991) showed that firms with high levels of managerial ownership (owner-controlled) adopted policies different to foreign and conglomerate controlled firms. Typically, the former paid out lower percentages of earnings and incurred higher levels of debt.

Recent decades have seen a proliferation of multi-national corporations with diversified interests in first world and developing economies. This has led to an examination of the agency cost effects in such multi-nationals. Wright, Madura and Wiant (2002) conclude, from empirical evidence in US listed firms, that agency costs are more pronounced in firms with higher degrees of multi-national business and that the effect of security offerings on the firm's value is associated with the degree of international exposure.

This chapter presents an overview of agency theory, with the objective of examining agency costs in the context of the separation of ownership and control, highlighting the relationship of agency costs to debt and dividend policies and reviewing the particular effects of agency conflicts in multi-national corporations.

2. THEORY OF THE FIRM

All firms are characterised by having a number of interested parties with a stake in the performance of the firm over time. These stakeholders include customers, suppliers, employees, directors and managers, debt providers, the society at large and, of course, the investor holding shares in the firm. Traditionally, firms are assigned a unique corporate identity in that the goals of the firm are set with the assumption that all involved parties are striving for such goals. Jensen and Meckling (1976) argued rather that a firm is a focal point, or nexus, of the conflicting objectives of the stakeholders listed above. Given this understanding, the mission of the firm's owners is to align the stakeholders and their conflicting objectives in such a way so that actions taken within the firm maximise shareholder wealth.

This theory of the firm puts the agreements or contracts between the various stakeholders sharply into focus, as well as the consequential behaviours and decisions within the framework of those contracts. Some of the more significant contractual arrangements are between the owners and the professional managers and between the owners and the providers of debt capital.

Typically, these contracts stipulate the level of claim that the various stakeholders have on the assets of the firm. When considering the appointed agents (managers), however, Fama and Jensen (1983b) note that these agents have limited risks in that, typically, most of their remuneration is fixed, with a portion related to individual performance. Commensurate with this, these agents have limited rights or claims on the firm's assets. In contrast, there are a host of other stakeholders who have a claim on the residual cash flow and assets. The riskiness associated with these residual cash flows is termed the residual risk, as borne by the residual claimants.

3. SEPARATING THE OWNERS AND THE CONTROLLERS

As firms increase in size, whether by sales growth, globalisation, diversification, layering or simply through increased complexity, the "distance" between the appointed agents and the residual claimants increases, to the extent that it is common for the decision makers and the residual claimants to be totally separated, although the

latter bear most of the financial risk. At the heart of agency theory is the belief that this separation is a powerful incentive for the appointed agents to act in their own interests as opposed to that of the shareholders. To counteract these forces, the owners take actions to mitigate against these risks and to reduce the conflicts where possible. These actions are costly (agency costs) and further reduce the value of the residual claim. The difference between the value before and after agency costs is termed the residual loss. This loss is carried by the residual claimants.

Separating the owners and the controllers² naturally leads to conflict. Jensen and Smith (1985) identified three areas of conflict. These are:

- **Time horizons** – the shareholder has an indefinite time horizon, because the residual claims are traded at the market price for as long as the firm exists. The decision maker or controller on the other hand has a time horizon directly linked to his tenure with the firm.
- **Risk profiles** – the shareholder has invested in the firm as part of a portfolio of options and, therefore, has to bear diversified market risk. The controller bears total risk in terms of his personal investment of human capital.
- **Effort and attention** – the shareholder wants maximum management effort at improving value. The controller would weigh up the cost of such efforts on the use of his human capital. His personal benefits may not outweigh the costs of such efforts.

These areas of conflict can result in actions that increase the residual loss, thereby reducing the claim that the various stakeholders have on the firm. Some typical manifestations of inappropriate actions are listed below:

² The literature dealing with agency theory uses various terms interchangeably when referring to “owners” and “controllers”. This is helpful in that a discussion may warrant the use of a particular term that is commonly used in that context. For this dissertation, the terms “owner”, “shareholder”, “debtholder” and “residual claimant” are synonymous. Also, the terms “controller”, “agent” and “manager” are used to describe the same role players from different perspectives. There is a level of overlap in many firms, however, where controllers at the highest levels of managerial responsibility are also owners of the firm, in that they possess shares in the firm’s assets and carry some of the associated financial risk.

- Recruiting excess people as opposed to applying performance management and employee development.
- Agents paying themselves excessive levels of remuneration.
- Avoidance of investment opportunities through lack of effort or interest.
- Choosing projects that are safer, with lower than expected shareholder returns.
- Manipulation of dividend policy and debt policy.
- High gearing that places the firm at unnecessary risk.
- Focus on turnover and size at the expense of profit and return to shareholders.
- Purchasing “nice to have” assets, like the latest furniture or personal computers.

[Jensen and Smith (1985), Jensen and Meckling (1976), Fama and Jensen (1983a), Easterbrook (1984).]

With these in mind, the owners of firms have taken actions and incurred costs to mitigate against the risks and potential for increased residual loss. These are discussed below.

3.1 The Cost of Controlling the Agents

Owners take certain steps to ensure that management is acting in the best interests of the shareholder. Two obvious examples are illustrated below.

- Firms with many agents have widely dispersed decision making, leading to specific knowledge retention in the various groups of agents. It is costly to coordinate decision making in this environment. Owners set up reporting lines and hierarchies to manage information flows and control decision making.
- Installing compensation systems that incentivise the various groups of agents in the right manner, balancing fixed and variable compensation in line with job function and the profile of the agents.

The costs of these actions are termed agency costs, and can be categorised into the costs of monitoring management, bonding the agents and the residual loss emanating from other actions by the agents that are not in the best interests of the shareholders.

3.1.1 Monitoring Costs

Easterbrook (1984) highlights that, in addition to being costly, monitoring of managers is difficult to do effectively as it would require collective action from a diverse group of shareholders. The dispersion of shareholders also implies that no one shareholder would capture any significant proportion of the gain from spending funds on monitoring.

In larger firms, principal officers take actions to monitor management effectiveness at various levels. These are typically in the form of reporting structures, scorecards and internal auditing. The independent auditing function required by law and the generation of statutory accounts for scrutiny by the taxation authorities are another form of monitoring costs.

3.1.2 Bonding Costs

Jensen and Meckling (1976) describe the costs of interventions, systems or processes designed to prevent agents from taking certain actions, as bonding costs. These arrangements with agents protect the owner from certain actions, reduce the potential for such actions and even compensate the owner should certain actions be taken. One of the most prevalent approaches for bonding the agents to the firm is that of designing incentive and compensation systems that raise the level of risk sharing between owner and controller. The controller has more at stake, although this comes at a cost to the owner.

3.2 External Control of Agents

Fortunately, the nature of the capital and business markets in which firms operate is such that certain in-built control mechanisms mitigate the riskiness of controllers being independent from residual claimants. Some examples are:

- Transparency of executive compensation to the investing public.
- Open, professional job market with focus on results and the reputation of influential decision makers.
- Stock market pressure in the form of share prices reflecting management competency.
- Threat of takeovers compelling managers to increase the firm's value.

[Fama and Jensen (1983a), Easterbrook (1984).]

3.3 The Benefits of Separation

Agency theory is particularly valuable in that it assists in explaining the behaviour of the modern corporation. Of course, there are many examples of successful firms that have negotiated their way admirably through the inherent agency conflicts. A compelling reason for this is that the residual claimants have no formal role in the firm and can operate freely by holding, releasing or increasing their claims. This leads to a number of positive results or situations, described by Fama and Jensen (1983b). Briefly, these are:

- **Unrestricted risk sharing** - spreading of the residual risk across many claimants should lower the cost of risk-bearing services and the cost of capital. It leads to:
 - Specialised risk sharing – shareholders provide the capital for growth, whilst the agents provide the specific (human) capital to manage it.
 - Specific assets - facilitates the acquisition of risky assets specific to the operations of a particular firm.
- **Specialised management** – as the residual claimants are not also decision makers, the way is open for the appointment of competent professionals to manage the complex functions of modern firms.
- **Market value rule and investment decisions** – this rule says that shareholders favour investments by the firm that reduce current and future costs of delivering products and increase the current market value of their residual claim. Expenditures that are less than the current market value of the

future cost savings will be favoured. Product prices can then be lowered whilst still covering costs. However, when the time horizon of the claimant is less than the life of the firm, the claimant assigns zero value to cash flows outside his horizon. So, firms with common stock residual claims should deliver products at lower prices than those with restricted residual claims.

[Fama and Jensen (1983a)]

3.4 The Agency Cost of Debt and Equity

As previously mentioned, the separation of ownership and control naturally leads to conflicts and to financial policies that may not be in the best interests of the shareholders. A firm's policy on debt is one that is subject to the tensions inherent in an agency relationship.

Mello and Parsons (1992) explored the incentive effects that debt policy has on residual claimants, in this case debt providers and shareholders. This facilitated the measurement of the agency costs of debt, which could be defined as the impact that choosing an operating policy away from the first best one, has on the value of the firm. The consequence of this is that the tax benefits of debt should be reduced by these agency costs.

“As the size of debt increases, however, the marginal agency costs grow so that for large values of debt the total agency costs may far outweigh the total tax shield, making the value of the levered firm less than the first best.”

[Mello and Parsons (1992) p.1894]

Vilasuso and Minkler (2001) contend that agency costs imply an imperfect capital market where debt policies do matter, in contrast to the Modigliani-Miller demonstration of debt policies not affecting capital costs in a perfect capital market. They find that an optimal capital structure minimises agency costs, making the agency costs of debt and equity significant determinants of debt policy.

As the owner of a firm reduces his ownership by issuing equity, he may be incentivised to gain further non-pecuniary benefits, as he can spread this cost over

more owners. New shareholders are aware of this and offer less for new shares, thereby increasing the cost of new equity.

When a firm issues debt, the debt providers will increase the cost of such debt if they believe that the equity owners are likely to benefit from risky behaviour and leverage the firm highly.

Some of the other ways in which capital structure conflicts cost the firm are in under investment, financial distress in the form of bankruptcy or investment in risky projects that yield low returns. [Harris and Raviv (1991)]

3.5 The Agency Cost of Free Cash Flow

“Cash is king”, an often used phrase by academics and practitioners, puts into context the conflicts between management and shareholders when it comes to claims on free cash flow available. Paying cash to shareholders reduces management’s resources and increases the potential for capital market scrutiny as they raise new capital. Financing projects internally avoids this monitoring. Agency conflicts are even more pronounced when the firm generates substantial levels of cash. Managers need to be encouraged to pay out the cash, rather than reducing shareholder value (the agency costs of free cash flow) by investing it at below the cost of capital or wasting it on the inefficiencies of the firm, both of which may benefit the management in their personal capacities. [Jensen (1986), and Easterbrook (1984)]

Shareholders are often willing to incur the tax burden of receiving dividends in exchange for the professional monitoring that investors provide when the firm raises new capital i.e. balancing off the tax loss from a dividend gain against the reduced agency cost. The literature abounds with reasons why firms do or do not pay dividends, with many of these reasons founded in agency theory.

However, Baker, Powell and Veit (2002) conclude:

“Despite a voluminous amount of study, researchers still do not have all the answers to the dividend puzzle ...also do not have definitive answers as to why managers

choose one method of cash distribution over the other. Solving the dividend puzzle may depend on understanding the effects of various market imperfections... dividend policy may vary substantially from one firm to another. ”

[Baker, Powell and Veit (2002) p.1]

They list key factors that affect the dividend policy of firms as follows:

- Market imperfections and frictions, like taxes, asymmetric information, agency costs, transaction costs and flotation costs.
- Behavioural considerations, like irrational investors, shareholder needs and habits of firms.
- Firm characteristics, like profitability, size, available cash and forecasted earnings.
- Managerial preferences, like smoothing dividends to avoid future dividend reductions.

[Baker, Powell and Veit (2002) p.16]

Jensen (1986) argues that the assumption of debt enables managers to bond their promise to pay out the future cash flows to shareholders, thereby substituting debt for dividends now. He goes further to explain how debt reduces the agency costs of free cash flow as it reduces the cash available for spending by the managers.

3.6 Agency Costs in Multi-national Corporations

Increased globalisation, aided by the explosion of the internet and communications technologies, has resulted in a proliferation of multi-national corporations (MNC's), many of them invested in emerging market economies. This situation raises questions around the agency conflicts and costs that may or may not be unique to such corporations. For example, managers of central functions are reliant on decentralised divisions, whom they need to motivate, coordinate and evaluate. Such corporations typically have many tiers of managers, or agents, dispersed globally. Even with incentives at corporate head office to maximise shareholder wealth, the appointed

agents of the foreign subsidiaries may be inclined to make decisions in the interest of the subsidiary that is not necessarily in the interest of the shareholder. Therefore, a MNC with high levels of foreign exposure could be expected to have a pronounced level of agency conflict and its associated costs. [Kaplan and Atkinson (1998)]

Wright, Madura and Wiant (2002) conducted empirical tests on 107 US firms announcing debt offerings, and on 215 US firms announcing equity offerings for the same period, to determine whether firms with more exposure to foreign markets have greater agency costs than less exposed firms. They found that more negative firm valuation effects resulted from security offering announcements by firms with higher degrees of international business. The mean share price response to debt and equity offerings was negative and significant. Furthermore, the indications were that agency costs increased with the degree of foreign market exposure and firm size. They classified the anecdotal evidence for increased agency costs, as provided by practitioners, into the following:

- Geographical distance between parents and subsidiaries
- Corporate cultural differences
- National language and cultural differences
- Economic development levels of subsidiary nations

[Wright, Madura and Wiant (2002) p.350]

For example, an entrepreneurial culture at a subsidiary may clash with a head office culture of centralisation and slow change processes, which could lead to conflicts between the goals of the parent and the subsidiary. MNC's face unique challenges in the monitoring and controlling of diverse operations. Fosberg and Madura (1991) contend that the managers of foreign subsidiaries may not always be acting in the best interests of the MNC and its shareholders for the following reasons:

- Local decisions could ignore the effects of repatriation of taxes and exchange rates on the parent.

- Control over local management is often complicated by language, culture, distance, local government pressure, convoluted intra-company transactions, and different accounting standards.

[Fosberg and Madura (1991)]

3.7 Mental Model of Agency Theory

Distilling the key aspects of the agency theory overview presented so far, it is possible to summarise the above by means of a mental model, shown below in figure 1. This model is used throughout the dissertation as a theoretical framework of analysis, and forms part of the research methodology.

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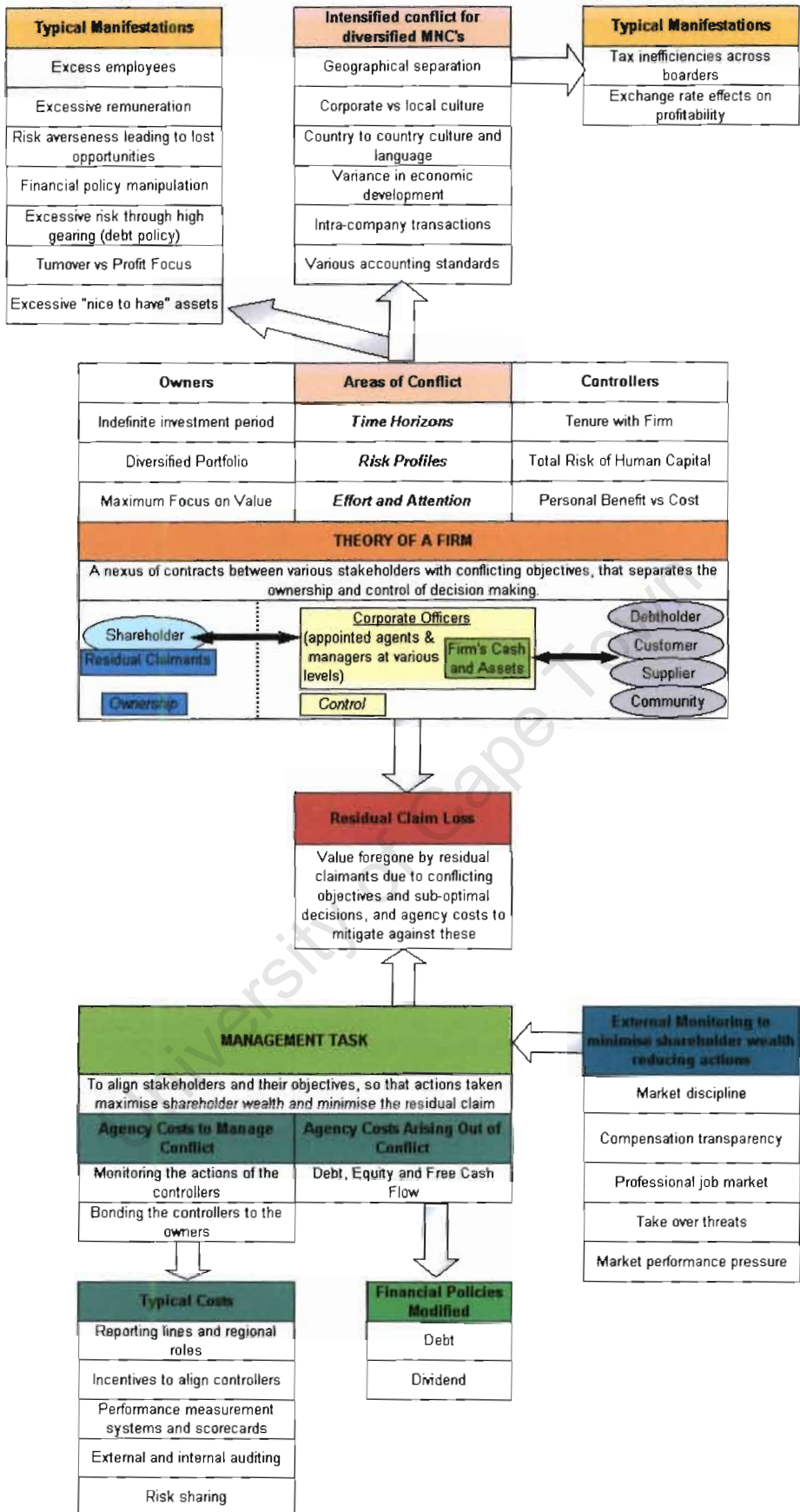


Figure 1: Mental Model of Agency Theory

CHAPTER THREE
**RESEARCH APPROACH
 AND
 SELECTED CASE**

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CHAPTER THREE

RESEARCH APPROACH AND SELECTED CASE

1. RESEARCH METHOD

The research question posed earlier, with the resulting research objective, sets the context for the choice of appropriate research method. An explanation of how MNC's deal with agency conflicts is required, thereby, suggesting that a form of case study research is appropriate.

Ryan, Scapens and Theobald (1992) address the philosophy of financial research and discuss the methodological issues within such research. They summarise research as a process of constructing theories validated by well designed tests. Proceeding to note the many successes of financial research, they highlight that most of the criticism, however, is aimed at the technical and methodological levels. The choice of research method is, therefore, a critical decision for the researcher. Shields (1997) reviewed 152 articles published in leading financial journals from 1990 to 1996 and illustrated the variety of research methods used. The results are shown below in table 1.

The rationality which is found in much of the finance literature tends to exclude behavioural and psychological factors in explaining the actions of economic agents. This can be explained by the fact that much of financial theory is based on the neo-classical economics program of research. This program has three core propositions that are foundational to financial model development:

- Economic agents are formally rational at the individual level
- Financial markets are perfectly competitive
- Information is freely available

[Ryan, Scapens and Theobald (1992) p.27]

Research Method	Frequency
Analytic	49
Survey	28
Archival	22
Laboratory Experimentation	21
Literature Review	13
Case / field study	10
Behavioural Stimulation	2
Multiple Research Methods	7
Total	152

Table 1: Distribution of Research Methods
[Shields (1997) p.9]

In evaluating these propositions, despite their importance, they cannot be considered in isolation from the problems of empirical testing. Empirical testing has highlighted the often irrational behaviour, for example, of investors and managers. Other economic theories have developed out of the core elements of neo-classical economics, however, and are useful for explanation of such behaviours.

For instance, the economic theory of principal-agent relationships (the focus of this research) can be used to set the framework for testing the implications of the theory and other financial models in a practical environment, although it is doubtful whether such a framework could actually predict individual behaviour. It may, however, be useful in predicting behaviour patterns across groups within a firm, or between firms.

In a discussion on research methods, Otley (1984) examined the relationship between management accounting and organisation theory and concluded that, despite the fragmented nature of organisation theory, that many elements of it had been used by researchers to explain management accounting practices. He made a number of

recommendations, including a call for more qualitative and interpretative type research, in particular case studies. He was supported by Kaplan (1984) who commented on “*researchers’ reluctance to get involved in actual organisations and to muck around with messy data and relationships.*” Foster and Young (1997) note that since the calls of the mid – 1980’s for more relevant research, case study research methods are often proposed. For some topics, substantial knowledge can be gained from going into the field. Atkinson and Shaffir (1998) note that case study research is about studying phenomena in their natural setting. They develop a helpful framework for gaining insight into the critical steps involved in this type of research. In addressing the subject of new research directions, Atkinson et al (1997), note the value of using multiple methods to understand complex phenomena. Commenting on the historical research patterns with regard to activity based costing, they note the role that case study research played in initially understanding practice through descriptive accounts, and then in identifying implementation problems as more companies adopted this costing method. Ahrens and Dent (1998) conclude that “*if organisations followed the predictions of single theories, nobody would demand rich field studies. To obtain better understanding of how management accounting functions in practice, field studies that bring the messy world of organisations closer to the reader are needed.*”

The next section examines the case study research method more closely.

1.1 Case Study Research

Yin (1994) characterises case study research (CSR) as remarkably difficult, and Stake (1995) calls it an “art”. Yet Ryan, Scapens and Theobald (1992) highlight the increasingly popular use of CSR in accounting and financial research. Stake (1995) provides a useful definition of a case study:

“A case study is expected to catch the complexity of a single case... ..we study a case if it itself is of very special interest. We look for the detail of interaction within its contexts. Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances.”

[Stake (1995) p.xi]

Amidst the range of research methods and strategies available, Yin (1994) provides a framework for selection of the appropriate strategy. Three criteria are used to aid the selection, but he notes that although each strategy has its distinctive characteristics, there is a large degree of overlap. Therefore, the framework can be used to ensure that the chosen strategy is not totally inappropriate. The framework is shown below in Table 2.

Strategy	Form of research question	Requires control over behavioural events?	Focuses on contemporary events?
Experiment	How, why	Yes	Yes
Survey	Who, what, where, how many, how much	No	Yes
Archival analysis	Who, what, where, how many, how much	No	Yes / no
History	How, why	No	No
<i>Case study</i>	<i>How, why</i>	<i>No</i>	<i>Yes</i>

Table 2: Choice of Research Strategy

[Yin (1994) p.6]

Considering the form of research question discussed, it is clear that a case study research method is acceptable for the research objectives posed.

1.2 Type of Case Study

CSR in itself is rich in a variety of types, although the distinctions are not necessarily clear cut. Yin (1994) and Ryan, Scapens and Theobald (1992) summarise the choices of the researcher, as described in Table 3 below:

Type of Case Study	Characteristics
Descriptive	Describing a phenomenon, like an accounting system, as it is found in practice. Helps to assess gaps with theory and to determine common and best practice. Useful in providing information on existing practice.
Illustrative	Illustrating what has been achieved in practice by new or innovative cases e.g. the latest approach to activity based costing. There is an implied assumption that the case is using practices “better” than most.
Experimental	Used to examine the process or difficulties involved in implementing new theoretical proposals of what should be done in practice. Also, helps to evaluate the benefits claimed by the proponents of the theory.
Exploratory	Used to explore the reasons for particular practices. Typically results in hypotheses that can be tested in subsequent research on a larger scale. Is a form of preliminary investigation with the objective of producing generalisations about practices.
<i>Explanatory</i>	<i>Attempts to explain the reasons for observed practices. The focus is typically on a specific case. Theory is used for understanding and explaining specifics, as opposed to producing generalisations. Therefore, the usefulness of the theory is tested, and modifications suggested. The objective is to generate theories that provide good explanations.</i>

Table 3: Choice of Case Study Type

The research objective described previously suggests that an explanatory case study type is appropriate for an understanding of how MNC’s manage agency conflicts.

1.3 Case Study Design

A primary factor in designing a case study research project is the choice between a single and a multiple case design. Yin (1994) lists the rationale and circumstances for a single case design as follows:

- When the case is critical to testing a well formulated theory, with propositions related to specific circumstances.
- When the case is unique or extreme or especially rare.
- When the case is revelatory, in that a previously inaccessible phenomenon can be observed.
- When the case is a pilot study or precursor to a multiple case design.

[Yin (1994) p. 39]

The choice of moving to a multiple case design is driven largely by the research strategy and objectives, although such designs still fall under the same methodological framework as a single case study. Multiple case studies often produce more compelling evidence, but gaining accessibility to multiple cases that exhibit the necessary characteristics often presents practical difficulties and obstacles.

Once the case study design has been selected, a decision on the case to study should be made. This is defined in case study research as the “unit of analysis”. If appropriate, further sub-units of analysis can be identified, should they potentially add to the insights into the case.

As outlined above, the research question and related objective led to a decision to utilise a case study research method and conduct an explanatory type of case study. The researcher identified a case that met the criteria for a single case study design and which potentially satisfies the research objective as follows:

- A single case can test the well formulated agency theory, especially as applied to MNC's.

- There are unique aspects to the identified case. (These aspects are described later in section 3 : Rationale for Choice of Sub-unit).
- The researcher has unlimited access to the case evidence, in that he is employed by the firm to be studied, with full support for the research from senior management.
- The case study is a precursor to expanded research options.

1.4 Pitfalls of Case Study Research

Although case studies are, according to Yin (1994), a distinctive form of empirical enquiry, many researchers have seen them as a less desirable form than either experiments or surveys. A review of Yin (1994) and Ryan, Scapens and Theobald (1992) yields the following list of common concerns.

- Previous case studies have allowed equivocal or biased views to influence the direction of the findings and conclusions.
- The belief that it is not possible to generalise scientifically from a single case.
- Case studies take long, and often result in lengthy documents.
- It can be difficult to draw boundaries around the subject matter of the case, especially when examining it from a holistic perspective.
- The problem of research bias suggests that CSR can only provide an interpretation of a social system, not an objective representation.
- Many accounting case studies require access to organisations and to confidential information. Even if confidence is gained, there are potential problems with the confidentiality of case report writing.

[Yin (1994) p. 9-11 ; Ryan, Scapens and Theobald (1992) p.125-127]

In addressing these concerns, the authors note that many people confuse case study teaching, where materials can be altered to demonstrate a point, with case study research. The latter obviously requires rigour and objectivity, like any research method. Case studies are often confused with specific methods of data collection, like ethnography, and do not need to be lengthy. Also, multiple case studies, like experiments, can be generalisable to theoretical propositions, but not to populations or

universes. In this sense, the case study is not a sample of a population. Rather, the goal of CSR is to expand and generalise theories. It is possible to place limits on the study, allowing other researchers to extend the work further.

“Some writers say that case studies lack academic rigour and cannot be generalised.

Frequently, such writers overlook the biases and inherent assumptions of their preferred research methods. Case study research has its own rigour and is capable of generalisation.”

[Ryan, Scapens and Theobald (1992) p.125]

In conclusion, it is important to note that in comparison with the more traditional forms of accounting research, case studies are more concerned with explanation than with prediction. Good accounting case studies will, therefore, focus on explanation and theoretical generalisation. Case studies provide ways of thinking about problems and, as such, are important tools in accounting research.

“most people feel that they can prepare a case study, and nearly all of us believe we can understand one. Since neither view is well founded, the case study receives a good deal of approbation it does not deserve.”

[Yin (1994) p. 11]

2. UNIT OF ANALYSIS

The chosen unit of analysis is that of a US based MNC that supplies a wide range of products to the global automotive industry. ArvinMeritor, Inc. (ARM) has manufacturing operations in more than 25 countries. One operation is based in Cape Town, South Africa. This operation forms the sub-unit of analysis, and has been in operation since 1962. The chosen case is a suitable example of a MNC with wide global interests and a lengthy period of investment experience in a developing economy.

The researcher is employed by ArvinMeritor South Africa (ARMSA). This allowed for unlimited access to information and resources. The objective of the research is fully supported by the senior management of the firm.

2.1 ArvinMeritor, Inc. (ARM)

ArvinMeritor has its headquarters in Troy, Michigan, and was founded on 7 July 2000 by the amalgamation of two strong companies and their heritages. Arvin Industries Inc. with 1999 sales of \$3.1 billion, established its reputation as a global manufacturer of automotive components and systems. Arvin was ranked as a leading manufacturer of automotive exhaust systems, ride and motion control products, air, oil, and fuel filters and gas-charged lift supports. Its products were sold under various trademarks including Arvin, Maremont, Timax, ANSA and ROSI exhaust systems, Gabriel and RydeFX shock absorbers, Purolator filters and StrongArm gas-charged lift supports.

Meritor Automotive Inc. with 1999 sales of \$4.5 billion, established its reputation as a global automotive supplier of components and systems for commercial, speciality and light vehicle original equipment (OE) and the aftermarket (AM). The Meritor product line consisted of two businesses. Commercial Vehicle Systems (CVS), a leading supplier of complete drivetrain systems and components for medium and heavy duty trucks, trailers and off-highway equipment and speciality vehicles, including military, bus and coach, and fire and rescue. Light Vehicle Systems (LVS), is a major supplier of roof, door, automotive body, access control and suspension systems, and wheel products for passenger cars, light trucks and sport utility vehicles.

Figure 2 illustrates the origins of ARM, with key dates and events.

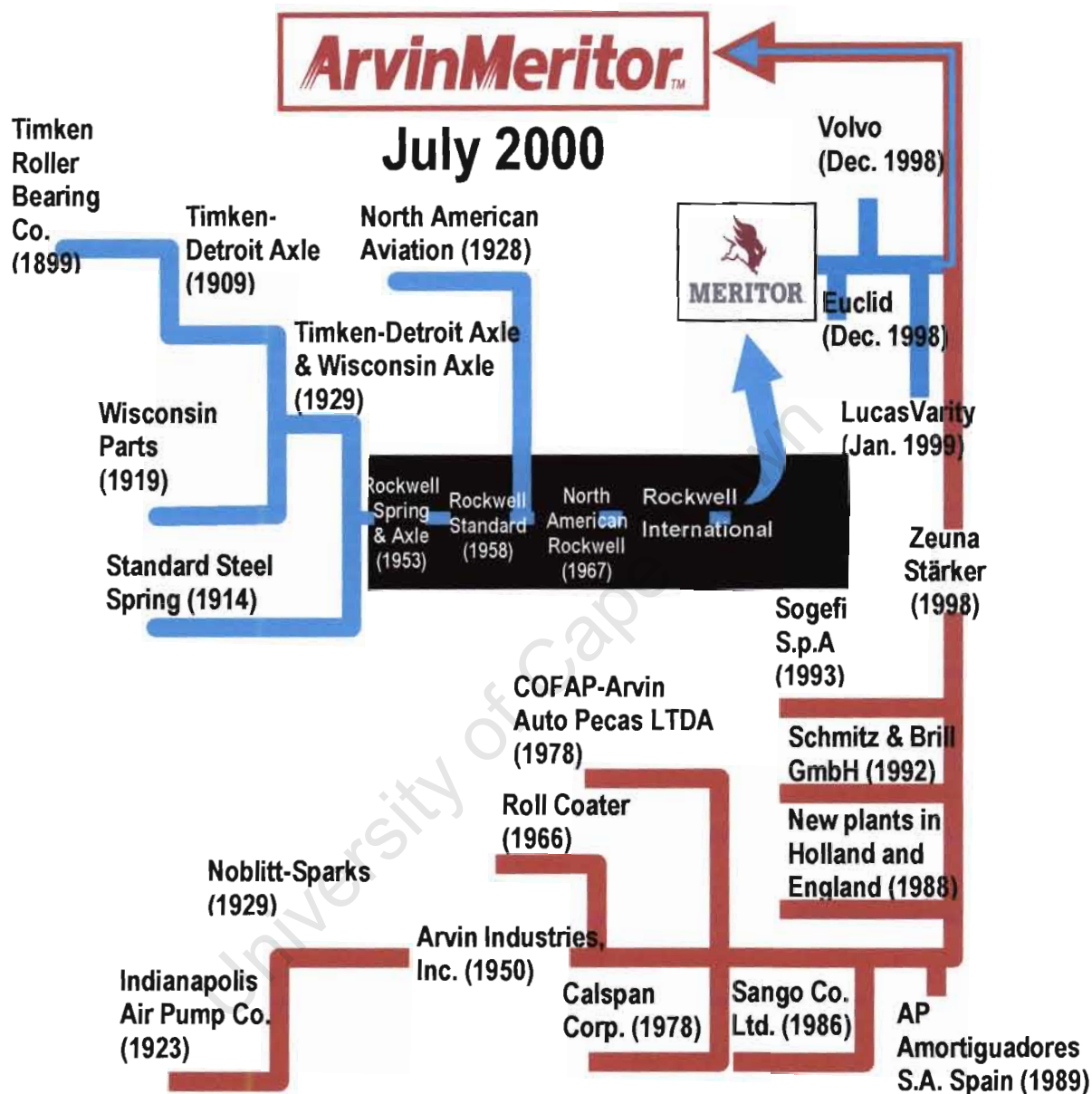


Figure 2 : Historical Overview of the Origin of ArvinMeritor, Inc.

[Source : ARM website <http://www.arvinmeritor.com>]

Figure 3 illustrates the diverse product range and markets served by ARM and its global operations.

Light Vehicle Systems

- Roof Systems
- Gas Springs
- Door Modules
- Shock Absorbers
- Access Controls
- Vacuum Actuators
- Window Regulators
- Exhaust Systems
- Wheels
- Suspensions
- Filters (air, oil and fuel)



Commercial Vehicle Systems

- Shock Absorbers
- Trailer Axles and Suspensions
- Tyre Inflation Systems
- Drivelines
- Driver Axles
- Braking Systems
- Anti-Locking Braking Systems (ABS)
- Air Dryers
- Filter Products
- Transmission Clutches
- Front Axles



Figure 3 : Divisions and Product Range of ArvinMeritor, Inc.

[Source : ARM website <http://www.arvinmeritor.com>]

ARM has not been impervious to the volatility of the automotive market in recent years or the jittery US economy, but has delivered financial results that place it in the top group of performers amongst its peers. Figure 4 summarises the recent key financial performance history and current financial goals as reported to the investing public and Wall Street analysts.

Financial Highlights

In millions, except per share amounts

Year Ended September 30	2002	2001	Change Better (Worse)	
Sales				
Light Vehicle Systems	\$ 3 632	\$ 3 588	\$ 44	1%
Commercial Vehicle Systems	2 249	2 199	50	2%
Light Vehicle Aftermarket	844	859	(15)	(2%)
Other	157	159	(2)	(1%)
Total Sales	\$ 6 882	\$ 6 805	\$ 77	1%
Operating Income	\$ 343	\$ 195	\$ 148	76%
As a percent of sales	5.0%	2.9%		2.1pts
Net Income	\$ 107	\$ 35	\$ 72	206%
Pre-tax interest coverage	2.7x	1.4x		1.3x
Diluted earnings per share	\$ 1.59	\$ 0.53	\$ 1.06	200%
Diluted common shares outstanding	67.2	66.1	(1.1)	(2%)
Cash provided by operations	\$ 184	\$ 605	\$ (421)	(70%)
Total debt-to-capitalisation ratio	65%	67%		2.0pts
Return on average equity	15.4%	4.8%		10.6pts

Financial Goals

Grow sales 10 percent annually over the business cycle. We intend to achieve this primarily through organic growth

*

Grow earnings per share 15 percent to 18 percent annually by focussing on margin expansion. This growth will be driven by cost reductions and efficiencies

*

Emphasize cash generation

*

Maintain investment grade credit rating

*

Reduce debt-to-capital ratio to 45 percent

Figure 4: ARM Financial Performance and Goals

[Source: ARM website <http://www.arvinmeritor.com>]

2.2 ArvinMeritor Alignment to Mental Model

Further rationale for the choice of ARM as the unit of analysis is achieved through an examination of ARM within the mental model developed during the review of agency theory. Figure 5 illustrates some characteristics of ARM as they relate to components of the model. From this it is clear that the basic characteristics of the chosen unit of analysis are substantial enough to warrant further investigation within the theoretical framework.

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Intensified conflict for diversified MNC's	ArvinMentor characteristics related to model elements
Geographical separation	With headquarters in Troy, Michigan, U.S.A., ARM has more than 125 operations in more than 25 countries. Operations are in North America, Canada, South America (e.g., Mexico, Brazil, Venezuela), U.K., Western and Eastern Europe (e.g., Czechoslovakia), South Africa, Australia, Far East (e.g., China, Taiwan).
Corporate vs. local culture	Many of the diverse operations are managed by locals who report through to HQ via many different levels. There is a strong culture of centralisation at HQ, due to it being well staffed with functional and business positions.
Country to country culture and language	The company language is English. Many of the non-English speaking countries report into geographically designated managers. These managers are accountable for the performance of operations in countries with a variety of cultures and languages.
Variance in economic development	In terms of the World Competitiveness Report of Nations, ArvinMentor has investments in countries ranging from the US to South Africa. In the last report South Africa ranked poorly. A fair proportion of countries with ARM operations are classified as having developing economies. 1/3 of sales are outside North America.
Intra-company transactions	There are numerous intra-company transactions as the local operations are often legal entities, paying local taxes. These operations are grouped geographically within business units. These, in turn, roll up into global divisional results and total company results.
Various accounting standards	As above, there are a myriad of local or geographical accounting standards that need to be adhered to. However, all management accounts need to satisfy the provisions of US GAAP for Corporate Reporting and local GAAP for tax purposes in the local region.

External Monitoring to minimise shareholder wealth reducing actions	ArvinMentor characteristics related to model elements
Market discipline	ARM is listed on the New York Stock Exchange with a market capitalization of \$1.18 billion, and is subject to the scrutiny of capital markets and the investing public. On 30 September 2002 there were 87.9 million shares outstanding, with 58 % of shares being held by institutions.
Compensation transparency	The US lives on public scrutiny of executive and corporate officers salaries apply. This is not always the case in other countries.
Professional job market	ARM is a large player in the market for professional managers and executives, employing more than 5000 salaried staff at middle management level and above.
Take over threats	The automotive supply sector is known for merger and acquisition activity. ARM is in the top 10 global automotive suppliers since the merger in July 2000, as measured by turnover. A key reason for the merger was the threat of takeover. ARM will soon acquire 100 % ownership of Zeuss-Sturcker in its bid to grow its base and avoid takeovers.
Market performance pressure	The automotive industry is marked by substantial overcapacity. In recent times many competitors of ARM have struggled to maintain profitability, with many filing for Chapter 11 bankruptcy protection in 2001/2002, and having their debt downgraded to junk bond status. ARM currently has a debt rating just above junk bond status. The volatility of the US economy prior to and especially after September 11 2001 attacks, makes stock market performance all the more significant to maintain shareholder confidence.

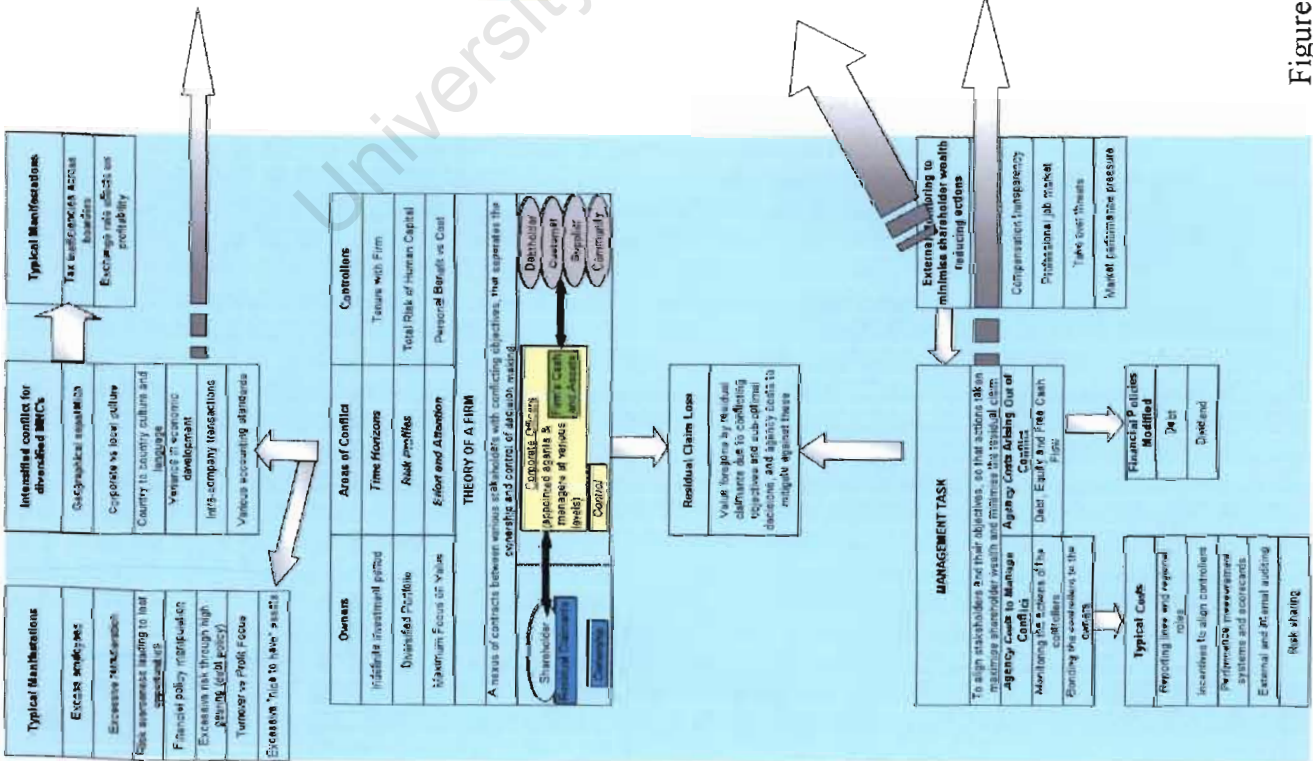


Figure 5: ARM Alignment to Mental Model

3. SUB-UNIT OF ANALYSIS

The chosen sub-unit of analysis is the ArvinMeritor operation in Cape Town, South Africa (ARMSA). This subsidiary is 100 % owned by ARM and consists of two South African legal entities: Air and Emissions Technologies Group South Africa (Pty) Ltd. (AETG), and Gabriel South Africa (Pty) Ltd. (GSA). The latter includes the CVS shock absorber sales to Canada. ARMSA management is also responsible for overseeing the CVA Meritor Automotive business in Johannesburg.

3.1 ArvinMeritor South Africa (ARMSA)

The earliest automobiles had no shock absorbers and relied on leaf springs to soften and stabilize the ride. The first primitive shock absorbers appeared in 1902 and the modern shock absorber was born in 1907 when an American, Claude Foster, patented the “Gabriel Snubber”.

The US based Ford Motor Company and General Motors opened assembly plants in South Africa in the 1930's. Following close on this, an agency, Harold H. Jones & Co., was established for the importation and distribution of shock absorbers under the Gabriel brand. By 1960, the total South African car market had reached 48000 units p.a. making local manufacture a possibility. In 1962 the South African government introduced the “local content” programme (now known as the Motor Industries Development Plan, or MIDP) and the first Gabriel factory was built in Plumstead, Cape Town. Shareholders were Gabriel SA (51 %), Plessey SA (35%) and Harold. H. Jones & Co. (14%). In the same year a contract was signed with Chrysler Valiant for original equipment (OE) supply to their local assembly plant. In 1970, the first export contract was concluded. Exports have now grown to 40 % of total production and include OE and AM applications in the U.S.A, Canada, Australia and several European, South American and African countries. Gabriel S.A. was the first manufacturing plant worldwide to build adjustable strut cartridges and its gas shock design is used worldwide. In 1982, as a result of continuous sales growth, a new production plant was constructed in Retreat, Cape Town. In 1986, US based Maremont Corporation, owners of Gabriel USA, were acquired by Arvin Industries, Inc., who merged with Meritor Automotive in 2000 to form ArvinMeritor, Inc.

Due largely to consistent quality and a long list of technological firsts the Gabriel brand is firmly established as the “No 1 shock absorber” in SA, particularly in the AM sector, with market share greater than 85 %. The Gabriel brand is supplied to many OE plants such as Toyota, Ford, Mazda, Volkswagen, Opel, Nissan, Fiat, BMW and Mercedes Benz.

The Gabriel product range includes McPherson struts, spring seat shocks, adjustable twin tube shocks, heavy-duty truck shocks, mono tubes and gas springs, totalling over 10000 top-level part numbers.

In the 1920's attention was paid to the exhaust noise of automobiles for the first time, without any thought to the emission of poisonous exhaust components. It was only in the 1960's when the problem of exhaust gas pollution entered the public consciousness, especially in the intensifying smog conditions of Los Angeles, California. The “Clean Air Act” was passed in 1963 in California, followed by further legislation that laid down permissible emission limits. Initially thermal reactors were placed directly behind the exhaust valve to oxidise the hydrocarbons and carbon monoxide. During the 1970's these were replaced by catalytic convertors, where the pollutants oxidise by means of the chemical reactions catalysed by precious metals like platinum, rhodium and palladium.

In 1995, Ford Motor Company (FMC) entered into discussions with Arvin Industries as regards the viability of producing catalytic convertors in Cape Town. FMC could realise benefits from the MIDP and from the technological and management support of a global supplier like Arvin. In 1996, three manufacturing cells were transferred from the Arvin facility in Roermond, Netherlands, and installed in the Gabriel factory in Retreat, Cape Town. In January 1997 approval was given to construct a separate production facility. A year later, the convertor facility had a capacity of 1,000,000 units p.a. The expansion continued and in April 1998 a second phase of the convertor facility was completed. Later that year the first of the new technology “tourniquet” convertors was produced by Arvin, with the Cape Town facility nominated shortly thereafter as a centre of excellence in this regard. A third phase to the facility was completed in April 2001 with an annual capacity of over 2,000,000 units.

Air and Emissions Technologies Group SA (AETG) supplies a variety of “clamshell” and “tourniquet” catalytic convertors to all the large OE plants in Europe such as Ford, Jaguar, Rover, BMW, Renault, Peugeot, Volkswagen and Land Rover, and to DaimlerChrysler plants in the U.S.A. Some products are supplied directly to the assembly line, whilst others are supplied to other ARM facilities and assembled into full exhaust systems. In 2003, the facility will start preparations for supplying to Ford Mustang in the U.S.A. Figure 6 illustrates some products from the range supplied by ARMSA.

Gabriel® Shock absorbers

Full range of high performance MacPherson strut, spring seat, extra heavy duty and load compensating shock absorbers covering 98% of the European car parts market. Also available are heavy-duty replacement shocks for European trucks, trailers and vans including a wide range of units for air suspension trucks and trailers.



Figure 6: ARMSA Product Range

air and emissions technologies



Figure 6: ARMSA Product Range (continued)

3.2 Rationale for Choice of Sub-unit.

Besides being one of a variety of locations where ARM has invested in an emerging market economy, the Cape Town operation has a number of interesting and unique aspects that make it worthy of being selected as the sub-unit of analysis within the agency theory framework. This also addresses some of the criteria motivating the choice of a single unit of analysis (case study) as discussed previously. An initial investigation to determine feasibility produced the following, in no particular order.

- Size

ARMSA, consisting of GSA and AETG, is a small player in ARM's global portfolio of investment options. In the 2002 financial year ARMSA contributed 1.35 % (R958 million) of net sales and 2.6% (R24 million) of net operating profit after tax, in US dollars. This potentially increases the opportunity for less control by corporate and more autonomy for local management.

- **Impact and Risk**

All products sold by ARMSA are either an important safety feature on vehicles or key to satisfying stringent emissions standards. In both cases, the potential for expensive, image destroying vehicle recalls or assembly line stoppages exist. Such events will have a global impact on ARM in terms of sourcing decisions by global customers.

- **Distance**

With the exception of the local shock absorber market (which represents 45% of sales units), all ARMSA's customers are 4 to 5 shipping weeks away. The pipeline stockholding presents special risks in terms of the financing of stock and large-scale containment action for quality defects. Also, with corporate and divisional headquarters in the US, there are regional groupings appointed to manage decisions in the operations distributed globally. This suggests many potential levels of agency conflict and associated costs.

- **Diversity and Reach**

ARMSA supplies products to a variety of markets and regions with many different customers, internal and external to ARM. These products are either sold in their final retail form, or are integrated into a larger system. In some cases ARMSA is the official exporter, in other cases it is the SA subsidiary of a global customer e.g. FMC of Southern Africa.

- **Motor Industries Development Program (MIDP)**

Locally based OE manufacturers, who act as the exporters, can gain valuable import tariff reductions through the export of products with high local material content. The MIDP is, however, in the process of being phased down so as to facilitate the development of true global competitiveness in SA. Benefits exist

at this stage until 2012, albeit at decreasing value. The interest in import tariff reductions obviously only exists for as long as there is a need to import raw materials that cannot be sourced locally. There is, therefore, a danger of flooding the market with duty rebates in excess of demand.

This situation suggests that local management and local OE subsidiaries (customers) share a common goal, namely the continued viability of the MIDP, or in the absence thereof, other competitive advantages that will support the jobs and companies that currently exist. Both these parties are managers of distant shareholder funds and ironically both need the maximum piece price that the market can absorb, whilst bargaining for the largest portion of that price.

- Equity Stake and Local Management Interests

Local management have no personal equity at stake in the operation, and compensation is via traditional remuneration practices. However, the career options and scarcity of similar local executive positions make job security a significant factor.

- Local Management Autonomy

Local management do not have the pressures and scrutiny of a local public listing as the operation is a wholly owned subsidiary of ARM.

- Portability of Operations

ARMSA is a manufacturing concern that consists of independent assembly cells and a common support / service structure. It is possible to decommission, transport and re-commission assembly cells at any other ARM location in a couple of months. Some of the current assembly cells have been relocated from ARM operations in Europe and Canada. Most of the equipment at ARMSA is standard within the particular division, or is at least adaptable to

standards in other countries. This situation exists intentionally and is a core policy of ARM to improve flexibility and reduce risk. OE assembly tooling is generally the property of the OE customer who, having made the capital investment, has the freedom to relocate this to a competitor or to another ARM facility.

- Risk and Investment Horizons

ARM has the ability, due to the portfolio of options for sourcing products from developing countries, to agree to new business for ARMSA on a program-by-program basis. Most programs run for 3 to 4 vehicle model years and ramp down in volume in the final year. ARM evaluates the business and financial risk of each project and decides, normally in conjunction with the customer, on the best source within ARM. The risks of investing in SA are part of these decisions. There are cases where ARM regional (e.g. Europe / Asia / Africa) managers have required investment in ARMSA on a marginal costing basis so as to retain business with a particular customer.

- Forex Risk

The continued volatility of the SA rand's value to hard currencies like the US dollar and the euro presents financial risks to ARM. Most of the products sold by ARMSA are sold "ex-works" in local currency. Foreign exchange control regulations and tax considerations affect ARM's ability to repatriate cash and minimise the value of the investment in US dollar terms.

In summary, the Cape Town operation presents some interesting, and possibly unique, aspects that make it a suitable sub-unit of analysis within a single case study design. The relatively small size financially, and the distance from customers and shareholders, suggests heightened levels of agency conflict and differences between local and corporate behaviours and policies. Also, local management are not subject to stock market scrutiny and do not have personal financial equity at stake. However, the potential for a large impact on shareholder returns and on business reputation

exists, as ARMSA products are sold globally into safety critical aftermarkets and into OE plants that carry severe financial penalties for assembly line interruptions. A volatile local currency further increases the risk. With the MIDP appearing to be the primary reason for investment, there is an alignment of interests between the local OE manufacturers and the ARMSA team. Both realise that continued existence depends on the delivery of results that outweigh the inherent risks related to supply from South Africa. ARM are able to relocate assets fairly easily, and investment decisions are made on a program by program basis. This suggests that local management operate within a context of uncertainty of tenure in the medium to long term.

At this point in the research process it is unclear how ARM manages the agency conflicts with South Africa to achieve shareholder value.

4. RESEARCH METHODOLOGY

Having established that an explanatory case study method, using a single unit of analysis, is suitable for addressing the research question and objective, an appropriate methodology is needed to study the case of ArvinMeritor. The previous discussion highlighted that an explanatory case study has the following typical features:

- Explains reasons for observed practices.
- Theory is used to determine the explanations.
- Usefulness of the theory is tested.

In view of this, the following methodology is used in the research. Figure 7 shows the research process steps.

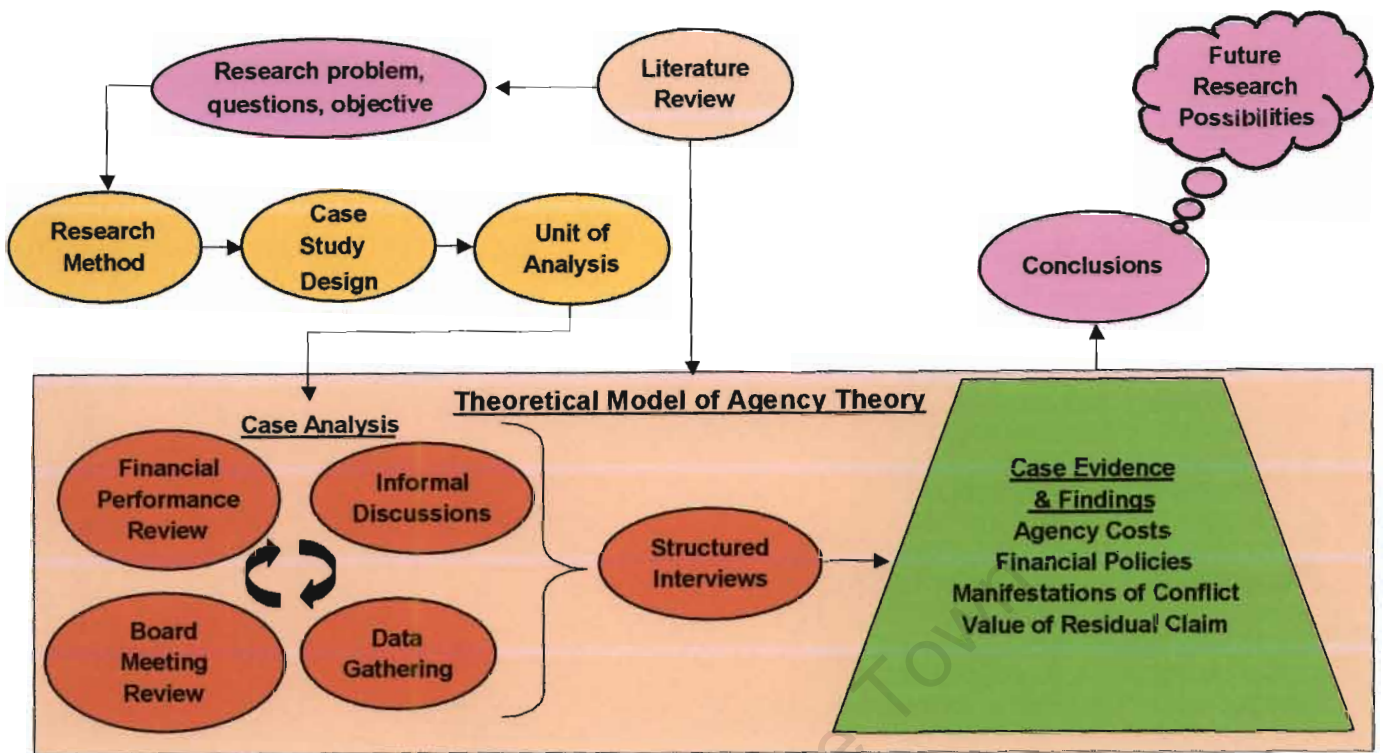


Figure7 : Research Methodology

The case analysis comprises five elements. The first four discussed below were used to gather data about the history and performance of ARMSA, and current forecasts of future profitability. These elements were analysed in parallel and initially formed an iterative relationship with the task of defining the research problem, question and objective. The fifth element, structured interviews, concluded the case analysis and built on the data gathered in an attempt to find complete explanations for observed behaviours and facts.

The evidence in the case is described in terms of findings in four main areas. These are agency costs, financial policies, manifestations of conflict and impact on the value of the residual claim.

The case analysis, evidence and findings were researched within the framework of the theoretical model developed in the literature review phase.

Finally, conclusions are drawn from the findings and evidence, with consideration of the research problem, question and objective. Further research possibilities are suggested.

Before discussing the case evidence, the following briefly describes the research steps used for each of the five elements of the case analysis.

4.1 Financial Performance Review of ARMSA

Management and statutory accounts for each financial year from 1965 to 2002 were analysed. Audited income statements, balance sheets and cash flow statements were used. AETG and GSA results were combined to give an ARMSA position. Copeland, Koller and Murrin (2000) identify the main drivers of a firm's value. Considering this, the financial history analysis included the following:

- Return on invested capital (ROIC) tree to analyse the performance of the key drivers of value.
- Free cash flow (FCF).
- Corporate tax rates (local).
- Rand / US dollar foreign exchange rate averages.
- Corporate weighted average cost of capital (WACC).
- Various other financial ratios.

[Copeland, Koller and Murrin (2000)]

Relevant graphical illustrations of the findings are contained in the discussion on case evidence in Chapter 4.

The financial performance analysis was conducted in South African rands and converted to US dollars using an average rate of exchange for each financial year as a suitable approximation.

4.2 Informal Discussions

As the researcher had unlimited access to employees at ARMSA and full access to records and statements, various people were involved in discussions about the history of the case. Past and current practices with regard to manifestations of agency conflict and agency costs were discussed. Participants were introduced to the theory of agency by the researcher, and then asked to respond with examples of typical agency conflict manifested in their areas of work. Group discussions on various topics ranging from royalty payments to performance measurement systems helped to form a rich picture of the interactions between decision makers and decision monitors, as well as assisting in the formulation of the questions for the structured interviews. Some of the employees involved in discussions on the case included finance and accounting managers, vice presidents of operations and finance based in Europe and the U.S.A., and commercial managers from the Ford business group based in the Netherlands. The researcher gathered this initial data in the form of personal notes and tape recordings, and arranged the information into the parts of the mental model on agency theory.

4.3 Board Meeting Review

A review of the minutes of board meetings from 1965 to 2002 was conducted in order to analyse the timing of, and reasons for, the payment of dividends and royalties. This also assisted in establishing reasons for certain financial policies and funding decisions through the life of the operation.

4.4 Data Gathering

Used iteratively with the above three elements, this exercise was conducted by the researcher until sufficient evidence was available for the formulation of a structured interview set of questions, and for the identification of clear findings. Some examples of gathered data are the investigation into how commercial transactions have been structured to protect the operation and shareholder against a weakening local currency, how changes in tax laws and foreign exchange controls impacted on royalty

and dividend decisions and how business group managers and finance leaders have set investment criteria for South Africa.

4.5 Structured Interviews

Formal, structured interviews were held with three key decision makers and decision controllers. These are:

- **Randall Zeek** - Vice President of Finance for ArvinMeritor, representing the Light Vehicle Systems Division for both original equipment and aftermarket business.
- **Mike Biden** – Senior Regional Director for Light Vehicle Systems and Commercial Vehicle Systems interests in Southern Africa, for both original equipment and aftermarket business. He is also the Managing Director of ARMSA.
- **Peter Stern** – Financial Director of ARMSA.

The interview was comprised of various sections, such as debt policy, financial risk, operating risk, dividend policy and cash flow. During the interview, the interviewees were required to express opinions on the financial performance history of the operation from 1965 to 2002, and on the level of shareholder value achieved.

CHAPTER FOUR
CASE EVIDENCE AND FINDINGS

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1	INTRODUCTION
2	MOTOR INDUSTRIES DEVELOPMENT PLAN (MIDP)
3	MANAGEMENT INCENTIVES
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CHAPTER FOUR

CASE EVIDENCE AND FINDINGS

1. INTRODUCTION

Chapter 4 summarises the evidence found in the case, with quotations from the structured interviews for emphasis and illustration of the behaviours and views of some of the key role players. The chapter outlines the evidence found in the case that is most relevant in terms of addressing the research question. Some of the reasons for choosing the areas of focus are listed below. The key elements of the theoretical model presented earlier also assisted in choosing the areas of focus.

- The *export incentive scheme* driving past and future investment decisions (MIDP) focuses on the reasons for ARM investing in Cape Town, explains something of the nature of the agency relationship and sets the context for further explanation of the evidence.
- The *incentivisation* of the appointed agents explains how ARM have managed the need to bond dispersed agents to corporate and shareholder objectives.
- An examination of the installed *performance measurement and reporting* systems helps to explain how ARM have invested in monitoring the actions of the agents in Cape Town.
- A review of the *organisational hierarchies* of accountability explains the complex nature of the multi-national business and indicates the opportunity for agency conflict at many levels.
- An understanding of the *auditing systems* and approaches explains how ARM have managed the need to have minimum levels of control over standards and systems.
- A review of the policies and guidelines for *capital appropriation* explain the extent to which ARM is prepared to allow autonomous decision making in this critical financial area.
- A *financial history analysis* determines the actual level of shareholder value delivered during the life of the Cape Town operation and is an indication of

whether the original investment decision was justified. The effect of key financial policies can be seen from the analysis.

- An understanding of the *debt policies* adopted over the life of the operation assists in explaining how ARM and ARMSA management have managed the risks associated with gearing a business in a remote location, within a volatile economy.
- The nature of the *dividend policies* adopted explains the intention of ARM as regards the securing of cash, and further illustrates the mindset with which the ARMSA operation is viewed from a corporate level.

In order to continue the use of the theoretical framework for analysis, the evidence is related to one of the major elements of agency theory, namely, agency conflict manifestation or mitigation, monitoring costs, bonding costs, impact on financial policy or the value of the residual claim. In the last section, the findings are summarised into a table showing the most significant theoretical element that each particular finding relates to.

2. MOTOR INDUSTRIES DEVELOPMENT PLAN (MIDP)

The MIDP was introduced by the South African government to incentivise locally based exporters to include high levels of local material content in their products. This stimulates local economic growth and creates jobs. The net local value of a “claim” is the difference between the freight-on-board selling price and the value of any imported material content in the product. When the Department of Trade and Industry approves a claim, the exporter is entitled to receive an Import Rebate Credit Certificate (IRCC), which reduces the cost of imported materials. IRCC’s are traded in the market for 70 % to 80 % of par value. ARMSA sells most IRCC’s to locally based customers who import materials for the production of motor vehicles. In a lot of cases, the customer is the exporter of goods produced by ARMSA and makes the claim for IRCC’s. Table 4 below shows the calculation of the claim for an IRCC, for a typical export product containing precious metals.

	2002	2003	2004	2005	2006	2007
A	CUSTOMS DUTY ON IMPORTS					
	30.0%	29.0%	28.0%	27.0%	26.0%	25.0%
B	EXPORT COMPLEMENTATION FACTOR					
	100.0%	94.0%	88.0%	82.0%	76.0%	70.0%
C	PRECIOUS METAL – MAX ALLOWANCE					
	50.0%	40.0%	40.0%	40.0%	40.0%	40.0%
	EXAMPLE CATALYTIC CONVERTOR WITH TOTAL PRECIOUS METAL VALUE: R154					
	FOB SELLING PRICE					
	R457	R457	R457	R457	R457	R457
	IMPORTED MATERIAL CONTENT					
	R122	R122	R122	R122	R122	R122
	GROSS LOCAL CONTENT					
	R335	R335	R335	R335	R335	R335
	PRECIOUS METAL ALLOWANCE R154 x (1-C)					
	R77	R92	R92	R92	R92	R92
D	NET LOCAL CONTENT					
	R258	R242	R242	R242	R242	R242
E	CLAIM VALUE (A x D)					
	R77	R70	R68	R65	R63	R61
	EXPORT COMPLEMENTATION (100% - B) x E					
	R0	R4	R8	R12	R15	R18
	NET CLAIM VALUE					
	R77	R66	R60	R54	R48	R42

Table 4 : IRCC Claim Calculation Example
 [Source : ARMSA Finance Department]

The table shows that the value of the IRCC claim decreases in future years. In order to maintain the current value of claims, the exporters need to increase the volume of exports in future years. Both ARMSA and the South African OE exporter are, therefore, dependant on increasing cost competitiveness against other nations, whilst striving for maximum selling price to gain IRCC value. This results in collective South African efforts by the value chain participants to remain suppliers of choice to international markets.

ARMSA exists primarily due to the MIDP. The financial benefits make it attractive to supply from South Africa to international markets, and all major automobile manufacturers have established operations in the country. The decision to invest in the first Gabriel plant in the 1960's, and in the first catalytic convertor plant in 1996, were made at the request of ARM customers, who sought the financial gains of the IRCC's. At this time, this was not necessarily the preference of the corporate officers and shareholders, but remaining a global supplier to certain customers required them to agree to investing in South Africa.

"...the remoteness from our marketplace, there clearly is a risk and an additional cost of doing business here. Although it is a beautiful location, the cost of time and money to get here, shows that it is not a location we would choose first. We are mainly here because our customers want us to be here. They operate globally, so that determines our locations. ARMSA is not really here for a purely strategic reason, it is the politically driven, government incentive that keeps us here. And that is a risk to ARM, because that incentive could be removed with the stroke of a pen."

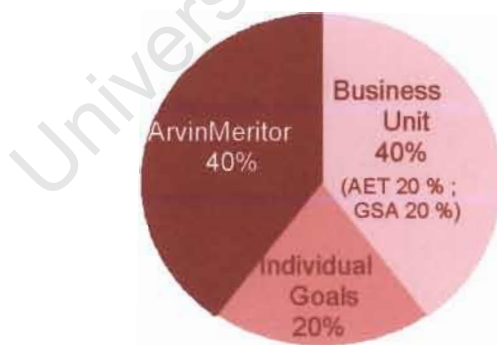
[Source : Randall Zeek Interview]

The case evidence on the MIDP is presented first as it is the most compelling as regards the chief reason for ARM investing shareholder funds in S.A. The investment decision sets the scene for heightened agency conflicts between shareholder and manager, and between levels of management, and for a potential reduction of residual value. However, the MIDP drives increased competitiveness between nations and MNC's supplying automotive components and finished units. A tension is created whereby MNC's have to minimise the reduction in residual value from within an

environment that they did not entirely choose to be in. Further evidence on how ARM manages this conflict is presented in the following sections.

3. MANAGEMENT INCENTIVES

In an attempt to make managers think and act like shareholders, the top 170 senior managers in ARM are required to own substantial amounts of company shares, not including stock options. The top executive and board chairman is required to own shares to the value of 5 times his annual remuneration. In Cape Town, the ARMSA executive team are encouraged by ARM corporate to “think global and act local”. This maxim is applied to the design of executive incentive compensation plans. The ARM Incentive Compensation Plan (ICP) is designed to reward leaders for their contributions to ArvinMeritor’s overall success. The ICP is based on performance in three areas : ArvinMeritor consolidated results, business unit and individual performance. The ArvinMeritor and business unit financial metrics support the company’s key business objectives. The individual component focuses key employees on specific objectives that support ArvinMeritor’s overarching business strategies. The ICP for some of the ARMSA executive is described below. The 50:50 split between the performance of the two legal entities in Cape Town ensures that both operations receive equal attention.



■ A minimum threshold of 5% ArvinMeritor EPS growth must be met before any payouts are made.

Target Performance Levels for 2002

■ **EPS Growth: 15%**

■ **Improvement in Working Capital as a % of Sales: 0.5%.** This measure focuses on asset management - how effectively inventory is controlled and receivables collected.

■ **Economic Profit:** This measure at the business unit level assesses economic profit compared to the Annual Operating Plan. This measure focuses on profit generation and asset management, taking into account the cost of capital.

Figure 8 : ARMSA Incentive Compensation Plan

[Source : Corporate HR Publication]

In addition, the local executive team is awarded ARM shares on an annual basis. These shares can be traded after a three year waiting period and are forfeited upon termination or resignation. This encourages executives to have longer tenures with the firm and increase their time horizons.

The ARMSA executive team has the freedom to design and implement incentive plans for other employees at the Cape Town facility. These plans contain measures that focus solely on local performance metrics. In so doing, the performance of the unit is in focus from an EBIT, working capital and continuous improvement perspective. This assists ARMSA in delivering the optimal contribution of profit and cash to ARM.

“...they bond us to them through the incentive plan...before the merger, the incentives were largely based on local measures, but the current model has a healthy dose of corporate performance in it. The financial side of my stake here is important, but my job satisfaction, status and profile through great profit results is even more important.

I enjoy being part of a success story...”

[Source : Mike Biden Interview]

The transparency of executive compensation packages to Wall Street analysts and the investing public has helped initiate incentive schemes throughout ARM that bond the agents to the firm. These schemes are tailored to suit the business objectives at various levels of organisation, and although a degree of local autonomous decision making is encouraged, the focus is on cash generation, EPS growth and economic profit measured at the corporate level. The effects of these bonding costs on the value of the residual claim is mitigated to an extent in that no incentives are paid if the growth in EPS for the period under review is under 5%.

4. PERFORMANCE MEASUREMENT AND REPORTING

ARMSA reports regularly on performance from many perspectives, in many different formats to ARM corporate functions and to business groups. Figure 9 below summarises a few of these reporting requirements for illustration.

Reporting Requirements for ARMSA				
No.	Name	Recipient	Frequency	Content
1	Flash Results	Finance	Monthly	EBIT : Actual vs budget
2	Flash Results	VP Ops	Weekly	Sales, scrap rate, PPM, inventory turns, headcount, premium freight
3	Management Operating System	VP's	Monthly	Supplier performance, customer metrics, safety, inventory turns, employee involvement
4	Productivity	VP's	Monthly	\$ savings on productivity improvement projects
5	CI Logbook	VP's	Monthly	Plant performance metrics: Downtime, scrap rate, PPM, EI, training plan
6	Activities	Presidents	Monthly	Significant events, grouped by key strategies

*VP = Vice-president ; PPM = parts per million rejects

Figure 9: Reporting Requirements

In addition to the above, ARMSA reports financial results through a myriad of reports on a monthly basis, and forecasts sales and EBIT performance 3 months ahead. Figure 10 below shows the variety of applications and reports required within the corporate database, called Hyperion. Gabriel SA results are submitted directly to the U.S.A, whilst AETG's are consolidated through the European offices in Amsterdam.

Reporting results to four different divisions, each requiring different formats and month end timings, together with the burden of MIDP claim calculations and documentation, and other forex related calculations, places a substantial workload on the ARMSA team at month end. For this reason, the administrative and finance function is bolstered with extra, costly resource. The situation is exacerbated by the unreliability and speed of internet and telecommunications between South Africa, Europe and the U.S.A.

Reporting Structure

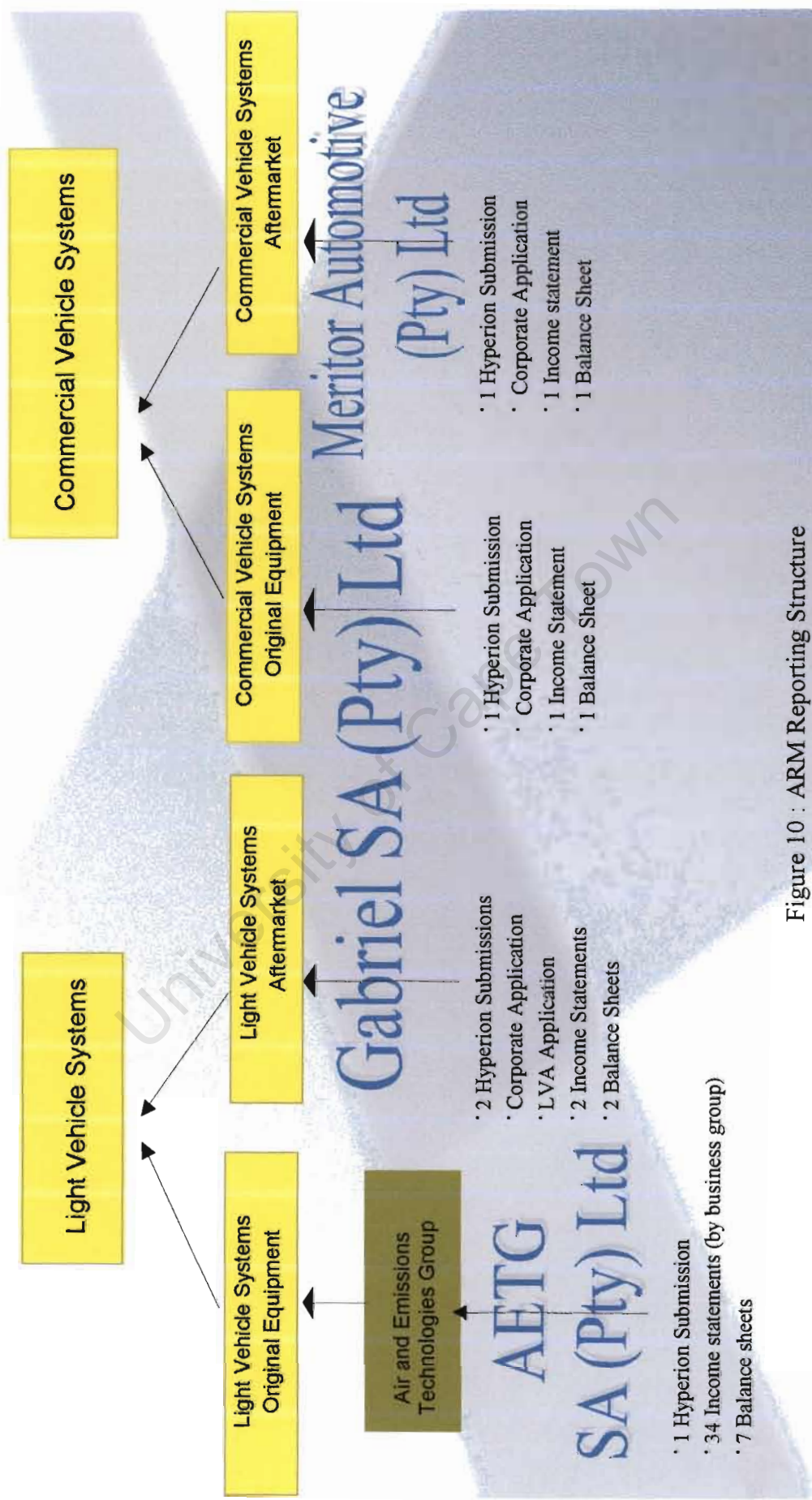


Figure 10 : ARM Reporting Structure

[Source : Peter Stern]

“...we have loads of reports to do every month and during the month. Many different people look at our results from many different angles. We get queries quite often, which require some follow up. Any significant variances are picked up and explanations are required in detail. This is very time consuming.”

[Source: Peter Stern Interview]

The geographical separation of ARMSA from the corporate treasury and headquarters, together with the variety of inter-company accounting transactions, has led to ARM investing in complex reporting systems and structures, with a wide variety of reports. These monitoring costs impact directly on the value of the residual claim and require an ongoing fixed agency monitoring cost base to support the requirements.

5. ACCOUNTABILITY HIERARCHY

The multi-divisional and multi-national nature of ARM is evident in the organisational reporting relationships of the ARMSA executive team. Each person has at least two managers to report to on performance metrics and for the setting of strategy and business objectives. These lines of accountability are summarised below.

Accountability Hierarchy for ARMSA

ARMSA Position	Reports to	Location	Accountability
Managing Director	President : LVA	Michigan, U.S.A	Gabriel SA profitability and growth
	President : LVS	Michigan, U.S.A	AETG SA profitability and growth
	MD : CVS	Toronto, Canada	CVS profitability and growth
	Mngr : Sales / Ops	Sunshine, Aus.	Meritor Automotive SA profit
Commercial Director	MD ARMSA	Cape Town	Gabriel SA marketing / sales / product engineering
	MD ARMSA	Cape Town	AETG SA Commercial and program mngmnt
	MD ARMSA	Cape Town	CVS marketing / sales / product engineering
Manufacturing Director	VP AETG Operations	Augsburg, Germany	Operational performance of AETG SA
	MD ARMSA	Cape Town	Operational performance of Gabriel SA (incl. CVS)
Supply Chain Director	Snr. Director	Amsterdam, NL	Supplier performance AETG SA
	Snr. Director	Indiana, U.S.A.	Supplier performance Gabriel SA
	MD ARMSA	Cape Town	Supplier performance CVS
	MD ARMSA	Cape Town	Logistics Performance ARMSA
Finance Director	MD ARMSA	Cape Town	Financial Control ARMSA ; CVS / CVA reporting
	VP AET Finance	Blackpool, U.K.	Financial Reporting AETG SA
	VP LVA Finance	Michigan, U.S.A	Financial Reporting Gabriel SA
HR Director	MD ARMSA	Cape Town	HR management ARMSA
	VP AET HR	Augsburg, Germany	HR management AETG SA
	VP LVA HR	Michigan, U.S.A	HR management Gabriel SA

* VP = Vice-president ; HR = Human Resources

Figure 11 : Accountability Hierarchy for ARMSA

The current MD of ARMSA is required to keep the local team operating as a unit for the good of ARM, whilst satisfying the different divisional goals. This convoluted reporting relationship continues for certain positions reporting into the executive of ARMSA, where even local managers have different functional and line leaders, some based locally and some overseas.

Observations reveal some inherent weaknesses in this approach. Some of these are listed below.

- It is very difficult to align managers and executives to common objectives and priorities, as each ARM division and their associated operating units are at

different stages of their life cycle. For example, GSA is in a mature market, with small margins and high sensitivity to costs. AETG, on the other hand, enjoys continual growth in new, high margin products, with profit levels highly sensitive to the rand forex rate with the US dollar.

- Each executive has a different set of criteria in the incentive compensation plans for the business unit and individual categories. A typical example is where the purchasing executive is attempting to minimise inventory value, whilst the manufacturing executive wants zero downtime for raw materials supply to the production units.
- It is a fairly onerous task to determine the fairest allocation of shared resource costs to the different divisions. The ARMSA unit does not use any detailed costing system and allocates shared costs on the basis of sales value ratios.
- There is an additional cost of reporting results (discussed previously) and the management burden of implementing balanced scorecards that contain suitable metrics in alignment with the various divisional strategies.
- There is an additional cost of complexity in terms of the variety of products and services on the one site. Managing the variety places a strain on information systems, documentation control, quality system procedures and accreditation, and on management span of control.
- There is no focus on ARMSA as a whole by corporate and divisional business groups as regards decision making in the interest of the ARM shareholder overall. Only corporate treasury shows a mild interest in cash holdings and the tax effects of royalty payments.

Nevertheless, ARMSA is regarded as a prime example within ARM of how it is possible to combine the manufacturing of different products for several divisions on a common site and, in so doing, achieve cost savings and synergies arising from economies of scale. In contrast to this, ARM has a shock absorber factory in Blackpool, U.K., on the same site as a convertor facility, where two totally independent management teams and cost structures operate.

“...for South Africa, one of the keys is its operational excellence, its “can do” attitude. You were using shared services here before that phrase was even coined

within the ArvinMeritor language. We have a global footprint. Do we really need to duplicate exhaust facilities in a country where we already have ride control plants in place? ...Mike leads this organisation with that mindset, one of balancing the local with the global role. We have other locations, which are very parochial, and that is a negative...you don't own this business, but you take ownership responsibility. You can see this in the way you have financed the business. If Mike had been on his own, had to write the cheques, negotiate with the banks and grow the business, very different decisions could have been made... I have seen with family run businesses and a few majority shareholders that it can go very wrong...in a MNC the separation that agency theory speaks about, produces more positives than negatives for me.”

[Source : Interview Randall Zeek]

“We are an example of synergies, but we have some myopic accounting traditions to comply with...we have responsibilities over the whole business here. In contrast, if you take VP of Operations for AETG, he is only interested in that...we need the right balance and we should be driving the synergies. Also, there are severe limitations in looking at accounting data from a narrow perspective. One must understand the whole and focus on shareholder total value as well as sustainability for the future. We are trying to build a company that lasts.”

[Source : Interview Mike Biden]

ARMSA's uniqueness and position within the ARM hierarchy of divisional and regional management structures makes it especially challenging to align local management with corporate goals. Ironically, the corporate officers themselves do not review ARMSA performance as a unit. Fortunately, the local management have found innovative ways to deal with the agency conflicts and the monitoring costs imposed. Driving for synergies and economies of scale, local management are focused not only on divisional performance but total shareholder value.

6. AUDITING

Besides the audits by the South African Revenue Services and appointed financial auditors, the Cape Town operation is subject to the internal scrutiny of systems and controls, and financial results, by the internal audit function of ARM. This function

conducts detailed audits on a bi-annual basis, with findings reported to corporate officers and senior managers. Corrective action plans are generated for ARMSA to complete. Furthermore, ARM maintains other centralised functions that conduct audits, albeit infrequent, on the level of compliance that ARMSA has to corporate strategies and programs, such as the ArvinMeritor Performance System (AMPS) for continuous improvement and the Concept to Customer (C2C) program launch process. Some divisions send multi-disciplinary operations review teams to conduct detailed analyses of operational performance. Corrective action plans are generated for ARMSA to complete.

It is clear that ARM has invested substantially in internal audit functions, the development of world class systems and approaches and in the cost of travelling to Cape Town to review performance. The strategy is one of focusing on output measurables, whilst allowing the management team to determine the best inputs and processes to achieve the targets set by corporate.

“...they incur costs to monitor us, like the global accounting system, the training they do with AMPS, the regular visits, the reporting, the analysis of the reports, the auditing and so on...for the distance we are away, there is quite a bit of interaction at the higher, centralised level.”

[Source : Interview Mike Biden]

“The other risk of investing in SA is your remoteness from a financial control standpoint. There is greater reliance on the management team. How often does an internal auditor get out here? Not often. These are agency costs. We are relying heavily on the management team to make sure that the controls and proper approvals are in place in the decision making process. This can affect financial performance.”

[Source : Interview Randall Zeek]

One of the significant agency costs of operating multi-nationally is that of monitoring the financial and operational performance of globally dispersed units, and of setting global standards and requiring compliance to standard programs and initiatives. ARMSA employs a number of additional people to deal with these demands. The corporate belief is that investment in these standardised approaches produces a return

above the cost of the monitoring systems and auditing activity. This, of course, is difficult to quantify.

Auditing activities are a necessary part of any firm, but appear to be especially pronounced and costly in the MNC situation. Ironically, cost budgets do set a limit on auditing activity, so there is a degree of reliance on the local management team to comply with standards and corporate systems.

7. CAPITAL APPROPRIATION

Somewhat in contrast to the autonomy allowed within the accountability hierarchy and auditing approach, ARM exercises strict control over capital expenditure. Other than for amounts less than \$1500, ARMSA is required to complete a formal Appropriation Request (AR) procedure for all capital expenditure. An AR is routed through the various levels of hierarchy and after consideration of the payback and the approved capital budget, final approval is given or refused. This procedure applies to all global operating sites, however, for new business investment in South Africa, certain particular criteria are set. These are summarised below as they currently stand:

- 20 % operating profit margin
- Payback period of less than 2 years (ideal)
- Corporate WACC of 10 % used to discount cash flows

These criteria set by corporate treasury are further enhanced by specific requirements, when divisional or regional management have specific concerns about financial and operating risk in a particular country. As an example, the approval guidelines for new business within the Light Vehicle Systems division, provided by Tony Williams (Senior Finance Director for Europe / Africa / Asia) in 2002 are examined below.

“South Africa, South America & Emerging Markets:

NEW BUSINESS GUIDELINES

New business quotations and proposals for transfer of existing capacity to South Africa should take into account the following recommendations which are aimed at minimising the manufacturing and economic risks associated with increasing our exposure within this environment.

The comments focus on South Africa but apply equally to South America and other Emerging Market.

COMMERCIAL

Any new business requires approval from the President, LVS division in Troy, Michigan U.S.A.

Pricing and Contractual Commitments

- *Pricing should be fixed in a hard currency. Dependent on the ultimate delivery point this could be \$, Euro or £. This puts any exchange rate risk firmly on the customer. Minimum requirement if this is not possible is to fix elements of pricing in hard currency to reflect either the origin of the cost e.g. R & D, or to protect profit against exchange rate erosion e.g. fix agreed profit in \$.*
- *Profit percentage should be negotiated to reflect the additional risk associated with manufacture and agreement reached at 2 times normal profit percentage.*
- *Machine costs / depreciation should be calculated over a 3 year life, again to reflect the risk and potential obsolescence.*
- *Ideally agreements should be ex-works, Cape Town, with full normal material handling and financing costs included. For agreements involving point of sale at the point of delivery or where delivery is to a fellow ARM facility for final assembly, then inventory carrying costs at full Economic Profit rates (10%) or at South Africa LIBOR rates (whichever is the higher) should be included.*
- *Productivity agreements must be resisted. Strong arguments exist for this in the nature of the transient workforce and economic agreements must reflect local inflation levels.*
- *Catalyst substrates. Wherever possible negotiate free issue substrates from the customer. Minimum requirement failing this is for full financing / handling recovery and full quarterly reconciliation of precious metal prices and exchange rate movements, including inventory on hand and in transit.*
- *Payment terms must reflect normal SA conditions of 30 days and not terms prevalent in Southern Europe (90/120 days).*
- *Tooling payments for the customer should be negotiated to minimise working capital e.g. 33% with order, balance on sample approval. Where practical, and where compatible equipment exists outside South Africa, duplicate tooling*

should be customer financed to reduce the economic and manufacturing risks involved.

- *Any new commercial contract should include a “hold harmless” clause effectively waiving any potential customer claims for production stoppage or loss of production caused by civil unrest or “Acts of God” within or in transit from South Africa.*

ECONOMICS & INVESTMENT

Any AR proposals for new business / business transfers to South Africa must take into account the reducing benefits of MIDP over the outer years and allow for accelerated depreciation of equipment over a 3 year life.

MANUFACTURING

- *Any production transferred to South Africa must be capable of back up manufacturing outside SA utilising customer funded duplicate tooling.*
- *Any new business for SA must utilise proven technology again with the capacity to produce elsewhere on duplicate customer funded tooling.*
- *Transferred or new production must have a dedicated, experienced resource to facilitate engineering and manufacturing liaison until production quality is proven.*

Contingency plans should be in place to provide a maximum 2 year time frame to facilitate an emergency move out of South Africa and re-establish manufacture elsewhere without customer interruption.”

[Source : AETG European Finance (Tony Williams)]

Auditing of past AR's reveal that not all of these criteria are met on every occasion. Often, the decision to invest in Cape Town is part of an overall decision by the customer to purchase a full system from ARM, of which ARMSA provides one component. MIDP benefits for the customer have to be considered as well, therefore, determination of the selling price ex-works is critical (see previous discussion on MIDP).

It is evident that the criteria serve as guidelines for capital appropriation, but that often other “non-financial” criteria play a role, normally strategic in nature. Management

make decisions contingent on the circumstances, as opposed to restricting capital to investments that provide maximum shareholder wealth on paper.

“Payback requirements have been raised and investment associated with cost reduction, formerly on a 1-2 year payback, would be approved on a 2-3 year payback, possibly rising to 3-5 years at a later date. If sanctions against South Africa are eased, we would have to spend on the expansion of the export business in order to become world competitive when sanctions are totally lifted.”

[Source : Gabriel SA Board Meeting 21 June 1991]

“Given the size of our organisation, we never really look at South Africa specifically. We look at the criteria as being part of the transportation industry, and whether the product could be produced successfully in South Africa. The operating units are not really empowered to be that entrepreneurial and make their own investment decisions. Should we have different WACC’s for the regions? You could argue for this, but then this would defeat the purpose of our multi-national structure, for which we get many benefits. Let’s not penalise an operation because it is part of a global production decision. We decide whether to go with SA prior to quotation, when we assess the riskiness of the pipeline, the supplier base, the political risk etc. Anyway, the overall AR will only be approved if the financial criteria for the whole exhaust system are met.”

[Source : Interview Randall Zeek]

“ In the early days, they wanted us to produce twice the returns to make up for the risk, but now they have a more global attitude. As long as they meet their hurdle rate, they accept that there will be ups and down. They are getting used to markets like ours, and don’t really expect double the return.”

[Source : Interview Peter Stern]

Recognising that in order to compete for full system programs, investment in SA is often required, the various ARM business groups have formulated specific strategies to take cognisance of this and of the financial criteria set by corporate treasury or divisional management. An example of the Ford business group strategy is shown below in Figure 12.

Ford Business Group Europe Strategy for SA

- **Main drivers for presence in SA**

Ford Motor Company has a strong presence in SA. A car and engine assembly plant in Pretoria and Port Elizabeth driven by financial benefits, such as

 - MIDP rebates
 - Weak currency relative to hard currency selling price
 - Low labour and material costs
- **Link with the Ford European purchasing strategy**
 - Converter production in SA, full system assembly in Europe.
- **Why specifically converter production in SA ?**

High MIDP benefits, due to

 - High value components like precious metals
 - Relatively small component i.e. easy to export
 - High local content industry has established itself in SA. Precious metals, coaters, bricks (monoliths) and canners
- **...resulting in benefits for automotive customers through competitive prices, with additional import credit benefits (MIDP)**

Figure 12 : Ford Business Group Strategic Statements

[Source : Presentation to FMC by Paul Knaapen : Snr Director ARM]

In summary, ARM spends shareholder funds on investment in S.A. after careful consideration of the investment criteria set for an emerging, risky market. However, there is often little choice of investment location as the OE customer will dictate the decision in order to receive MIDP benefits. ARM, therefore, relies on the local management team to implement the approved funds correctly to achieve acceptable shareholder returns and the profits estimated in the original business case.

8. SHAREHOLDER VALUE (ROIC AND FCF)

Considering the evidence presented to this point on the agency costs incurred by ARM, as well as the many opportunities for agency conflicts to further reduce the value available to residual claimants, it is appropriate to analyse the actual financial results of ARMSA. The purpose of uncovering this evidence was to determine whether or not the investment in S.A. has delivered to shareholder expectations. The

historical financial performance analysis used a “tree” to analyse the main driver of shareholder value, namely, return on invested capital (ROIC). This measure was also chosen as it focuses on the true operating performance of ARMSA, essentially an operating unit of ARM, and makes a trend analysis more focused. End of period figures are used throughout and the average rand : US dollar exchange rate for the period is applied to provide a US dollar based period result. The ROIC analysis tree is shown below by means of example in Figure 13.

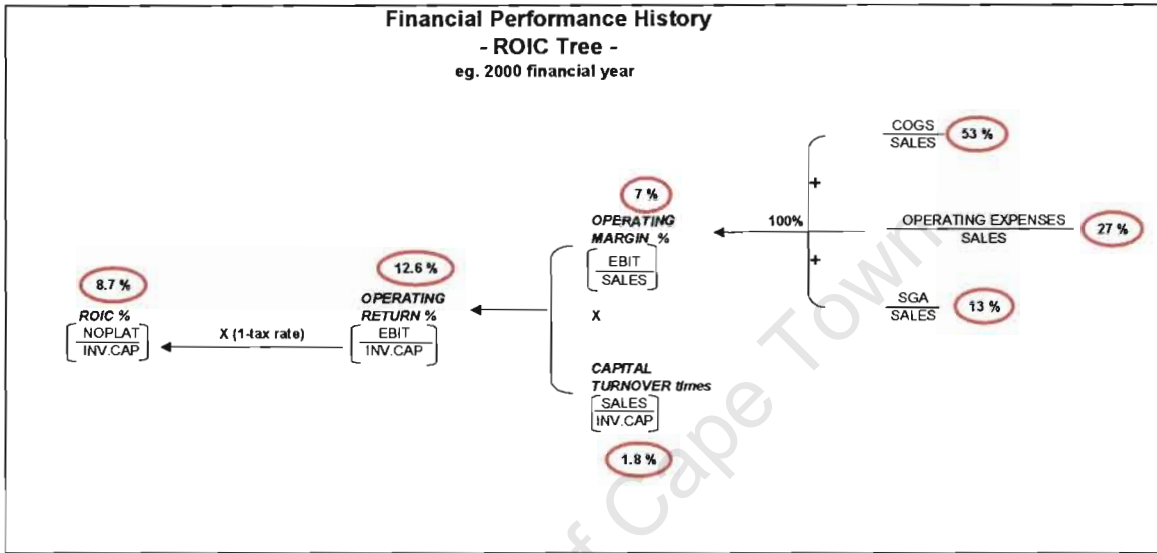


Figure 13 : ROIC Analysis Tree

The results of the ROIC analysis for the life of ARMSA is presented in Figures 14 and 15 below.

The following is evident from the analysis:

- In the first decade of operation capital turnover was between 1 and 2 times per annum. Since then, capital turnover has been consistently between 2 and 3 times per annum.
- Operating margin and operating return show a decreasing trend in the last decade, but are projected to rise significantly in the 2003 Annual Operating Plan (AOP).
- ROIC has averaged 12 % in the last decade.
- Effective tax rates have varied substantially, as evidenced by the % difference between the ROIC and operating return from period to period.

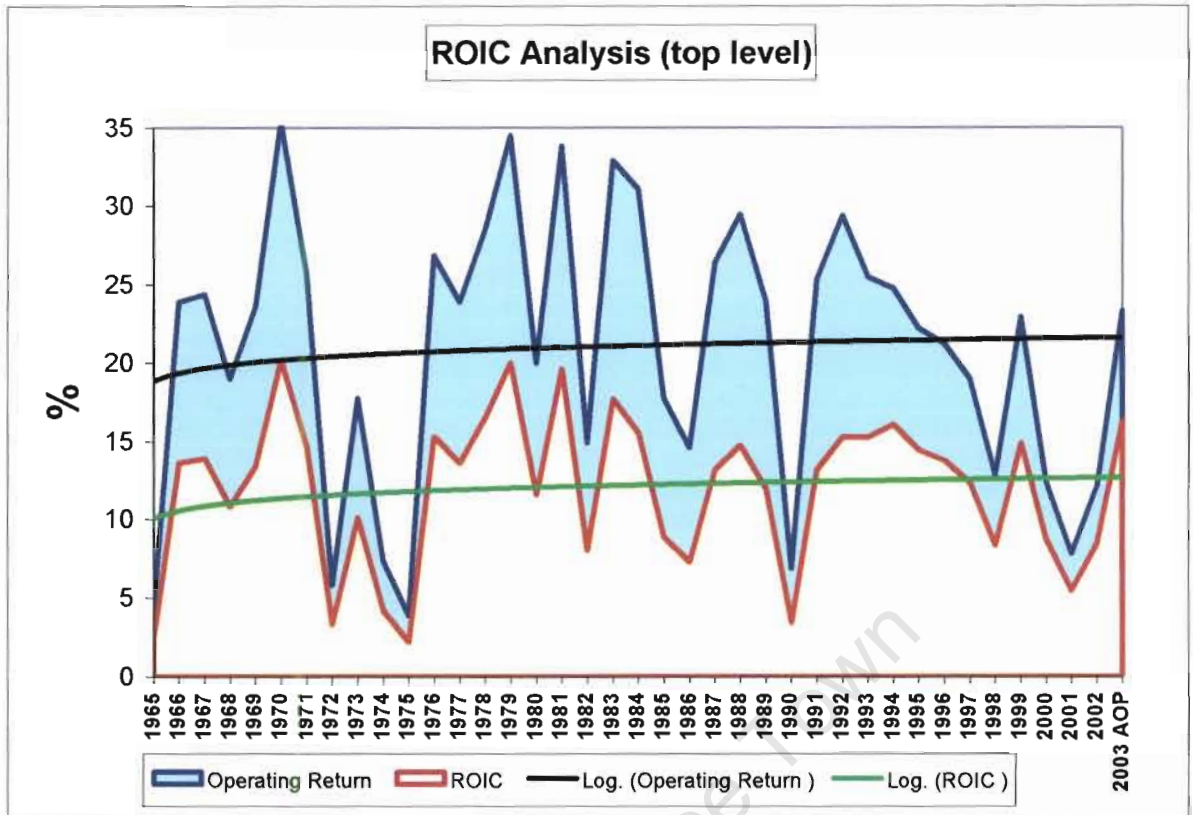


Figure 14 : ROIC Analysis (top level)

[Source : ARMSA Financial Statements]

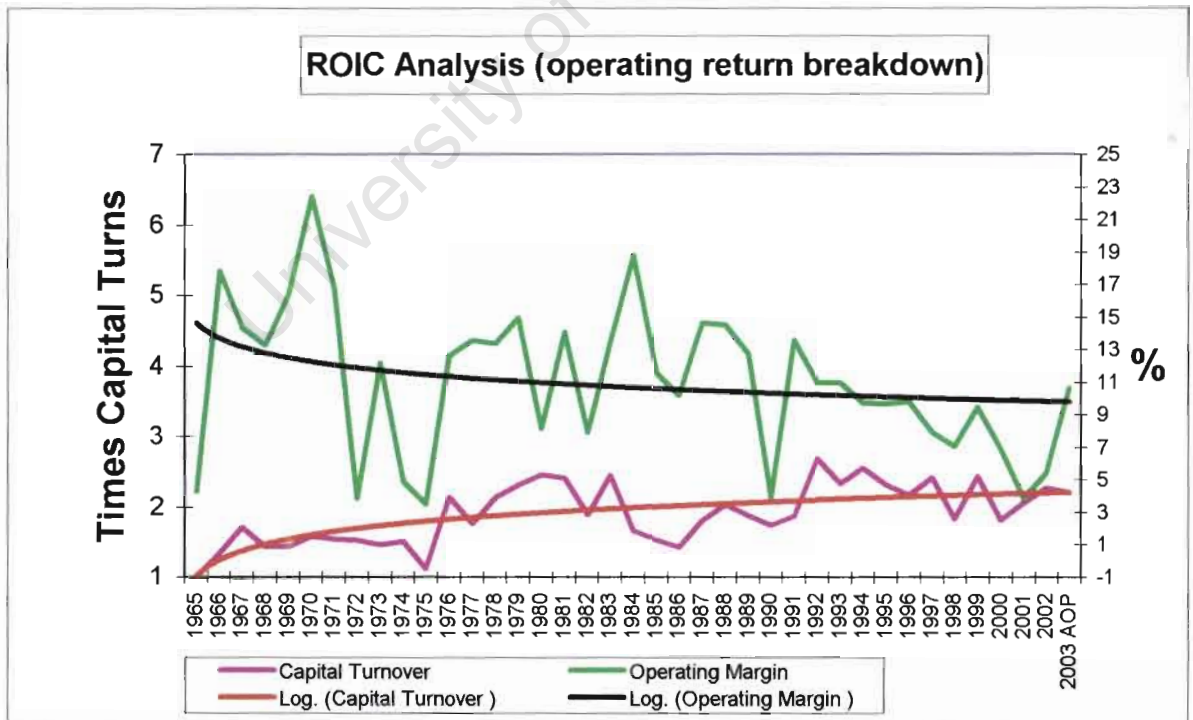


Figure 15 : ROIC Analysis (operating return breakdown)

[Source : ARMSA Financial Statements]

In order to explain the operating margin and return results, an expansion of the ROIC tree in terms of operating margin for the last decade is shown below in Figure 16.

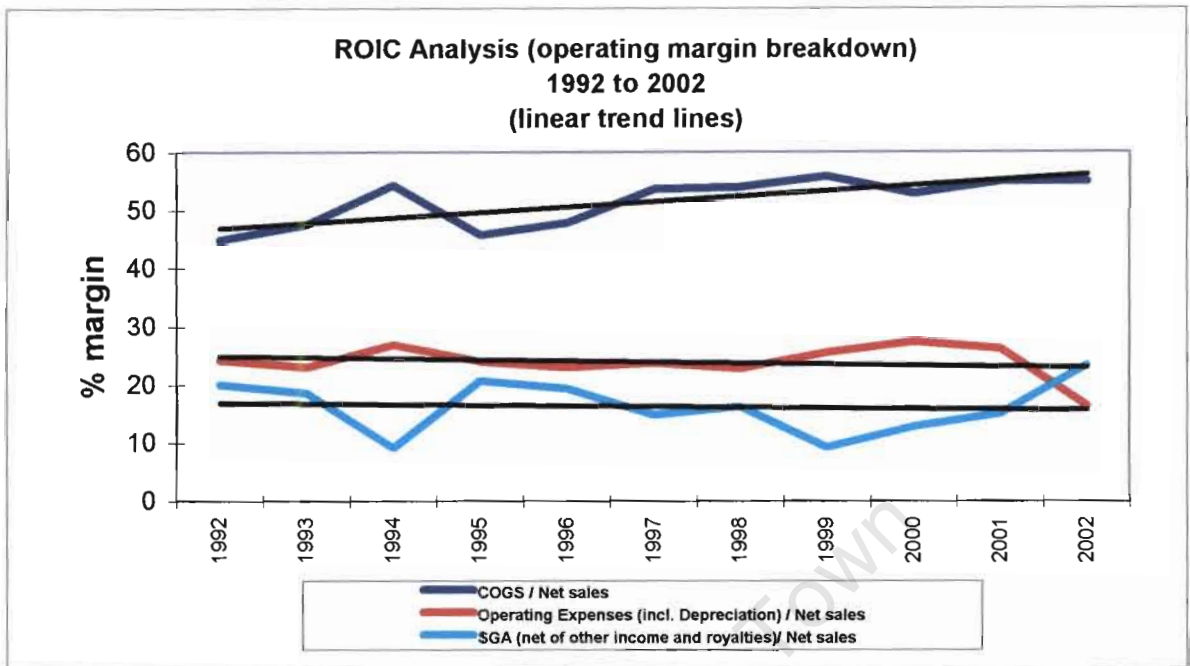


Figure 16 : ROIC Analysis (operating margin breakdown)

[Source : ARMSA Financial Statements]

It is evident from this analysis that ARMSA have maintained and improved operating expenses as a percent of sales, but have lost points at the gross margin over the last decade. This is due to increasing price pressure in the market to meet OE manufacturers cost reduction targets and the sales incentives offered to local shock absorber distributors in terms of bulk discounts. Furthermore, raw material and distribution cost increases are not always passed on to the customers via selling price adjustments. This indicates the importance of ARMSA's focus on continuously reducing controllable costs to maintain operating margin levels. Fortunately, the value of sales resulting from invested capital has facilitated an ROIC result in excess of 10% on average.

"If you look at the average, then for sure you are creating value here. Our Corporate WACC is 10 %, and that includes the cost of paying a dividend to the shareholders, so anything above that is pretty good. Of course, there could have been some poor

investments or missed opportunities, but from what you need to do to exceed break even, you are doing well with the resources you have been allocated.”

[Source : Interview Randall Zeek]

ARMSA have traditionally paid royalties to ARM, calculated as a % of net sales. In the later years the value of royalties has increased significantly and now includes a management fee for the AETG division. The royalty and fees have been justified on the basis of ARM's provision of resources, intellectual capital, continuous improvement systems and management attention and are, therefore, an arms length expense.

“Training for the Arvin Total Quality Production Systems, maintenance training program and Kanban inventory management system were costly to develop and make available to Gabriel South Africa. Manufacturing cell design concepts, along with implementation support, have also added greatly to the cost of supporting Gabriel South Africa. Since the support of the programs will be ongoing it is necessary to raise the fees charged.”

[Source : Leon Viars (President Gabriel Ride Control Products) memorandum to Mike Biden (MD ARMSA) on 30 June 1995]

Typical accounting treatment would be to take this expense above the EBIT line, as shown in the ROIC analysis so far. However, the decision to increase royalties and fees was commensurate with a decision to stop dividend payments by ARMSA. The latter was primarily driven by the effect that Secondary Tax on Companies was having on the cost of dividend repatriation at that time. Also, ARMSA management were incentivised on results at the EBIT line. An increase in royalties and fees obviously impacted on the absolute value of this performance measure. This typical agency type of conflict led to a proposal by ARMSA on how to deal with this, which is shown in the table below and in place today. The actual management fee varies from year to year dependant on the amount of activity involved from Corporate and regional management and on the amount of capital investment envisaged for ensuing periods (see later discussion on debt policy for ARMSA).

ARMSA Royalty and Fees Agreement	1995	1996	1997	1998	1999	2000	2001	2002	2003 AOP
GSA royalty above EBIT line	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
GSA royalty below EBIT line	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
AETG management fee below EBIT line	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	6.5%	4.0%
AETG royalty below EBIT line	0.0%	1.0%	1.0%	5.0%	5.0%	5.0%	5.0%	1.0%	1.0%

Table 5 : ARMSA Royalty and Fees Agreement
[Source : ARMSA Records and Financial Statements]

“ ...the decision was made to stop dividends in the mid-1990’s. Because of double taxation, dividends are not the most efficient means, royalties are clearly more tax efficient. Whether it is above or below the line it doesn’t matter, as it is all consolidated in the end. You can move them all below the line, as it is really a mechanism for distribution, for moving cash the most tax effectively. Operationally it should not direct us. I can see why you (ARMSA) don’t support it above the line. If you grow your revenue base and pay your royalty on sales, it is costly. The expense is really company wide, division wide and it isn’t really an expense as it is an income somewhere else. So, you can argue that royalties are on the level, as long as they are paid by 100% owned businesses, like you are. The payment of the royalty is justified to the tax authorities and it is a means for Corporate to maximise return on investment, by providing the resources and the investment in the form of knowledge, thereby increasing the potential of the South African operation. Royalties are legal ways of reducing tax. Certain currency control regulations apply in some regions, so it is a way of avoiding transaction costs, whereas dividends which are periodic are often costly to transact.”

[Source : Randall Zeek Interview]

“ I don’t think the royalty charges are a lot different to what we would have paid a Bain or McKinsey type consultancy to provide us with similar tools. So the royalty distributes income and is tax efficient, but it is not excessive or unrealistic. We have retained more earnings than we have spent on royalties and fees, and we have reinvested those to grow the business and provide employment.”

[Source : Mike Biden Interview]

Figure 17 below shows the value of royalty and dividend payments over the life of the operation. By inference the substantial increase in sales in recent years can be noted.

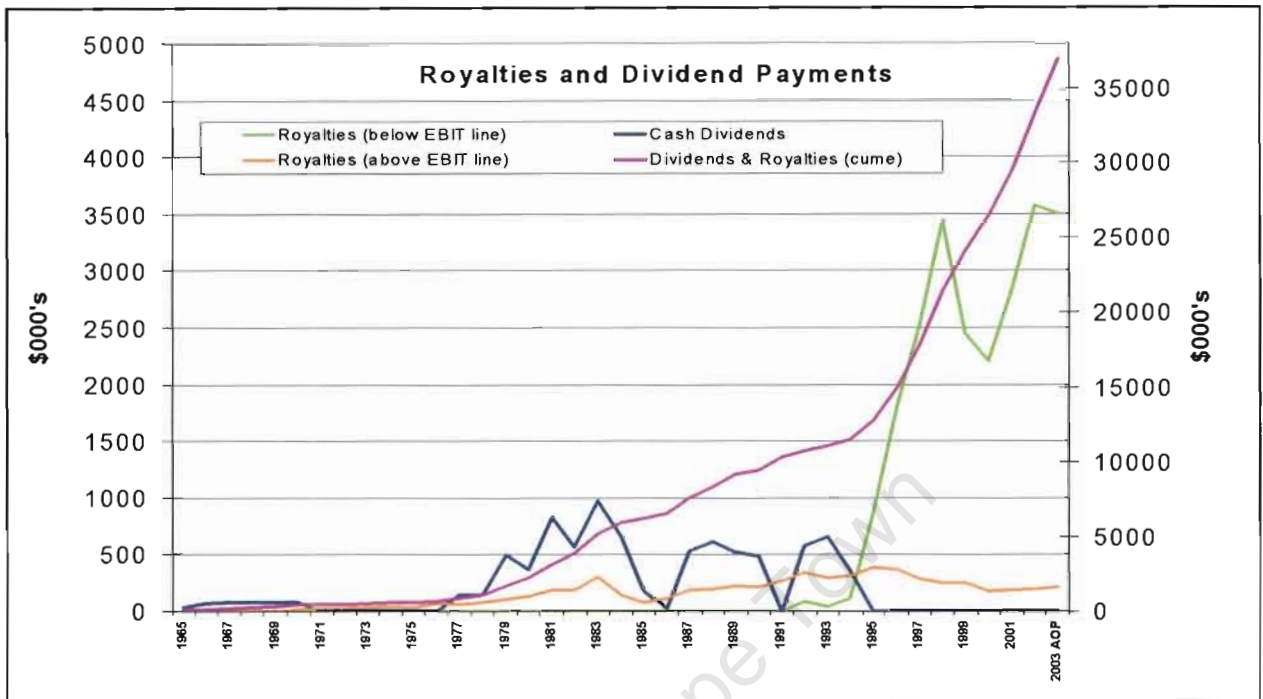


Figure 17 : Royalty and Dividend Payments
 [Source : ARMSA Financial Statements]

In light of the preceding evidence, it is useful to analyse a ROIC tree using the royalty and management fee agreements in place and compare the results. Figures 18 and 19 below show the comparison for ROIC and operating return and margin.

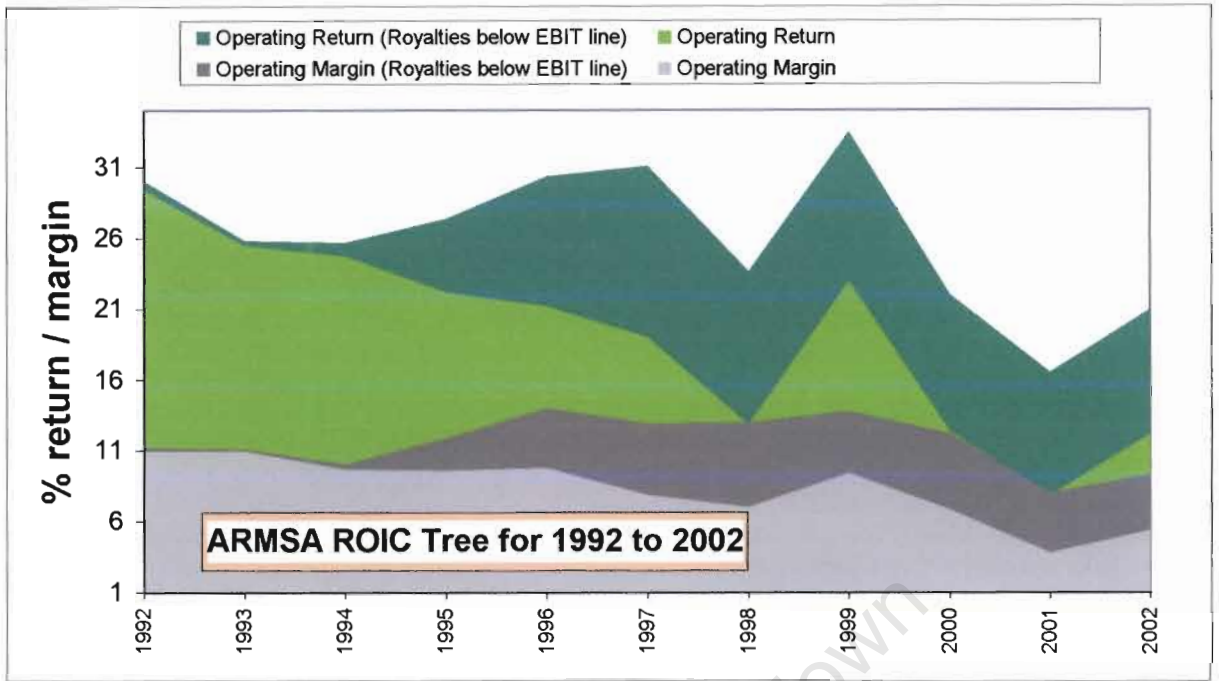


Figure 18 : Operating Margin and Return Comparison
 [Source : ARMSA Financial Statement]

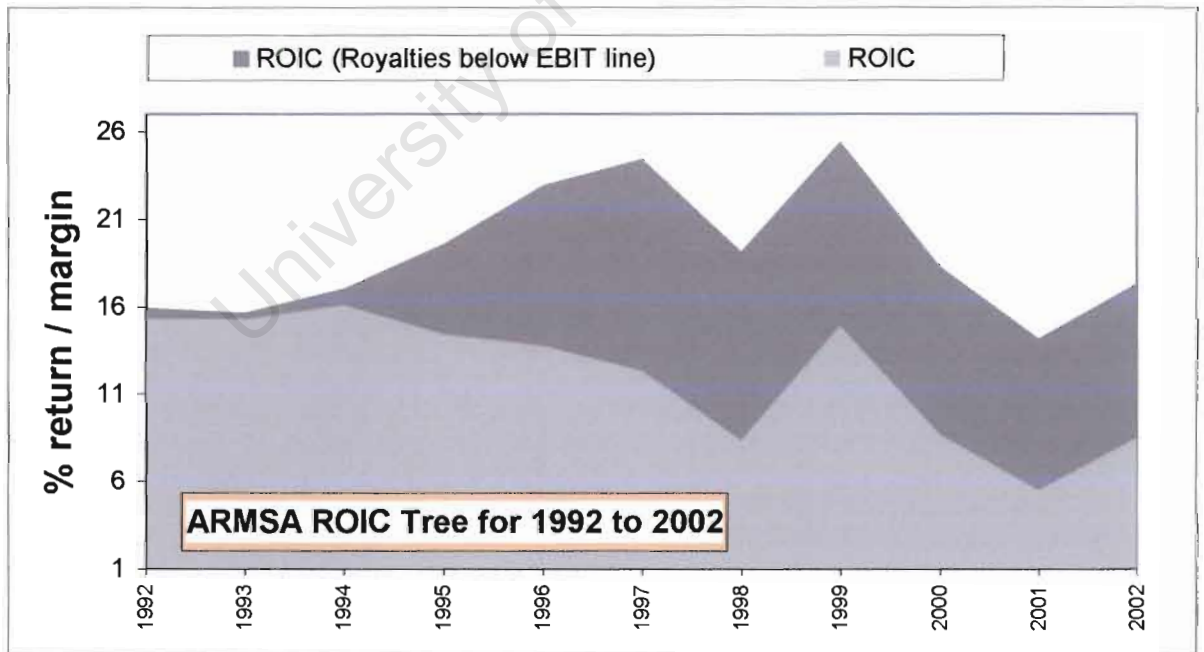


Figure 19 : ROIC Comparison
 [Source : ARMSA Financial Statements]

It is evident from the above that the value of royalties and fees impact significantly on the returns to the shareholder. It is understandable why ARMSA management negotiated an ostensibly “arms length” royalty to be accounted for below the EBIT line.

“Looking at EBIT after royalties is not really fair. They have been especially high in recent years, but we are a wholly owned subsidiary and they take a helicopter view of how to divide it up. We have generated acceptable returns. We are measured on operating margin, which is the right way. In my view, the ideal would be to ship out as much royalty as reasonable, because we would save on tax here and they would get a better rate there. Of course, we need to consider foreign exchange control regulations and thin capitalisation rules.”

[Source : Peter Stern Interview]

An analysis of operating free cash flow, using end of period figures, was conducted to determine the after tax cash flow available to shareholders. Figure 20 displays the results graphically for the life of ARMSA.

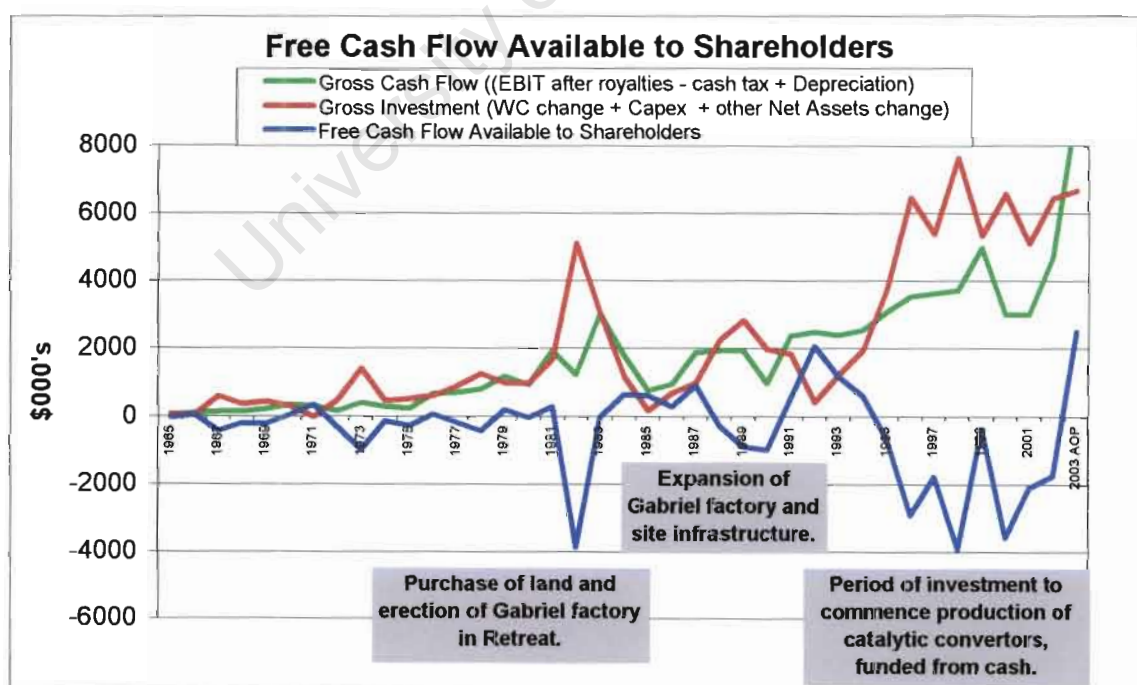


Figure 20: Operating Free Cash Flow for ARMSA 1965 to 2003 AOP

[Source : ARMSA Financial Statements]

The following is evident from this analysis:

- In US dollar terms, gross cash flow into ARMSA has increased continuously year on year on average. This is despite the significant weakening of the local currency relative to the US dollar in recent years.
- There have been periods where gross investment has exceeded incoming cash flows. These periods have specific events related to them, such as investment in new plant, land and buildings or equipment. In 1982, the current land was purchased and the initial factory built. In 1990, extensions to this were completed. In 1996, the first catalytic convertor cells were commissioned. A steady stream of investment in new markets has continued every year since, as well as the completion of the existing factory extensions. Land and building infrastructure is largely complete, hence the projection for positive operating cash flows henceforth.

However, these are end of period figures and they hide the positive cash holding position of ARMSA, as seen in a history of daily cash balances in the last and current financial year below in figure 21.

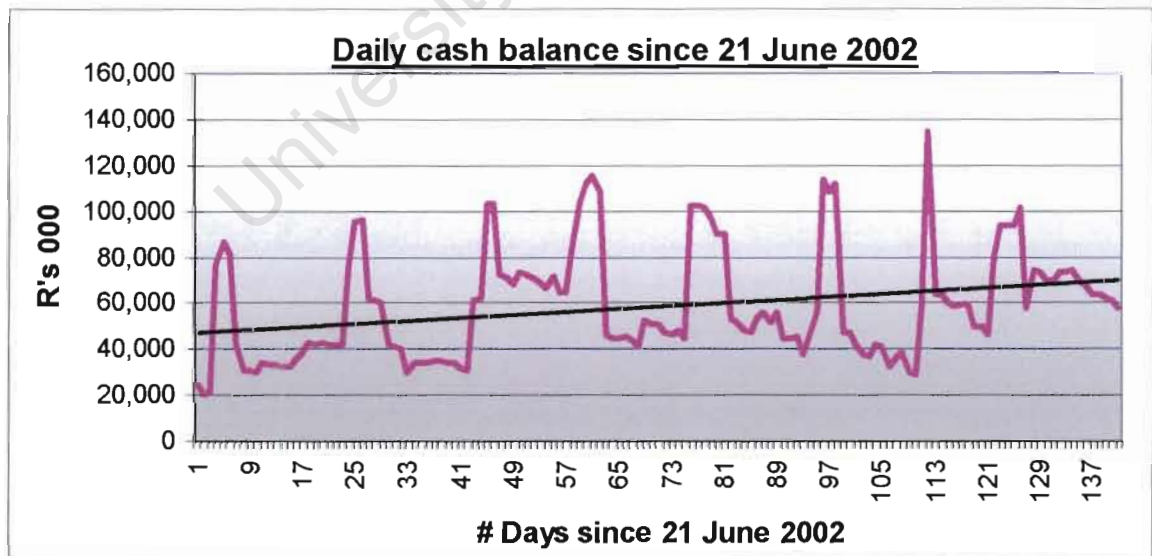


Figure 21 : Daily Cash Balances of ARMSA
[Source : ARMSA Finance Department Records]

An entity DCF valuation of ARMSA yields the results shown in the table below. It is evident from this analysis that the operation is poised to provide ongoing positive value to the shareholder if future projected cash flows are realised.

Free Cash Flow of ARMSA (\$'000's)	2000	2001	2002	2003 AOP	2004 AOP	2005 AOP	2006 AOP	2007 AOP	Continuing Value
EBIT (after all royalties)	2,829	2,552	4,902	10,214	11,235	12,359	13,595	14,954	
(Cash Taxes)	849	766	1,471	3,064	3,371	3,708	4,078	4,486	
NOPAT	1,980	1,787	3,431	7,150	7,865	8,651	9,516	10,468	115,148
Depreciation	1,008	1,226	1,252	2,026	1,985	1,758	1,689	1,457	
Gross Cash Flow	2,988	3,013	4,683	9,176	9,850	10,409	11,205	11,925	
(Gross Investments)	6,570	5,111	6,439	6,672	6,347	5,984	6,325	6,178	
Free Cash Flow	(3,582)	(2,098)	(1,756)	2,504	3,503	4,425	4,880	5,747	
Discount factor at WACC of 10%				0.9091	0.8264	0.7513	0.6830	0.6209	
PV of FCF to Investors				2,276	2,895	3,325	3,333	3,568	71,495
Total Value of Operations		86,893							

Table 6 : Entity DCF Valuation of ARMSA

[Source : ARMSA Financial Statements]

The free cash flow calculations and DCF valuation were conducted by the researcher, using information in the financial management and statutory accounts. Although cash flow statements are generated by ARMSA as part of statutory requirements, they appear not to be regarded as significant measures of operating performance. This is with the exception of daily cash balances which are monitored closely.

“Cash at year end is not helpful, as it is a point in time. You need to see the volatility of the daily swing. We should have less emphasis on managing current cash and more on forecasting cash needs in the future. If we can reduce the variation in cash balances through better cash management we can use that information to invest those monies more effectively. ARSMSA can't do that due to working capital funding needs and lack of economy of scale, but from a Corporate viewpoint it is different. If we could get say \$4 million for a 2 week period from each of 30 locations, that is a worthwhile investing exercise.”

[Source : Randall Zeek Interview]

“Maintaining positive free cash flow is obviously important when you are in a growth phase and don’t want foreign funding. It is a plus for us when we can pay the shareholder the royalty and not require funds for the growth needs. In contrast they have had to put funds into Mexico, Argentina, China and Thailand.

[Source : Mike Biden Interview]

“Our cash position is increasingly positive. Corporate would get interested if we had say \$ 10 million available. This is an area we run too conservatively in ARM. If we started a treasury function in SA, we would have to keep it separate from operations. Our results must be achieved through operations, not through cash investments or arbitrage.”

[Source : Peter Stern Interview]

In summary, the review of historical and projected financial results suggests that ARMSA has yielded shareholder returns above the cost of capital, and is in a position to repatriate cash at any point that corporate treasury requires it. The treasury function, however, is well aware of the costs involved in repatriation of cash and unless there are substantial amounts involved, it is not financially viable. This stance has made sense in the light of ARMSA’s capital expenditure requirements in recent years, where cash has been used extensively to grow the asset base and generate additional revenues and profits. Opportunities exist to utilise positive cash holding positions in various remote locations. These opportunities do not currently appear to be taken by ARM.

ARMSA’s acceptable returns have been in addition to substantial levels of royalty and management fees paid to corporate offices over the life of the firm. This amount is calculated to be more than \$36 million cumulatively over the life of the operation. This despite the costs invested in bonding management to the shareholder and in the monitoring and reporting systems.

Year end cash positions are not viewed as significant when compared to investment opportunities that yield shareholder value, so recent years have seen negative free cash flow positions at financial year end. The local management has, however,

maintained a focus on daily cash holdings within the cycle of payables and receivables. The net working capital position is monitored closely.

The costs incurred to monitor and bond agents have obviously reduced the value of the residual claim that shareholders have on ARM. However, once the investment decision is made to use shareholder funds in South African ventures, the ARMSA management team are charged with delivering profit results and returns expected by the investing public. The analysis shows that, on average, this objective has been achieved.

9. DEBT POLICY

Further investigation into the financial management of ARMSA, within the agency theory framework, leads to an examination of debt and dividend policy. An analysis of the capital structure of ARMSA over its life is presented in Figure 22 below. Total debt to total assets is used, with a focus on long term debt to understand the policy of the shareholder and local management as regards committing the operation to this form of financial risk.

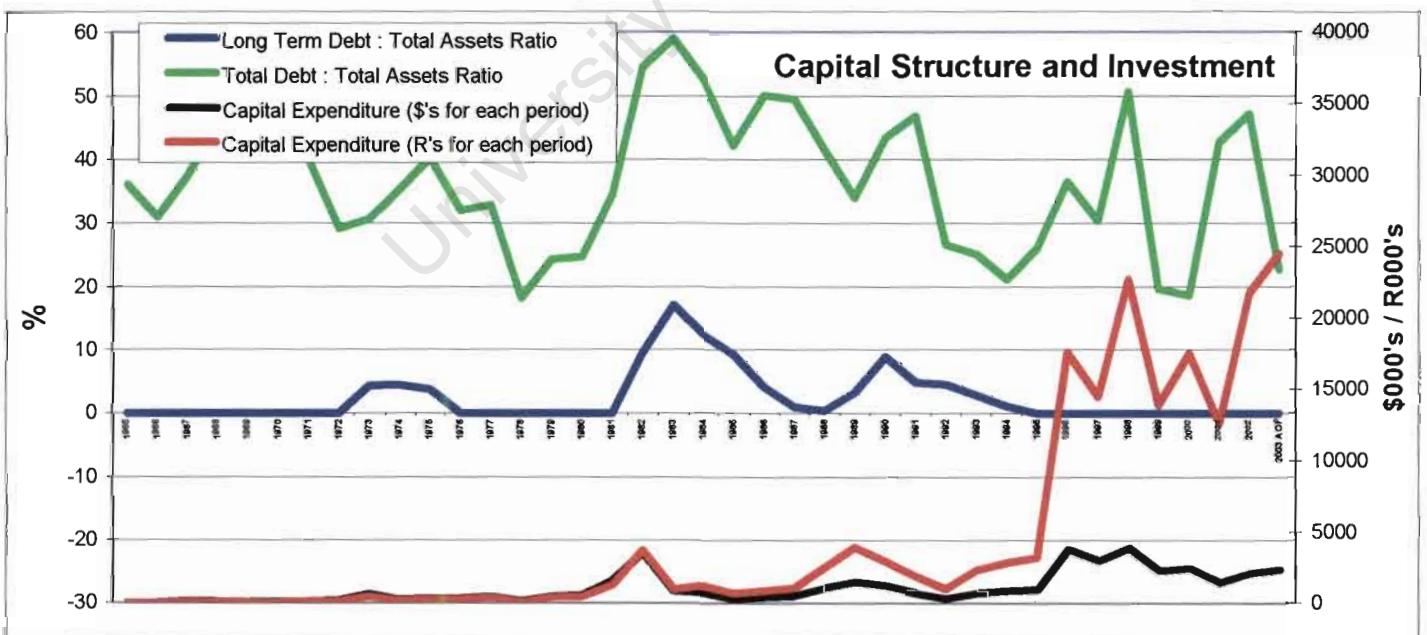


Figure 22 : Capital Structure and Investment in ARMSA

[Source : ARMSA Financial Statements]

When analysing the capital structure together with the period by period capital expenditure, the following is evident from the figures:

- Total debt to total assets has never exceeded 60 % and has averaged less than 40 % over the analysis period, with a decreasing (linear) trend.
- There were 3 distinct periods of long term debt, all paid off in less than 5 years
 - 1973 – funding of equipment for new business growth.
 - 1982 / 1983 – purchase of existing land and construction of initial factory.
 - 1990 – extension of the Gabriel factory.
- The construction of the catalytic convertor plant from 1995 to date and the completion of remaining site infrastructure was done without long term debt being incurred. This was the site's period of largest capital investment in its history.
- There has been no long term debt since 1995.
- The weakening of the rand relative to the US dollar has shielded the shareholder against the size of the capital investment at risk, whilst the local value of the assets under local management control have increased considerably.

Further investigation and examination of ARMSA records yields the following evidence in order to complete the explanation of ARM's debt policy and how it is applied at ARMSA.

- Corporate treasury target a debt: equity ratio of 40 % to 60 %. This is governed by the views of the shareholders and the capital markets in the U.S.A.
- Any large debt financing requires Corporate board approval.

- Corporate are concerned about protecting the market capitalisation of ARM and the share price. They will adhere to shareholder wishes about debt levels.
- Capital appropriation requests (AR's) are used as a control mechanism to ensure that target debt levels are achieved (see previous discussion on Capital Appropriation).
- A Corporate treasury ruling in 1995 prohibited the use of long term debt in developing economies, based on the view that the access to US dollar debt is the least expensive, with more attractive interest rates. All "foreign" debt was paid off and not renewed.
- ARM has from time to time provided security for short term loans or overdraft facilities.

"...debt managed properly is an asset to fund growth. If we get our managers to be like owners, they could create a common inheritance for all stakeholders by leveraging properly. Our investment in Japan through a joint venture has been penalised through the debt averseness of the local team. Of course we would always prefer to sell more stock than incur debt out of our target range...we rely on your management team here to obtain the right approvals for capital spend, it is all over to your integrity. I understand the agency cost scenario, but there really are benefits of being in this relationship with you. If you were a sole entity, you would not have the same access to capital markets that we have, and your borrowing costs would be higher...we don't look at your specific ratio, as we lose the identity of the multi-national in that way, so we measure at a consolidated level. Of course, if you have low or no debt and are growing and using the market opportunities, that is fantastic."

[Source : Randall Zeek Interview]

"We have applied the 'no-debt' policy since 1995 by focusing on cash generation, reducing working capital needs and using short term overdraft facilities during growth phases. On top of that we have been able to repatriate in terms of royalties and management fees. Obviously there would have been an advantage to ARM if we

had been more highly geared prior to the rapid decline of the rand, as the US dollar liability would have been less, but we are not that significant on the Corporate radar screen in this area.”

[Source : Peter Stern Interview]

The case evidence on debt policy suggests that ARM leadership have preferred not to incur “foreign” debt where possible. The debt averseness of the local management has complemented this. With a strong focus on cash generation and net working capital positions, ARMSA management have grown the business without funding from the parent, and returned cash to the shareholder, thereby effectively mitigating against the residual loss emanating from the fixed agency costs. The attitude of local management towards delivering shareholder value off a low geared base is clearly a crucial factor in this success.

10. DIVIDEND POLICY

As discussed in the overview of agency theory, there are still a variety of opinions as to whether dividends matter or not. It is, however, interesting to examine the behaviour and policies in this regard within this case. ARM pays a regular dividend to investors. The following discusses the case evidence on how ARM views dividend payments from its dispersed subsidiaries. A summary of dividend payments made by ARMSA to ARM Corporate over its life is shown below in Figure 23.

The following is evident from the below:

- Dividends have not been paid every year.
- Dividends were paid from the beginning of the operation.
- In the late 1970's the level of dividend paid increased substantially, to the point that accumulated retained earnings were reduced.
- The last dividend was paid in 1994.

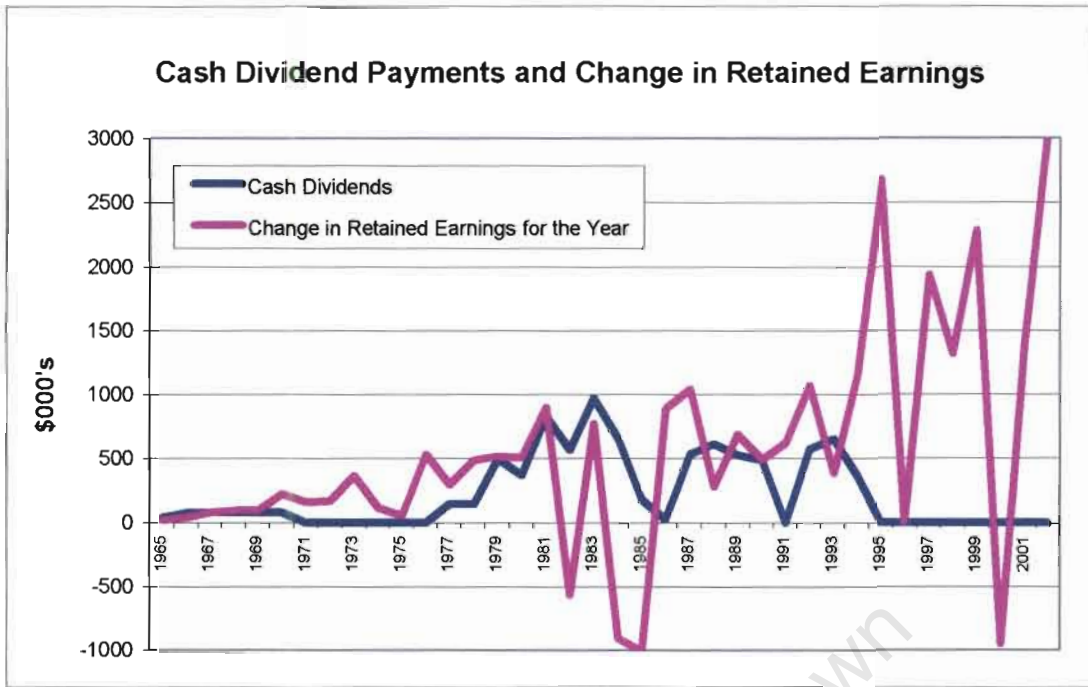


Figure 23 : Cash Dividend Payments and Change in Retained Earnings

[Source : ARMSA Financial Statements]

Further investigation and examination of ARMSA records yields the following evidence in order to complete the explanation of ARM's dividend policy and how it is applied at ARMSA.

- Initially the ARMSA (at that stage "Gabriel SA") directors only declared a "small" dividend, when cash flow permitted. They had autonomy as regards these types of decisions.

"In view of the fact that tax payments would absorb the bulk of the Company's liquid resources, it was resolved that no final dividend in respect of the year ended 31 March 1977 be declared."

[Source : Gabriel Board Meeting Minutes 23 June 1977]

- Under pressure from ARM (at that stage "Maremont Corporation"), a formal dividend policy for South Africa first emerged in 1977 in discussion with ARM. Just after the outbreak of the Angolan war, the US directors and

shareholders preferred not to keep cash in S.A. The rand : dollar exchange rate at that point was averaging 85c to 1 US dollar.

“In discussion on dividend policy, it was agreed that, the objective was the payment of an annual dividend twice covered by after tax earnings. An interim dividend would be paid as soon as possible after September each year and a final dividend as early as possible after the March year end.”

[Source : Gabriel Board Meeting Minutes 13 June 1978]

- There were instances where this policy could not be met due to cash flow constraints, for example,

“A dividend of 250c per share was declared payable to ordinary shareholders. Although this dividend was less than half of after tax profits, the policy remains. The limited distribution was made necessary by cash restrictions brought about by the two year term on promissory notes issued by the Board of Trade and by the extended payment period imposed by the Department of Customs and Excise.”

[Source : Gabriel Board Meeting Minutes 18 November 1986]

- In order to promote growth and free up cash for funding the growth, ARMSA directors proposed an amendment to the dividend policy, which was accepted.

“It was agreed subject to the opinion of the majority shareholder, that the Company’s needs would be better served by a reduction in the dividends distributed from 50% to 35% of taxed profits. A three year business plan will be tabled in Chicago, including extensions to the existing buildings and the investment in plant and equipment.”

[Source : Gabriel Board Meeting Minutes 29 April 1988]

The business plan was agreed to but the US based owners were somewhat wary of the political future of S.A. post the President P.W. Botha “Rubicon” speech.

- A change in ARMSA management brought about an amendment to dividend policy, in the light of changes to tax laws in South Africa.

“Mr. Biden stated that no dividend had been paid for two years due to withholding tax (STC) in South Africa. Mr. Vance (representing majority shareholders) agreed that no further dividend be declared, and that Corporate treasury and tax personnel be further consulted.”

[Source : Gabriel Board Meeting Minutes 7 November 1996]

- In the last decade, no particular dividend policy is in place.

“There is not a specific dividend policy in ARM, but our shareholders expect us to provide them with a dividend. People don’t invest in us as a growth business. A corporate dividend is really inefficient from a tax perspective. Growing the share price and reinvesting those monies is much more effective than having shareholders reinvest them in other businesses. As a shareholder I would rather ARM did that for me. We should not pay dividends unless we had no investment opportunities to earn more than 10 % return. Internally, dividends are a tax and treasury decision. We need the most cost effective way of repatriating your profits back to ARM, dividends are the last solution.”

[Source : Randall Zeek Interview]

“In the last 9 years there has not been a coherent policy on dividends out of South Africa. Had the royalties not been flowing that might have been an issue. We are giving them a good return and not asking for funds, although the rand has weakened. Of course, they welcome cash back, we get requests at year end, sometimes. Now, after the 2000 merger we are perhaps below the “just notable size” in the group. Speaking to the CFO recently, he said they would be interested if we could give them upwards of \$ 10 million. We are not there yet, but are well on the way in the near future. Of course, we stay on the right side of transfer pricing and exchange control regulations, so with the tax work involved in dividends, it must be worth the effort.”

[Source : Mike Biden Interview]

From the case evidence it is found that ARM have historically attempted to transfer cash back to the US through dividends. When this was no longer tax efficient, local management proposed a royalty and management fee approach. ARM corporate treasury are comfortable with receiving as much as is legally possible under this approach, whilst leaving the remaining cash in SA to fund growth, in place of long term borrowings. It is not clear what position would be adopted should growth opportunities reduce. ARMSA's size of cash holding (generally less than \$10 million) is not significant enough for corporate to warrant the costs of such a repatriation. Recently, it has been mooted by the South African Revenue Services that the tax avoidance opportunities as regards royalties and franchise fees will be reduced by requiring MNC's to register for VAT and to charge tax on their "royalty services", with the local agencies being able to claim the VAT back as a business input.

These situations may only serve to heighten the agency conflicts inherent in the MNC relationship with foreign countries and agencies, and further add to the long list of financial risks associated with investment in S.A.

11. SUMMARY AND DISCUSSION OF FINDINGS

The research objective is to improve understanding of how MNC's manage agency conflicts, through an explanatory case study research method. The case evidence presented in the 9 preceding sections provides some explanations. This can be summarised into key findings, categorised by the elements of agency theory that provide the best context, or framework, for explaining the evidence. It is clear from the evidence that there are various manifestations of the inherent agency conflicts and that both monitoring and bonding costs have been incurred, financial policies have been adopted and the value of the residual claim has been affected. However, there are some distinctly positive behaviours and results uncovered in the case. ARM and ARMSA management have recognised the dangers that agency conflict bring to shareholder value, but have turned this into positive actions in many areas, effectively mitigating against the value destruction impact of agency costs. To differentiate between **positive** and **negative** effects, two colours are used in Table 7 below.

Case Evidence and Element of Agency Theory	Key Findings
Motor Industries Development Plan	<ul style="list-style-type: none"> • The developing South African economy has an incentive for local material content export, that automotive industry players can use to generate competitive advantage and increase shareholder returns. (Value of residual claim) • Export incentives heighten the competitiveness between competing nations and drive shareholder value increases. (Value of residual claim) • ARMSA exists because of the MIDP and ARM customer requirements. South Africa would not naturally be ARM's first choice of foreign investment location. ARM corporate and regional managers are aware of the risks associated with Cape Town and would prefer to have convertor and shock absorber supply located near to the end consumer. This view is well understood within the ARM group and creates tensions between employees of the same business divisions, in the sense that ARMSA management continuously have to "sell" the merits of using Cape Town as a supplier, despite the very acceptable returns that can be demonstrated on paper in a business case. (Agency conflict manifestation)
Management Incentives	<ul style="list-style-type: none"> • ARM leadership owns high levels of ARM stock and incentivise globally dispersed leaders to act locally within a company mindset. For ARMSA the focus is on profit and cash. (Agency bonding cost) • Dispersed leaders partake in an ARM stock ownership scheme that promotes increased tenure with ARM and improves personal ownership. (Agency bonding cost) • ARMSA leadership exhibit strong bonding to ARM in a personal or relational sense and take pride in delivering to expectations. (Agency bonding cost) • Management incentives are not paid unless an EPS threshold is met. This protects the shareholder. (Value of residual claim)
Performance Measurement and Reporting	<ul style="list-style-type: none"> • ARM measure ARMSA performance through a myriad of reports, metrics and corporate database applications. This appears excessive. (Agency monitoring cost) • ARM and ARMSA have invested substantially in financial reporting systems and human resources for routine requirements. (Agency monitoring cost)
Accountability Structures	<ul style="list-style-type: none"> • Being a large multi-national, ARM has various divisions represented in South Africa. This results in complex reporting

	<p>lines and accountabilities. (Agency conflict manifestation)</p> <ul style="list-style-type: none"> • Alignment of objectives and priorities across divisions and shared services is difficult and complex. (Agency conflict manifestation) • There are additional costs of allocating shared services, reporting and the management burden associated with a wide range of products and markets. (Monitoring cost) • With the exception of corporate treasury and tax functions, there is no consideration of ARMSA performance as a whole. (Value of residual claim) • ARMSA is a model or study in how to achieve the cost and other synergies of combining the operations of various divisions on one site and sharing service functions. (Value of residual claim) • Local management mindset mitigates positively against the monitoring costs and structures, and the “divisional only” mindset, thereby creating a financially beneficial situation for the shareholder. (Agency conflict mitigation)
Auditing	<ul style="list-style-type: none"> • Besides statutory audits, ARM conducts bi-annual financial audits internally. (Agency monitoring cost) • ARM accepts the potential financial control risk of Cape Town’s remoteness to corporate and relies on the local management team. (Agency conflict manifestation) • Other ARM corporate functions are set up to conduct audits globally, such as operations and continuous improvement systems. (Agency monitoring cost) • ARM has invested in technologies and resources to assist in achieving the same standards of operational excellence in all operations globally. (Agency monitoring cost)
Capital Appropriation	<ul style="list-style-type: none"> • ARM treasury has implemented formal capital appropriation procedures, with clear payback criteria. (Value of residual claim) • ARM divisions have set specific criteria for the awarding of new business to South Africa. These criteria are set in terms of pricing, contracts, depreciation periods, back-up manufacturing facilities and formal contingency plans for rapid relocation of operations out of South Africa. (Agency conflict manifestation) • Practically, each investment decision is made contingent on particular circumstances, and sometimes at the insistence of the customer. Total risk is assessed, from a global ARM perspective, often prior to final quotations. (Value of residual claim)

	<ul style="list-style-type: none"> • Recognising the ongoing customer requirement for South African investment, ARM business groups have formulated clear strategies to find the optimal solution to operating in South Africa and supplying global markets. (Value of residual claim)
<p>Shareholder Value: ROIC and FCF</p>	<ul style="list-style-type: none"> • ARMSA has consistently delivered shareholder value, despite the decline of the local currency relative to the US dollar, declining MIDP benefits and an erosion of gross margin (mainly as a result of pricing pressures in the value chain). ROIC after adequate royalty payments has exceeded the US cost of capital. (Value of residual claim) • The main contributors to ongoing shareholder value are smart commercial contracts set up by ARMSA, increased sales off an existing base and cost control by local management. (Agency conflict mitigation) • For tax efficiency, ARMSA convinced ARM to cease dividend payments and to increase royalties and fees. These are accounted for below the EBIT line to facilitate the incentivisation of the management team, as they are assessed on EBIT performance. (Agency bonding cost) • ARMSA have retained sufficient earnings to fund business growth. (Value of residual claim) • Gross cash flow in US dollars has increased steadily in recent years, despite the weakening local currency. (Value of residual claim) • End of period free cash flow is not monitored by ARM or ARMSA, but ARMSA focuses closely on daily cash balances and forecasts ahead. (Agency conflict manifestation) • Negative free cash flow periods coincided with capital investments and did not last long. (Value of residual claim) • Projected cash flows are healthy and suggest ongoing shareholder value creation. (Value of residual claim) • ARM are not interested in cash repatriation (over and above royalties) unless a minimum of \$10 million is available. (Agency conflict manifestation)
<p>Debt Policy</p>	<ul style="list-style-type: none"> • ARMSA has never been highly geared and for long periods has had no long term debt. Historic ratios are well below corporate targets. (Value of residual claim) • Long term debt was used for business expansion and settled as soon as possible. The latest and largest expansion used no long term debt, but rather short term overdraft facilities and cash. (Financial policy) • ARM policy is not to have locally sourced long term debt in

	<p>developing economies. (Agency conflict manifestation)</p> <ul style="list-style-type: none"> • ARMSA has benefited by being part of a multi-national in terms of security for debt covenants and in potential access to overseas sourced capital. (Agency conflict mitigation)
Dividend Policy	<ul style="list-style-type: none"> • Since the inception of the operation ARM has attempted to repatriate dividends to the U.S.A. There were periods of conflict with local management over the size of the dividend and the retention of earnings for growth. (Agency conflict manifestation) • A formal dividend policy existed for some 20 years, with the size of the dividend related to after tax earnings. (Financial policy) • ARMSA convinced ARM to cease dividends due to tax inefficiencies, and focus on royalties. (Agency conflict mitigation) • There is no current dividend policy opposite South Africa. (Financial policy) • ARM pay dividends to satisfy the shareholder expectations of a mature business, but would prefer to reinvest earnings in growth opportunities. (Financial policy)

Table 7 : Summary of Findings

In summary, the case evidence has produced a number of findings. One of the most significant findings is that there is ample opportunity for the MNC agency relationship to develop areas of conflict, mostly due to the finding that agents at the highest level do not view Cape Town as the preferred investment option and are somewhat remote from the operation. Local management have their livelihoods at stake and clearly understand that their careers depend on their ability to make “the original pilot study” a success. This tension has facilitated some positive results and local management have proactively taken measures to protect and grow the investment of shareholder capital. Although the value of the residual claim has been reduced through the costs of monitoring and bonding the agents (incentives, auditing, hierarchies, performance measurement, capital appropriation rules) and the adoption of debt and dividend policies pertinent to the region, the value of the MIDP and the judicious management of the operation have far outweighed these costs. The operation has consistently delivered a return in excess of the cost of invested capital. Over and above this, dividends and royalties have been paid to the shareholder.

CHAPTER FIVE

CONCLUSIONS AND FUTURE RESEARCH

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CHAPTER FIVE

CONCLUSIONS AND FUTURE RESEARCH

1. CONCLUSIONS

The primary objective of this case study has been to analyse the phenomenon of agency conflict in a real life context, and in so doing propose answers to the research question. This has been achieved, in that the chosen case exhibits ample evidence of the manifestation of agency conflicts, agency costs and the tailoring of financial policies to mitigate against these. There is also sufficient evidence from the financial performance analysis as regards the value of the residual claim that shareholders have on the South African concern. The richness of the evidence in the case and the use of the agency theory framework allowed the following conclusions to be drawn as to how MNC's manage agency conflicts to achieve shareholder value.

To understand the context of the case, it is important to note that the research concludes that the investment decision as regards Cape Town as a location, is not the first choice of the primary agent (and in all likelihood neither that of the investing shareholder), due to the inherent financial and operating risks of supplying products to a first world market from a remotely located, developing economy. However, ArvinMeritor's very identity as a global supplier of automotive component systems, requires it to be invested in locations close to its customers, many of whom have operations in developing economies. Specifically in the case of Cape Town, most of the investment is at the request of the customers. Both gain financially from the benefits of the export incentive program, MIDP, and in so doing generate shareholder value that would not have otherwise been possible. It is clearly a case of risk versus return on investment and business opportunity. This conclusion heightens the interest in the research question, as the investor of shareholder capital has no choice but to work out how to manage the agency conflicts and achieve suitable returns.

Recognising this, the appointed agents have taken action to manage the risks and embrace the challenges. In the case of ARMSA, these actions have been successful

enough to ensure acceptable returns in excess of the cost of capital to the investing shareholder. This has further facilitated ArvinMeritor's ability to provide cost effective systems solutions globally, inclusive of shock absorbers and catalytic convertors from ARMSA.

The research concludes that the parent MNC has developed performance monitoring systems, financial reporting global database applications, world class continuous improvement approaches and centralised auditing teams to monitor the performance of dispersed operations and to achieve commonality and standardisation. Also, the specific risks of operating in South Africa are understood and key financial policies governing debt and dividend decisions have been tailored accordingly.

Despite these ongoing efforts and costs, the size of the MNC and the relatively small part that South Africa plays in overall shareholder returns, results in complex accountability hierarchies and reporting lines between the appointed agents in Cape Town and the principal officers in the U.S.A. This complexity is further compounded by the variety of ARM divisions operating on one site in Cape Town . This increases the costs and complexity of the monitoring and reporting systems.

Further attempts to mitigate against agency conflicts have resulted in bonding costs. These take the form of incentive compensation plans for executives in remote locations and the awarding of company shares on an annual basis. These compensation plans promote the concept of "think global and act local" by means of criteria that promote the achievement of corporate and divisional goals.

The appropriation of capital is controlled through formal and rigorous centralised procedures. Recognising the riskiness and agency cost effects of investment in Cape Town, ARM has specified particular criteria to govern investment decisions. These are expanded upon by certain business groups and divisions, who have developed specific strategies to exploit the competitive advantages of business in SA.

Due to the relatively small size of ARMSA in the broader ARM scenario, and its distance from the parent, there is a substantial reliance on the integrity and competency of the local management team. This is also true of the other remote

locations where ARM has invested shareholder funds. In the case of ARMSA, the local management team have taken a number of positive actions to achieve and improve shareholder value. These include revenue protection clauses in sales contracts to protect against the negative financial effects of a weakening local currency, proactive analysis of the tax effectiveness of dividend repatriation and the subsequent increase of royalty and management fee payments, and a policy of holding no long term debt. ARMSA management have grown sales revenue (and associated royalties) substantially since 1995, funded totally from cash and short term borrowings. ARMSA management consider the results of the South African entity as a unit and are leaders in the group as regards the allocation of shared service costs and the economy of scale possible from manufacturing diverse products on one site.

Local management recognise that their own personal interests can affect their behaviour and decisions, but have openly requested that ARM assist in finding a compromise that meets their objectives without detracting from shareholder value. This is well illustrated in the decision to account for the arms length royalty payments below the EBIT line, and in so doing maximise local management performance results.

The attitude and approach of the local management team has resulted in ARM focusing management attention and costs in other remote areas that are less successful. Whilst ARMSA continues to deliver returns above the cost of capital and provide quality of product and customer satisfaction, ARM is content to continue with the investment of shareholder funds, making decisions contingent on the circumstances of each business case. Maximisation of shareholder return is not the objective, but rather exceeding threshold return levels on an ongoing basis and considering the inherent risks of supply from South Africa on a non-financial and financial basis. Investment decisions are made contingent on the circumstances of each case.

A quote from Randall Zeek neatly concludes the discussion.

“You have done well to minimise shareholder exposure to the foreign exchange risk of an emerging market selling in a local currency. We have got the same risk situation in

Brazil, where we have not been able to negotiate the right contracts and deliver the results. From our perspective, South Africa was a pilot study that has proven successful because key people have done the right things to deliver shareholder satisfaction.”

[Source : Randall Zeek Interview]

Although not a primary objective of the research, it was possible to assess the usefulness of the agency theory framework for analysing the case. The mental model developed from the theory was very helpful in structuring the research methodology and in defining the elements of the investigation. It also allowed the findings to be categorised into the various elements of the theory quite easily.

As to the applicability of agency theory in practice, it was obvious throughout the research that natural areas of conflict exist between the interests of the various levels of management and the investing shareholder. The task of corporate management is clearly to align all stakeholders and their objectives to satisfy shareholder expectations. To this extent they have incurred agency costs and adopted appropriate financial policies. Being listed on the New York Stock Exchange, there is external monitoring of their actions by the capital markets and investors. All of the above is intensified in that ARM is a multi-national corporation. The agency conflict potential is increased, as well as the agency costs.

However, being a MNC is what makes ARM an investment possibility for shareholders in the first place. It is the identity of the firm. Being a MNC does not mean that shareholders cannot achieve wealth through shares in ARM. The case of ARMSA demonstrates that despite incurring agency costs and operating within a risky environment, the investing shareholder has received acceptable returns from that location. A key factor is the bonding of the local management to corporate objectives and the attitude of the local management team. It appears that this is not the case for all such locations within ARM, whilst the South African “pilot study” contends well for being labelled a generator of shareholder value.

2. FUTURE RESEARCH POSSIBILITIES

As discussed previously, the single case design can be a precursor to a multiple case design, and in itself is a type of pilot study. The case researched for this dissertation fits this description rather well. Having considered a typical MNC invested in a remote location, by means of an explanatory case study, the following possible areas for future research present themselves.

- A more in depth look at specific elements of the case of ARMSA. For example, an investigation into the impact on residual value if local management had not taken actions to address the risks and manage the agency conflicts. An improved understanding of why management has behaved the way it has, may lead to proposals on how bonding costs may be more effective.
- Within ARM a multiple case study design to ascertain whether any common success factors emerge as regards shareholder value creation from remote locations.
- Within ARM a multiple case study design to quantify the costs of being represented in remote locations at the customers' request, and a comparison of the shareholder value provided by these locations to improve understanding of the net effects on residual value.
- Within South Africa, single or multiple case studies on other MNC's with local interests to identify common and unique aspects of agency conflicts.

The purpose of such research would be to further improve understanding of how MNC's deal with agency conflicts and to test the applicability of agency theory in practice.

Finally, the researcher notes the difficulty that case study research presents when agency issues are the appropriate theoretical context. To truly understand the results and underlying actions of the appointed agents, the researcher needs to gain the full confidence of the management of the firm and be allowed access to financial and

other records that local management may not wish to share with MNC parents. In the case of ArvinMeritor, Inc. and ARMSA, this has fortunately not been a constraint.

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