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The Influence of Entrepreneurship on the Relationship between Corporate Governance and Corporate Performance.

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ABSTRACT

Three topics very much in the forefront of businessmens' and politicians' minds today are corporate governance, entrepreneurship and corporate performance and the relationship between these three concepts. The terms corporate governance and entrepreneurship would appear to be contradictory when used in the same sentence. Governance is often associated with regulations and control, whereas entrepreneurship is more associated with spontaneity and discovering new ways of creating value. It would seem therefore, that these terms are more mutually exclusive than compatible.

This apparent incompatibility is evident in business today. Stakeholders in companies are demanding more accountability in their companies while at the same time demanding consistent, if not, rising returns on their investments. To improve accountability requires the utilisation of increasingly scare resources – the same resources that companies require to improve their financial returns.

This author is interested in investigating this apparent incompatibility. Therefore the aim of this thesis is to examine *"The influence of entrepreneurship on the relationship between corporate governance and corporate performance"*.

The first step of this research was to examine the relationship between corporate governance and corporate performance. This was done by reviewing the factors that drive corporate governance and understanding how these factors can influence corporate performance. The second step was to examine the effect that entrepreneurship can have on corporate performance and the final step was to assess the effect of entrepreneurship upon corporate governance and corporate performance. This approach was derived from the literature review and the conceptual framework adopted by this author, which was influenced by the work of Shields and Tajalli (2006). As a result of this approach this author made a number of propositions which formed the basis of the research.

In order to research these propositions, the case study methodology was adopted. The applicability of this methodological approach is supported by Yin (2003), Dube and Pare (2003) and Benbasat *et al.* (1987). To carry out the research six US based high technology companies were selected for in depth research. Data sources were selected primarily from those available in the public domain, due to the fact that a number of the companies researched had ceased trading at the time the research was carried out. The data was collected with a clear understanding of the strengths and weaknesses of each data collection technique. The data was then analysed and the evidence documented.

The main theoretical conclusions derived from this research were as follows. It was concluded that corporate governance should be studied in its entirely rather than in its individual constituent components; the role and types of blockholders have changed over time but these changes are not yet adequately understood; traditional methods of aligning the interest of shareholders and management are no longer appropriate and need to be reassessed; there is a need to better understand the role of corporate founders in companies once they are no longer majority shareholders and there is a need to know how to promote and measure entrepreneurship at the individual company level. All these issues have an impact on the corporate governance, entrepreneurship and corporate performance relationship and therefore need to be understood.

The main managerial conclusions derived from this research were as follows. The importance of the appointment of Chief Governance Officers at board level was found to be vital. Equal importance needs to be given to all shareholders and not just to the largest shareholders. There is a need for continuity in the boardroom and it is necessary to re-evaluate the form and content of management executive plans. Finally, benchmarks for the measurement of entrepreneurship at the corporate level have yet to be developed.

TABLE OF CONTENTS

ABSTRACT.......... II

ACKNOWLEDGEMENTS VIII

PART A – INTRODUCTION 1

Chapter A1: Introduction.......... 1

- A1.1 Research Background.......... 1
- A1.2 Research Aim.......... 3
- A1.3 Conceptual Framework 3
- A1.4 Methodology.......... 4
- A1.5 Limitations of the Research.......... 4
- A1.6 Structure of the Thesis.......... 5

PART B - LITERATURE REVIEW 7

Chapter B1: Corporate Governance. 8

- B1.1 Introduction.......... 8
- B1.2 Corporate Governance Defined.......... 8
- B1.3 Agency Theory.......... 9
- B1.4 Legal, Historical and Financial Drivers on Corporate Governance.......... 12
  - B1.4.1 Legal Drivers on Corporate Governance.......... 12
  - B1.4.2 Historical Drivers on Corporate Governance.......... 17
  - B1.4.3 Financial Drivers on Corporate Governance.......... 21
- B1.5 Board Composition.......... 27
- B1.6 Stock Ownership.......... 33
  - B1.6.1 Stock Ownership by Board Directors.......... 33
  - B1.6.2 Stock Ownership by Institutional Investors.......... 35
  - B1.6.3 Blockholders.......... 39
- B1.7 Executive Remuneration.......... 43
- B1.8 Conclusion.......... 47

Chapter B2: Entrepreneurship.......... 50

- B2.1 Introduction.......... 50
- B2.2 Entrepreneurship Defined.......... 51
- B2.3 Corporate Entrepreneurship.......... 53
- B2.4 Entrepreneurial Leadership 56
- B2.5 Entrepreneurship and Firm Typology.......... 58
- B2.6 Corporate Governance and Entrepreneurship.......... 60
- B2.7 Conclusion 62

PART C - METHODOLOGY 63

Chapter C1: Theoretical Framework........ 64

C1.1 Research Statement – Introduction........ 64
C1.2 Development of Research Statement........ 65
C1.3 Conceptual Framework........ 66
C1.4 Development of Research Propositions........ 67
C1.4.1 Corporate Governance Propositions........ 68
C1.4.2 Entrepreneurship Propositions........ 75

Chapter C2: Approaches to the Research........ 76

C2.1 Research Approach........ 76
C2.2 Philosophical Perspective of the Author........ 77
C2.2.1 Introduction........ 77
C2.2.2 Epistemological and Ontological Underpinnings of this Research........ 77
C2.3 Methodology........ 78
C2.3.1 Introduction........ 78
C2.3.2 Qualitative Methodology........ 78
C2.3.3 Qualitative Methods........ 79
C2.3.4 Suitability of the Case Study Strategy for this Research........ 81
C2.3.5 Case Study Variants........ 83
C2.3.5.1 Single vs Multiple Case Design........ 85
C2.3.5.2 Holistic and Embedded Studies........ 85
C2.3.6 Unit(s) of Analysis........ 86
C2.3.7 Reliability and Validity of Research Data........ 86
C2.3.8 Closed Designs versus Flexible Designs........ 88
C2.3.9 Cross Case Analysis........ 88
C2.3.10 Conclusion........ 89

Chapter C3: Sampling........ 90

C3.1 Introduction........ 90
C3.2 Population........ 90
C3.3 Sampling Frame........ 90
C3.4 Sampling Methodology........ 91
C3.5 Sample Size........ 91
C3.6 Sample Selection Criteria........ 92
C3.7 Companies Selected for Research........ 99
C3.8 Conclusion........ 100

Chapter C4: Data Collection and Development of Research Objectives and Information Sources........ 101

C4.1 Introduction........ 101
C4.2 Data Collection........ 101
C4.2.1 Mapping Data Sources against the Research Framework........ 101
C4.2.2 Data Collection Sources and Techniques........ 102
C4.2.3 Strengths and Weaknesses of Data Sources Utilised........ 102
C4.3 Research Propositions Revisited........ 104
C4.3.1 Legal Drivers........ 104
C4.3.2 Historical Drivers........ 109
C4.3.3 Financial Drivers........ 112

Chapter C4: Data Collection and Development of Research Objectives and Information Sources (Continued)

C4.3.4 Board Composition Drivers.......... 110
C4.3.5 Stock Ownership Drivers.......... 122
C4.3.6 Executive Remuneration Drivers.......... 123
C4.4 Interpreting Documents.......... 123
C4.5 Rating Companies' Attitudes to Corporate Governance and Entrepreneurship.......... 124
C4.5.1 Corporate Governance Rating.......... 124
C4.5.2 Entrepreneurship Rating.......... 125
C4.5.3 Corporate Governance, Entrepreneurship and Performance.......... 126
C4.6 Conclusion.......... 126

PART D – DATA ANALYSIS **127**

Chapter D1: Corporate Governance.......... 128

D1.1 Introduction.......... 128
D1.2 Legal Drivers.......... 128
D1.3 Historical Drivers.......... 139
D1.4 Financial Drivers.......... 144
D1.5 Board Composition Drivers.......... 146
D1.6 Stock Ownership Drivers.......... 152
D1.7 Executive Remuneration Drivers.......... 159
D1.8 Corporate Governance Rating.......... 171
D1.9 Summary.......... 171

Chapter D2: Entrepreneurship.......... 177

D2.1 Entrepreneurship Research.......... 177
D2.1.1 Entrepreneurship and Corporate Performance.......... 177
D2.1.2 Entrepreneurship Metrics.......... 177
D2.2 Millers Typology of Firms.......... 179
D2.2 Summary of Research on Entrepreneurship.......... 179

PART E – CONCLUSION **182**

Chapter E1: Conclusion and Discussion.......... 183

E1.1 Introduction.......... 183
E1.2 Findings.......... 183
E1.2.1 Corporate Governance.......... 184
E1.2.2 Entrepreneurship.......... 197
E1.2.3 Corporate Governance, Entrepreneurship and Corporate Performance.......... 197
E1.3 Contributions of the Research.......... 201
E1.3.1 Theoretical Contributions.......... 201
E1.3.2 Managerial Contributions.......... 204
E1.4 Further Areas for Research.......... 208
E1.5 Conclusion.......... 210

APPENDICES

Appendix 1: Fitting Corporate Entrepreneurship Into Strategic Management. i
Appendix 2: Miller's Typology of Firms.. iii
Appendix 3: Prices and Technological Change in High Technology Industries.. iv
Appendix 4: Standard and Poor's Global Industry Classification Standard 1200 Index vi
Appendix 5: Composition of Information Technology Sector of GICS............ vii
Appendix 6: A Template for Corporate Governance.................................. xv
Appendix 7: Summary of Companies Researched..................................... xxi

FIGURES

Figure 1: A General Framework for Understanding Executive Compensation 45
Figure 2: Gartner's Framework for describing entrepreneurship.................. 53
Figure 3: Basic Types of Design for Case Studies.................................. 84
Figure 4: S&P Global 1200 Indices.. 97
Figure 5: Percentage Movements in Share Prices of Companies Selected for Research (1998-2005)... 98
Figure 6: Leverage Percentages 115
Figure 7: Percentage Changes in Interest Rates/Money Supply: December 1997 to December 2005... 129
Figure 8: U.S. Corporate Underwriting Activity 1985-2005....................... 130
Figure 9: Number of Corporate Governance Pronouncement Issued: 1997-2005... 131
Figure 10: Earnings per Share of Companies Selected for Research 148
Figure 11: The Sphere of Influence of a CGO.. 206

TABLES

Table 1:	Classifying Micro Conceptual Frameworks	67
Table 2:	Qualitative Methods	80
Table 3:	Key Characteristics of Case Study Research I	82
Table 4:	Characteristics of Case Study Research II	82
Table 5:	Criteria that the Case Study Methodology should meet	83
Table 6:	Ensuring Trustworthiness and Authenticity of the Research	87
Table 7:	Relative Strengths and Weaknesses of Qualitative Data Collection Techniques	103
Table 8a:	Information Techniques to be used in this research – Corporate Governance	104
Table 8b:	Information Techniques to be used in this research – Entrepreneurship	104
Table 9:	Legal Propositions, Research Objectives and Information Sources	109
Table 10:	Historical Propositions, Research Objectives and Information Sources	111
Table 11:	Financial Propositions, Research Objectives and Information Sources	119
Table 12:	Board Composition Propositions, Research Objectives and Information Sources	121
Table 13:	Stock Ownership Propositions, Research Objectives and Information Sources	122
Table 14:	Executive Remuneration Propositions, Research Objectives and Information Sources	122
Table 15:	Rating of Companies by Corporate Governance Traits	173
Table 16:	Rating of Companies by Entrepreneurship Traits	178
Table 17:	Classification of Companies by Entrepreneurship using Miller's Typology of Firms	179
Table 18:	Summary of Research Aims, Propositions and Findings	185
Table 19:	Summary of Companies Corporate Governance Compliance	199

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PART A: INTRODUCTION

CHAPTER A1- INTRODUCTION

This chapter presents an overview of the subject matter under examination. A background to the research matter is provided, followed by sections on the research aim, the conceptual framework of the research and the methodology of the research. The chapter concludes with sections on the limitations of the research and the structure of the thesis.

A1.1 Research Background

Joseph Schumpeter's book "Capitalism, Socialism and Democracy" (1937), introduced the hypothesis that creativity and innovation are the prime drivers of an economy. Whereas classical economic theory, expounded by economists such as Adam Smith and David Ricardo in the Eighteenth Century, assumes that an economy operates in equilibrium, Schumpeter argued that in fact an economy is cyclical and therefore subject to short and long-term booms which are the direct result of the introduction of new technologies. In "Business Cycles" (1939), Schumpeter studied the changes brought about by the introduction of steam power, electrification and the car as examples of the effects of new technologies on economies. In his later work, Schumpeter (1942) concluded that the monopolistic profits from being the first in the market are sufficient to drive entrepreneurs' creativity to develop new technologies. Schumpeter termed this drive for profits - "creative destruction". In other words, wealth in an economy increases as new products are brought to market at the expense of existing and increasingly inefficient products.

In many ways Schumpeter's term "creative destruction" and today's term "entrepreneurship" are similar in that they both involve the creation of new businesses in an economy. However, like creative destruction before it, this author believes entrepreneurship is no better understood today than creative destruction was understood in the 1930s. This is because, although entrepreneurship is seen by many today as the cure to underperforming economies (Manev *et al.*, 2005) there appears to be a lack of a clear understanding as to how entrepreneurship should be successfully implemented. In spite of this, many Western governments and governmental bodies promote entrepreneurship as one of the best ways for the West to compete in global markets (Ireland and Webb, 2007; Moore, 1997). The reason for this is that entrepreneurship is now closely linked with wealth creation (Antoncic and Hisrich, 2003; Hisrich and Peters, 1998) which in turn is seen as the way forward for economies to grow and compete in the global economy.

Along with the term "entrepreneurship" another term that is increasingly appearing in the financial press and being used by politicians is "Corporate Governance". This term, like

entrepreneurship, has many different meanings. Currently, the term is largely used in connection with the prevention of abuses or fraud by management; although Williamson (2007) states that the primary objective of corporate governance should be the promotion of corporate efficiency. This has resulted in the issuance of new laws and professional announcements to prevent such abuses. An example of this new legislation is the Sarbanes-Oxley Act passed by the United States Senate in 2002. The passing of this law has meant that both the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC) have had to adopt new policies in response to this act, which in turn has affected every major corporation in the United States.

While the prevention of fraud is of paramount importance, there is a danger that corporate governance will stifle the entrepreneurship that it is trying to protect, as the cost of governance compliance makes it uneconomical for entrepreneurs to start new businesses. Perhaps even more important, is the danger that entrepreneurs will ignore best business practices in the drive for business success. This is the dichotomy – how is economic creativity to be encouraged at the same time as checks and balances are implemented on that creativity to prevent fraud and the misappropriation of assets?

Enron is an example of where the balance between economic creativity and proper checks and balances broke down. The company was at the forefront of the world's energy trading business continually introducing new products and its corporate governance procedures seemed above reproach. "Its board was a splendid board on paper, 14 members, only two insiders. Most of the outsiders had relevant business experience, a diverse set including accounting backgrounds, prior senior management and board positions, and senior regulatory posts. Most of the directors owned stock, some in significant amounts, almost all had received stock options or phantom stock as part of the director compensation package. The audit committee had a state-of-the art charter, that gave it "direct access to financial, legal, and other staff and consultants of the Company" and the power to retain other accountants, lawyers, or consultants as it thought advisable. But if the report of the Enron Special Investigation Committee is accurate, the board was ineffectual in the most fundamental way, the Audit Committee particularly somnolent if not supine. It turns out that the independence of virtually every board member, including audit committee members, was compromised by side payments of one kind or another. Independence was also compromised by the bonds of long service and familiarity (Gordon, 2002)."

Much of the research into governance to date has been concerned with what good corporate governance is and what the value of good governance is (Kanagaretnam *et al.*, 2007; Dalton and Dalton, 2006). There have also been significant amounts of research into entrepreneurship which

has primarily been concerned with the examination of the factors that cause or drive entrepreneurship within the corporate environment (see, for example, Stopford and Baden-Fuller, 1994; Grinyer and McKiernan, 1990).

While a significant amount of research has been carried out into corporate governance and entrepreneurship, as is shown in Part B below, there appears to be little research into the relationship between these two factors and their combined effect on corporate performance in the current rapidly changing economic environment.

A1.2 Research Aim

In light of the above discussion it is the intention of this research to examine "The influence of entrepreneurship on the relationship between corporate governance and corporate performance." Stated alternatively: if poor corporate performance is often caused by a breakdown in corporate governance what part does entrepreneurship play in such performance? Does entrepreneurship cause such performance, expedite such performance or does it help improve corporate performance?

As a first step in this research, a literature review of corporate governance was carried out (Chapter B1), followed by a literature review of entrepreneurship (Chapter B2). Finally, a review of the literature of corporate governance, entrepreneurship and corporate performance was carried out which indicated that there was little research on the relationship between these three factors (Williamson, 2007; Turnbull, 1997) (Section B2.6).

While the basis of this research is founded on existing academic knowledge, this study adds to the current literature by focusing on the relationship between corporate governance, entrepreneurship and corporate performance, whereas existing literature has focused primarily on the relationship between corporate governance and corporate performance. In addition, it aids corporate managers in entrepreneurial organizations to better understand the need to balance the implications of their entrepreneurial decisions with the implications those decisions have on corporate governance.

A1.3 Conceptual Framework

The conceptual framework of this research is described in Section C1.3. This Section describes how this author intends to link all the aspects of this research, from the research aim, literature review and methodology through to the data collection and analysis so that the reader has a clear understanding of the empirical inquiry. The framework used in this research is based largely on the work of Shields and Tajalli (2006). Using this work the author decided that the research was

exploratory or gauging in nature. In addition, the exploratory/gauging "research purpose" of the research is justified by the fact that the research purpose is not specifically referring to pre-existing hypothesises or theories that are tested, but is exploring a concept or problem into which little research has previously been conducted (see Section B2.6).

A1.4 Methodology

The Methodology Section of this research (Part C) describes the step by step process to find the most appropriate methodology to conduct the research into the potential conflict discussed in the paragraphs above. This involved examining the theoretical framework of the problem (Chapter C1) and the philosophical perspective of the author (Chapter C2) which indicated that the qualitative methodology would be the most appropriate to use. This was followed by a detailed design process (Chapter C3), a discussion on the methods used to select the companies for in depth research and finally a discussion on data collection (Chapter C4).

In order to carry out this research, six companies facing rapid technological change were studied using the case study methodology, as it is hypothesised that it is in these types of companies that entrepreneurship is most likely to exist. However, it is also hypothesised that it is in such companies, that the challenges of corporate governance is most prevalent. Having selected the six companies their attitude to corporate governance and entrepreneurship was examined as well as their performance. Using Mintzberg (1973) typology of firms, each company was classified based on its entrepreneurship attributes. An attempt was then made to draw conclusions on which types of entrepreneurial companies were most or least likely to suffer from poor corporate performance.

A1.5 Limitations of the Research

Any research inevitably suffers from limitations. Although considerable effort has been made to ensure the robustness of the study, there are a number of limitations that should/need to be highlighted:

a) The majority of the companies selected for research ultimately "failed" and the two companies that "succeeded" were taken over by larger companies before the conclusion of the research. This means that many of the decision makers involved in each company were no longer connected with those companies. Consequently, much of the research has been undertaken without reference to the individuals involved with the companies, due to their unavailability, but rather through the review of secondary documents.

b) This research was undertaken in only one sector of the economy – the high technology sector. Consequently, the findings may not be generalisable to other economic sectors.

c) The research was carried out on US based or owned companies. This was primarily due to the fact that information on each company was readily available. Consequently, this research falls into the trap of being ethnocentric and Anglo-American in nature. This is another factor that limits the generalisability of the findings.

d) This study covered a specific period of time and therefore offers only a snapshot of a period of time in US economic history. A longitudinal study, which takes into consideration dynamic changes such as legislative and economic changes, may have been more appropriate in highlighting timing influences. Unfortunately, the time available to this author did not allow such a study to take place.

e) Any research involving the decision making process means that the research is primarily concerned with how and why individuals make decisions. The reasons for these decisions can be affected by extraneous factors, such as macro economic factors, which need to be considered. While these types of factors have been taken into consideration in this research, more extensive research into these factors would have been more appropriate.

f) This research has been limited to six companies. This author has made every effort to select companies that provide a representative sample of the industry sector under consideration but realises that a larger sample of companies is always preferable to a small sample in order to improve the validity of the study.

g) This study only looked at large companies. Different results may have been obtained if a larger cross-section of different sized companies had been included in the research.

In spite of these limitations, the author believes that they do not materially impair the objective of this research and important conclusions can be drawn from this research that corporations can use in their understanding of the relationship between corporate governance and entrepreneurship.

A1.6 Structure of Thesis

This thesis is comprised of five parts. Each part is subdivided into a number of chapters.

Part A: Introduction: The introduction of this thesis comprises one chapter (Chapter A1) which briefly discusses corporate governance and entrepreneurship, the current state of knowledge of these two subjects, the aims of this paper, the methodology used and the limits of the proposed research.

Part B: Literature Review: This part comprises two chapters. Chapter B1 discusses Corporate Governance, first introducing Agency Theory (Section B1.3) followed by four sections on the factors that drive governance in corporations (Sections B1.4 to B1.7). The chapter concludes with a summary (Section B1.8) of the current literature on corporate governance. Chapter B2 comprises of a discussion on entrepreneurship. Entrepreneurship is then defined (Section B2.2) and then the following items are discussed: corporate entrepreneurship (Section B2.3), the typology of firms in relation to entrepreneurship (Section B2.4) and entrepreneurial leadership (Section B2.5). Part B concludes with a review of the current literature on the relationship between governance and entrepreneurship (Section B2.6).

Part C: Methodology: The Methodology Part consists of four chapters. Chapter C1 discusses the theoretical framework of this research and develops the research statement and research propositions. Chapter C2 is the first of three chapters dedicated to the design of this research and looks at the philosophical approach of the author and the choice of methodology used in this research. Chapter C3 looks at the sampling techniques used in this research concluding with the names of the companies to be researched in depth for this research. Chapter C4 concludes this Part with a discussion on data collection aspects of this research.

Part D: Data Analysis

This Part has two chapters. Chapter D1 is dedicated to examining the factors identified as drivers of corporate governance and their effect on corporate performance. Chapter D2 looks at entrepreneurship and corporate performance. Each of the companies used in the research is rated in regards to their attitude to corporate governance and entrepreneurship.

Part E: Conclusions

The final part of the thesis comprises a single chapter (Chapter E1). It summarises the results of the research and their relevance to the stated research aim and objectives. Normative guidelines, the contributions of the research and suggestions/recommendations for future research are also presented.

PART B: LITERATURE REVIEW

This part presents the literature review that led to the presentation of the research statement and the Development of the Research Propositions in Chapter C1. The part consists of two chapters. Each chapter discusses one of the main issues of the research:

B1: Corporate Governance

B2: Entrepreneurship

Section A1.1 introduced the concepts of corporate governance and entrepreneurship and outlined the potential conflict in the two concepts. This literature review evaluates the current literature on these two concepts to understand what they mean within business to day.

With respect to corporate governance the literature is explored to determine those factors that drive how corporate governance is viewed in companies and ultimately how seriously the concept is taken within individual companies. The chapter on entrepreneurship looks at a number of issues: the overall concept of entrepreneurship, the meaning of corporate entrepreneurship and entrepreneurial leadership. The final section of Chapter B2 looks at the state of the current research on the interrelationship between corporate governance and entrepreneurship.

The aim of this literature review is to gain an understanding of the two concepts and their relationship to corporate performance, so that it can be determined if there is a potential conflict between the two concepts. If there is, there is a need to formulate a research study into how this conflict manifests itself in business and what lessons can be learnt from the empirical study of this conflict in a number of companies.

CHAPTER B1 - CORPORATE GOVERNANCE

B1.1 Introduction

Corporate Governance plays a part in the agenda of a number of different groups of people. For politicians it is of importance as a way for them to control the excesses of corporate management. For shareholders it is a way for them to keep a check on management to ensure that their wishes are being carried out. For management, it can either be an expensive hindrance to the performance of their duties or a benchmark on their performance. Corporate governance therefore has many different meanings and is as a result not easily definable. However in Section B1.2 an attempt is made to define the concept.

B1.2 Corporate Governance Defined

"The study of corporate governance is the examination of mechanisms that deter and correct managerial slack" (Triantis and Daniels, 1995, p. 1075). Cioffi's (2000) defined corporate governance as a "nexus of institutions defined by company law, financial market regulation, and labor law" (p. 574). The Organization of Economic Cooperation and Development (OECD, April 1999) offers a general definition as follows: "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs." All these definitions are indicative of the current view of corporate governance, in that they emphasise the reactive side of the subject rather than making any attempt to show how corporate governance can improve the transparency of the way companies are run or how corporate governance can help improve the performance of companies. However, this fact does not lessen the importance of corporate governance in business today and more recent research is now tackling these two deficiencies and is showing how corporate governance can be used proactively in the management of companies. This is occurring in two ways. Firstly, in the developed world, much of the research into corporate governance is about measuring the effectiveness of corporate governance in companies (Larcker *et al.*, 2005; Klein, 2002) and as such gives indications on how well management run their companies. Secondly, in emerging markets, research into corporate governance is being used to determine firm value (Baek *et al.*, 2004) and to understand how the different characteristics of corporate governance drive firm value. Consequently, in spite of the fact that corporate governance is still being used largely as a deterrent against management fraud, there are indications that corporate governance is being used in a more proactive manner. It is this latter aspect of corporate governance that this research is concerned with and forms the focus of this literature review.

Before commencing the discussion on corporate governance Agency Theory is reviewed and in particular its importance to governance. This author considers Agency Theory as one of the foundations of corporate governance, as will be seen in later sections of this research. However, there are differing views to this opinion.

B1.3 Agency Theory

Since 1932, Agency Theory has formed the theoretical backbone of how companies are governed. Ross (1973, p. 134) defined Agency Theory by stating that "...we will say that an agency relationship exists between two (or more) parties when, the designated agent acts for, on behalf of, or as representative for the other, designated the principal, in a particular domain of decision problems." Jensen and Meckling (1976. p. 5) defined Agency Theory "as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent". Shapiro (2005, p. 264) in explaining Agency Theory stated "Agency Theory dictates that ... principals will try to bridge the informational asymmetries by installing information systems and monitoring". As can be seen, the definition of Agency Theory has not changed in over 30 years, but the Jensen and Meckling (1976) definition is considered by this author to be a comprehensive description of the subject. It summarises clearly and succinctly the parties involved, the relationship between all the relevant parties and the expected outcome of this relationship.

Agency Theory therefore helps to explain the link between shareholders and management in corporations, or more particularly the link between principals and agents in an organisation and the alignment of these interests. Jensen and Meckling (1976) and Shapiro (2005) summarised the agency problem as a function of the information asymmetries created by the separation of owners and managers. Ultimately, the authors stated that owners will forego the benefits of management diversification when the costs of monitoring, contracting and controlling the management structures are too high (Francis and Smith, 1994). If these costs are high the owner will tend to retain ownership and management control of his company; if these costs are low he will be more tempted to diversify ownership in the company (Eisenhardt, 1989). Therefore, in small companies with few shareholders the alignment of owner and manager is often close. As an organisation grows in size and complexity and uncertainties increase, it has been found to be more difficult for principals to control the actions of their agents, thus the goals of principals and agents diverge (Jong and Veld, 2001; Bergen *et al.*, 1992).

The divergence of principals' and agents' interests occurs in three stages (Jones and Butler, 1992). In the early stages of an organisation's life cycle, the entrepreneur is busy establishing his business and agency problems are unlikely to occur. Once the business is established (second

stage) and the entrepreneur takes on a management role or hires a management team, that team expects to be paid a rent or salary for its efforts. Agency problems arise at this time because two things can occur. Firstly, it is expensive for the firm's owner to manage the performance of his management team and secondly, the motives of each party can diverge. In the former instance, costs of management occur because of the necessity to spend time and organisational effort supervising the actions of management. In the latter instance the risk preferences of each party can diverge based on their respective views of the opportunities presented in an uncertain environment (Eisenhardt, 1989). It is the former instance that is currently occupying the interest to shareholders. Increasingly stakeholders are seeing corporate executives being awarded large increases in remuneration while the performance of their companies fails to keep pace (Caulkin, 2007). This divergence of corporate results and executives pay is undermining the trust that shareholders have in the board members of companies. If this trust does not exist shareholders will question the value of investing in corporations.

The third stage of the entrepreneurial process is where a firm has increased in size so much that it has a new group of stakeholders with a claim on a firm's income. As well as the original entrepreneur and management team, there is a group of individuals who are shareholders. Shareholders will have a claim on the residual profits of a company as reward for the uncertainty they are bearing by investing in the company. As the size of a company increases, ownership becomes more diffused and the decision making process is pushed further down the corporate hierarchy so that, the persons who are expected to take the entrepreneurial decisions will not be rewarded with a share of the residual profits (McFall, 2004). Consequently, it has been found that the larger the company and the more diffuse the ownership, the more entrepreneurial activity within the company will decline (Francis and Smith, 1995). In companies where ownership is concentrated it has also been found that entrepreneurial activity can decrease as the ownership concentration increases (Ortega-Argiles, 2005). Consequently, there is the problem of promoting entrepreneurship in all companies as they grow.

In addition to the alignment of principals' and agents' interests, Agency Theory suggests that the different views of risk held by managers means that they will tend to be risk averse because they are only paid a base salary for taking a basic level of risk (Bergen *et al.*, 1992). Also, the majority of an agent's time and effort is invested in the business in which he is working, so that the opportunity for him to spread his risk is limited. The business owner on the other hand, has additional intellectual and financial capital that is not invested in the business, so he is able to spread his total risk over a number of business opportunities. This makes the business owner more likely to have a propensity for risk.

Corporate governance, if effectively managed, can mitigate the "Agency" problem. Jones and Butler (1992) stated at the conclusion of their research, that innovations in organizational structure and control and reward systems will mitigate the problems between principals and agents. Since the publication of Jones and Butler's article many of their recommendations have been implemented in world class organizations. However, the agency problem will continue to occur as long as new businesses are created and grow and new relationships between principals and agents are formed.

In spite of the extensive research into Agency Theory a number of authors have suggested that there is no Agency Theory paradox (Boatright, 1994; Freeman, 1994) because managers are inherently ethical in all their dealings (see following paragraph). Other authors (Simmons and Lovegrove, 2005) take a similar view, but contend that with the changes in the business environment – the advent of a "network society" and corporate social responsibility concerns – Agency Theory is of less importance today than it once was.

In addition to the views of the authors expressed above, other authors view the foundation of corporate governance in relation to their view on the role of companies or with regards to their cultural background (Turnbull, 1997). The Stewardship Theory (Donaldson and Davis, 1994) views managements as essentially trustworthy who act as good stewards of the assets entrusted to them. The Resource Dependency Theory views a management's role as a link between the firm and the resources on which it is dependent (Pfeffer, 1972). The Stakeholder Model (Clarkson, 1994) proposes that firms operate within a system where the host society provides the necessary legal and market infrastructure for the firm's activities. The Efficient Market Theory (Malkiel, 2003) contends that the market is so efficient in interpreting financial information, that incentives or deterrants for management to act in the best interest of their companies are not needed. However, recent business scandals such as Enron, Tyco International and WorldCom and the recent Credit Crisis, indicate that the Agency Theory is still very relevant in the business world today.

To understand further the issues of Agency Theory and corporate governance, attention will now be turned to factors that drive governance within a company. Despite the efforts of this author to identify research that clearly summarises the factors that drive corporate governance, little such research was found. Consequently, a detailed examination of the current literature was made to find research that describes the factors that affect corporate governance. This research identified certain factors that affect corporate governance, which in turn influences the relationship between owners and principals and affects the way a company acts. These factors were outlined in Section A1.2, but are now discussed below in greater detail.

B1.4 Legal, Historical and Financial Drivers of Corporate Governance.

A review of the literature on corporate governance shows that there are six broadly defined, but interrelated factors that drive corporate governance (Nayak *et al.*, 2007; Larcker *et al.*, 2005; Bellalah, 2004; Djankov *et al.*, 2003). These are legal, historical and financial influences, board composition, stock ownership by board members and institutional owners and executive remuneration. The first three factors are discussed in Section B1.4 while the latter factors are discussed in later sections of this chapter.

B1.4.1 Legal Drivers of Corporate Governance

The legal framework under which a corporation is incorporated and operated, regulates the relationships between stakeholders, management and employees. This regulation affects two major stakeholders; the investors and creditors (La Porta *et al.,* 1998). These two groups are crucial to any company, because they provide the initial and working capital with which companies operate, and as such have different rights under every legal system. Investors typically exercise power within a corporation by exercising their right to vote for directors. This right is conferred on the investors by the fact that they own shares in the company. Creditors' power, on the other hand, comes from the fact that they are able to repossess the company's assets in the event of non-payment of bills. These two stakeholder groups are not only treated differently in the eyes of the law, but their rights vary from country to country, which influencing the decision makers when they come to decide where companies are to be domiciled.

Today the study of incorporation laws of different countries is extensively based on the work of La Porta and his co-authors (2000, 1998, 1997). These authors discussed the differences between legal systems, the implications of these differences, but more importantly the amount of protection each legal system affords the different classes of stakeholders. La Porta *et al.* (2000, 1998, 1997) concluded that the amount of protection given to each class of stakeholder by a legal system, forms the basis of corporate governance for those companies in that legal system.

The rights conferred on shareholders and creditors helps to explain the financial and ownership structure of companies (Bebchuk, 1994; Harris and Ravi, 1988). Historically, commercial law is based on two different traditions: common law, which is English in origin, and civil law, which is based on Roman law. The latter tradition is further subdivided into French, German and Scandinavian groupings. Countries have been classified into each of these grouping largely on the basis of work carried out by Reynolds and Flores (1989). The importance of these groupings of countries is discussed below.

With respect to the rights of shareholders, La Porta *et al.* (1998) state that common law countries afford the best protection for them, while French civil law affords the least protection. Companies adhering closest to the strict principle of one-share-one-vote, best protect shareholders (Grossman and Hart, 1988). Companies in which votes are closely tied to dividends offer even more protection to shareholders. However, even this principle can be diluted to favour either minority or majority shareholders. At one end of the scale large shareholders can achieve an unfair advantage over small shareholders by such practices as issuing non-voting shares or founder's shares with high voting rights. On the other hand, minority shareholders can achieve an advantage over large shareholders, because the law allows such practices as proportional representation voting for directors and gives shareholders the right to challenge directors' decisions in open court.

In the case of creditor rights, common law countries offer creditors more rights than those afforded to corporate managers, while once again, French civil law affords the least protection. In the former instance, being given the right to be paid first from any corporate assets can protect secured creditors or restrictions can be placed on managers seeking court protection from creditors. In the latter case, companies can be protected by laws which do not allow an automatic stay on assets or companies may have an unimpeded right to petition the courts for reorganization (La Porta *et al.*, 1998).

Other factors that play a part in determining the effectiveness of legal systems on governance are the efficiency of the judicial system, the rule of law, corruption, the risk of expropriation and the risk of contract repudiation. These factors are not discussed in further detail, as corporations prefer to incorporate or locate in areas where the judicial system is efficient, the rule of law is in operation and there is some protection against corruption, expropriation and contract repudiation. Above all, companies prefer order, control and stability in and over their operations rather than uncertainty (Volberda, 1997; Mascarenha, 1982). Where there is less likelihood of stability corporations will only incorporate through necessity rather than because of a feeling of commitment to the country in question.

Although La Porta *et al's.* many articles are some of the most widely read articles on economics, finance and law and dominate the research on the classification of legal systems, criticisms have been raised as to their methodologies (Siems, 2005). These criticisms centre around a number of issues. Firstly, there is the danger of authors tending to impose their own home grown conceptions on other countries ways of doing things. Also their classifications of countries' legal systems are based on their conceptions which may not be universally agreed. Secondly, when studying one aspect of an economy there is a danger of taking this one aspect out of context.

Therefore, simply stating that common law stock exchanges are more efficient fails to take into consideration the wider aspects of the history and culture of that country. Thirdly, in the case of La Porta *et al.* they base their measurement of quality on the US standards with the assumption that this is the "best" standard. However, this may not be the case for all economies. Finally, in any classification system this author believes that there are so many variables that sometimes an important variable will be overlooked. For example, the influences of culture may not be fully understood and will therefore be overlooked.

In spite of the expressed reservations about the research of La Porta *et al.*, it has contributed significantly to the understanding of corporate law across the world and will remain the standard by which countries legal systems are classified.

As discussed above, the regulatory environment in which a company operates affects their corporate governance structures by governing the rights of the shareholders, creditors and also the rights of companies themselves. The overriding requirement of any regulatory system must be that it enables an organisation to deliver "value" to its stakeholders. This can be done in two ways. Firstly, within any legal framework, a macro-economic environment must be established that allows companies to operate in a stable financial environment. For example, the size and credit worthiness of the stock markets and credit markets in the economy should be such that companies have sufficient access to capital when it is required. This in turn will help companies achieve stability in the marketplace. Secondly, the regulations that govern how companies operate should not be so complex that they hinder companies from operating efficiently and profitably.

In the case of a macro-economic environment, a company is primarily concerned with the stability of the financial markets of the economy in which it operates. In this context, Das *et al.* (2004) define financial stability as an environment without banking crises but with asset price stability. Caprio and Klingebiel (1996, p.5) on the other hand define a banking crisis as "when a significant fraction of the banking sector is insolvent but remains open" and the European Central Bank has defined it with reference to asset prices by stating that asset price stability occurs when a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the Euro area of below 2% is achieved. The Das *et al.* (2004) definition presupposes that there are institutions in place in an economy that will guarantee, or at least attempt to control, those factors that lead to instability. In the last twenty to thirty years, with the increasing liberalization of the financial regulations, the financial regulatory bodies, such as central banks, have found that their work has become more complex and has come under increasing scrutiny. This has occurred because the financial liberalization has brought with it increased liquidity and global competitiveness so that

entrepreneurial opportunities now exist that were unknown thirty years ago. These factors, along with improving technologies, threaten the very existence of the old established industries. This, therefore, is the challenge – how to maintain a stable economic environment while not overburdening an economy with regulations that stifle economic activity.

In order for the regulatory bodies mentioned above to work effectively, there must be good regulatory governance (Arnone et al., 2007; Podpiera, 2006; Das et al., 2004). This is defined by Das *et al.,* (2004, p.13) as "(a) the capacity to manage resources efficiently and to formulate, implement and enforce sound prudential policies and regulations....and (b) the respect of the agency for the broader goals and policies of the (elected) legislature". In turn, the authors identified four factors that form the basis of good regulatory governance: independence, accountability, transparency and integrity. All these factors are dependent on each other and interact and reinforce each other to provide good governance. The situation therefore exists, that stability in the financial markets, the efficient working of the regulatory bodies and the health of corporate governance in an economy are all interrelated.

The regulation of the financial markets in the US dates back to the 1920's and started primarily in response to the stock market crash of 1929. New regulations have been added over the years, but more recently a plethora of regulations have been enacted due to the emergence of a number of corporate scandals that shocked both the government and the public due to the magnitude of the fraud involved. In spite of the now numerous regulations three fundamental questions still remain largely unanswered: who should regulate, how to effectively regulate and how to enforce the regulations enacted (Coglianese *et al.,* 2004)? How these questions are answered will largely decide the future direction of corporate governance.

At present, governments are responsible for regulating corporations supported by non-governmental, self regulating bodies. This mixture of enforced regulation backed up by self-regulation has largely come about because the public has demanded governmental action in response to corporate fraud (Witherell, 2002) but also because the professional bodies representing interested parties wish to be seen as proactive players in the field of corporate governance. Both enforced regulation and self-regulation have advantages, but the most important and difficult aspect of any regulation is achieving an equitable balance between ensuring the rights of shareholders and managers. If the rights of either party are subjugated to the rights of the other party any potential value that regulations intended to achieve is lost because corporate governance is most effective when there is consensus amongst all parties involved.

The question as to how to effectively regulate comes down to the question whether enforcement should be by rules or principles. Rules have historically been seen as the most effective way to regulate, as evidenced by the passing of the Sarbanes-Oxley Act of 2002, which introduced numerous detailed rules for corporations to follow. Unfortunately, every rule is open to interpretation, which often means that the final interpretation is left to the courts. This leads to further regulations which in turn can be interpreted or even manipulated as desired. Principles are also open to interpretation, but in this case principles are usually backed up by a non-governmental body that is ready to provide guidance on those principles, usually without the delays experienced in legal action. However, principles introduce a certain level of uncertainty, which again gives the courts the opportunity to intervene.

Behind any regulatory system, lies a political system that is largely responsible the economic rights enjoyed by both investors and employees and therefore for the strength of the corporate governance in an economy. However, the political process responds to economic interests, so the two forces are closely linked. In any economy, there will be those forces that want high investor protection, while at the other end of the spectrum are those that require employee protection. Each force is motivated by personal interests that can change over time. Therefore an entrepreneur will prefer low investor protection to increase his profits, but if an entrepreneur sells the majority of his stake in his company to a third party, so that he becomes a shareholder rather than an entrepreneur, he will then place greater emphasis on high investor protection. The economic rights of each party are therefore largely dependent on the structure of the political system in operation (Pagono *et al.*, 2001; Weingast, 1995; Przeworski and Limongi, 1993). Pagano *et al.* (2001) have shown in their study of OECD countries that economies where the political system has historically favoured coalition governments have low investor protection and high employment protection. Those economies that tend to have only two or three major political parties, so that coalition governments are not the norm, tend to have high investor protection and low employment protection. Examples of countries that have tended to have coalition governments are Continental European countries and Japan, while Anglo-Saxon countries tend to be examples of governments that are non-coalition.

An alternative view of the economic rights enjoyed by both investors and employees, is one based on the degree of equity ownership in an economy (Pagano *et al.*, 2001). This view shows that under certain circumstances, if equity ownership is diffused, the political system will favour investor rights as opposed to employee rights. This view is supported in a study by Biais and Perotti (2002). If on the other hand, equity ownership is more concentrated, the reverse will be the case. Both views however, give no substantial reasons for the differing levels of investor protection. A third view on the economic rights of investors and employees says that these

differing rights can be attributed to ideological factors rather than political or economic factors. Roe (2000) has suggested that the differences between structures in the United States and Europe are due to American ideology on the one hand, and the history of social democracy on the other. This is examined in more detail in Section C1.4.2 below.

B1.4.2 Historical Drivers of Corporate Governance.

This section looks at the part history can play in the governance structures of a company. Defining the components of history that can drive governance is not simple. Consequently, a broad spectrum of the subject is taken in an attempt to understand the most important drivers. This section looks at the macro history drivers on governance, individual companies' history on governance and finally looks at how individuals' backgrounds can affect governance.

With regards to the historical drivers of corporate governance, studies have tended to concentrate on the influence of firm characteristics on governance (Durnev *et al.*, 2005 and Francis *et al.*, 2005) but Doidge *et al.* (2007) following on from the studies of Bushman *et al.* (2004), Dyck and Zingales (2004) and Stulz and Williamson (2001) have developed and tested a model that showed that country characteristics, rather than firm characteristics largely explain the variance in governance ratings of companies around the world.

As mentioned earlier, any study of a country's historical influence on corporate governance will involve aspects of its legal institutions. In this regard, different countries have taken different approaches and attitudes towards corporate governance. For example, countries whose legal systems are based on common law emphasise the responsibility of boards to maximise the wealth of shareholders, whereas German law emphasises the need for the involvement of workers in the running of companies. Arguments have been put forward that laws and corporate governance based on the Anglo-Saxon model are more efficient and other countries should move towards this model (Guillen, 2000). However, while the United States and the United Kingdom were the dominant economic powers of the 19th and 20th centuries, the rise of Germany and Japan in the 1970s and 1980s, along with the recent rise of China and India have called into question the superiority of the Anglo-Saxon model. The question this section is trying to answer is the part a country's history plays in firms' attitudes to corporate governance?

A nation's history is largely affected by what can broadly be termed "the culture" of the country. For example, whereas it is convenient to assume that all businessmen are driven only by the profit incentive, this is not necessarily true. American culture or attitudes dictate that wealth creation is the primary reason for being in business, so there is no shame in selling out the family firm to a publicly held company. Italian culture, on the other hand, prizes family run firms and even today

the economy is primarily made up of this kind of firm. From a different perspective, Americans very much prize the role of the individual, often typified in films by the individual standing up against authority. Germany is a much more consensus driven country typified by the fact that trade unions have the right to board representation. Similarly, Coffee (2001) found that social norms can play a part in the way companies are structured and operate. He noted that the low crime rate in Scandinavia helps to explain the low rate of expropriation of minority shareholders. In Japan, Teranishi (2006) has shown that the country's history of weak investor rights is often attributable to the social history of the country rather than any other reason.

Currently globally, the concentrated form of ownership is much more prevalent than diverse ownership, which is found more often in Anglo Saxon economies. The former form of ownership has been shown to have a positive effect on a firm's share price (Filatotchev *et al.*, 2007; Kapopoulos and Lazaretou, 2007; Demsetz and Villalonga, 2001). It also provides investors with greater returns although it does significantly strengthen the position of small groups of shareholders. At the same time it puts the rights of minority shareholders at risk from an agency perspective (Denis and McConnell, 2003). On the other hand under Anglo-American corporate law, where corporate ownership is much more widespread, legal protection of all shareholders' rights is more prevalent. This means that the wishes of all shareholders will be taken into consideration by management when strategic decisions are made, even to the point where one company is considering a hostile takeover of another company (van Ees *et al.*, 2003).

A problem that arises when trying to measure the effect that culture has on an economy or corporate governance, is that it is difficult to define culture in such a way that it can be measured. Licht *et al.* (2005) state that when trying to define "culture" they are defining the term in subjective terms due to problems with trying to define it objectively. Consequently, religion is often seen as one alternative measure to culture as economies can be classified by their religious origins. Thus, in relation to corporate governance, the common classification of Protestant versus non-Protestant economies is the most prevalent classification. At this fundamental level, the effect of religion can be seen when studying the economics of European countries at the time of the Protestant Reformation. Although the rise of Protestantism speaks more for the protection of creditors than shareholders, its rise had a fundamental effect on the development of capitalism. For example, the Catholic Church specifically prohibited the practice of usury (Stulz and Williamson, 2001) whereas Calvinism saw the payment of interest as a normal part of business practise. This crucial difference therefore made it possible for debt markets to develop.

As with all classifications, any classification based on one factor is open to dispute. In the case of religion, Licht et al. (2005, p.231) state that classifying countries by religion "fails to capture

the richness of cultural differences". This is especially true when trying to divide countries or economic styles simply based on whether or not the religion of the country is either Catholic or non-Catholic. For example, this mode of classification fails to take into consideration other religions, the level of religious commitment in a country and to a certain extent, does not even describe a country's culture, only a component of its culture.

As important as religion is in defining a country's culture, personal "self interest" will also play a part in the formation of a culture (Bebchuk and Roe, 1999). Thus, for example, an economy that is dominated by firms epitomized by concentrated ownership will have governance structures that favour that type of ownership. On the other hand, an economy dominated by firms with diverse ownership will have governance structures that favour that type of ownership. The reason for this is that, under the former scenario, the company's owners will not want to move to a diverse ownership structure, as this will mean they will have to share the value of the company with third parties. In the latter scenario, the reverse situation occurs, in that the many owners of the firm will not want to lose the value in their company to a more restricted group of owners. Thus, to a certain extent, any existing form of corporate ownership, and thus corporate governance, will tend to be self-perpetuating. This is also true where a company enters a new market or economy. John and Kedia's (2002) research has shown that companies tend to structure their governance regulations to make up for the deficiencies of the regulations in the economy. This will, for example, improve a company's ability to raise capital in the external markets. Similarly any deficiency in a country's governance structures will be mitigated by companies increasing their diversification in countries with weak investor protection. The increased diversification has a more positive effect on these companies' valuation than those companies with good investor protection (Fauver *et al.,* 2003).

The term "culture" has so far been largely defined at a national level. National culture shapes all those that belong to that culture. This is especially true of the effect of national culture on individuals. Similarly, individuals affect the culture to which they belong. This is true of leaders in a culture and indeed of leaders of any organization. Thus charismatic leaders produce the very "best" from employees as they are able to effectively motivate them (Luthans *et al.,* 1998). The rise in the importance or influence of charismatic leaders co-insided with a period in the latter part of the 20th Century that was characterised by an intense interest in a number of individual business leaders. In some cases this interest was generated by self-publicity which was well deserved as these leaders grew their companies in both size and profitability. In other cases, these leaders received attention because of the size and consequences of their business failures.

Conger (1990) identified three skill sets that defined whether or not a leader would be successful: a leader's strategic vision, communications skills and management practices. However, a leader's strategic vision can lead to market failure if any one of the following events occurs:

- There is an inability to understand changes in the market. These may be technological changes, changes in consumer wants or failure to understand changes brought about in the marketplace by competitors;
- The leader overestimates his understanding of the market place thereby substituting his needs ahead of what the marketplace demands;
- There is an underestimation of the resources required to fully execute the leader's vision.

The consequences of any one of these events occurring can range from a company losing market share to ultimately the company failing. For example Henry Ford, buoyed by his previous successes in the marketplace, believed customers would always buy his cars even if he sold them in only one colour – black. This error allowed other car manufacturers to gain market shares at his expense such that Ford has never regained the title of being the biggest car manufacturer in the world.

With the potential price of failure so high, it is a valid question to ask – why do leaders take risks that can undermine their companies? The simplest answer is that once leaders have made a decision they are unable to go back on it. This may be due to pride or perhaps an unwillingness to admit that they made an error of judgement. Often these situations are made worse if the leader has surrounded himself with acolytes who themselves are unable to admit their mentor may have made an error.

A leader's inability to admit his fallibility is just one trait of a dominant leader. The consequences of this trait can be serious. Leaders often display characteristics that disrupt a whole company. For example, they can be poor interacting with staff either at the board level or with subordinates. An entrepreneur is usually successful initially because he is an "ideas man". The skills required to implement an idea with a small team are very different from those required to run a large organization. Thus, if an entrepreneurial company floats on the stock market it, will require non-executive directors whose outlook on business practices may be very different from those of the founder. This scenario can lead to a board becoming moribund giving competitors' time to overtake them in the marketplace.

Similar problems can occur between entrepreneurs and employees. The drive and determination that makes entrepreneurs successful also means that they tend to be autocratic, controlling and

impulsive which alienates peers and subordinates. In addition, if they are very successful they tend to lack attention to detail and often become more absorbed with their own fame rather than concentrating on running the business.

While it is relatively easy to critique poor leadership it is harder to define what makes a good leader. The simplest answer would be to suggest that a leader needs charisma in order to be successful. However, as with any single style of leadership, continuous charismatic leadership will become "routinized, depersonalized and deradicalized" (Takala, 1998, p. 795). To combat these traits Goleman (2000) has defined six leadership styles: coercive, authoritative, affiliative, democratic, pacesetting and coaching. Each style of leadership is very different and no one style is more likely to succeed than any other. Instead, the effective leader is a person who displays flexibility and is able to switch between different styles as the situation demands. If a leader is unable to switch between leadership styles, then the most effective way around this problem is for him to ensure that different members of the management team possess the right mix of styles to ensure that the team as a whole is successful.

B1.4.3 Financial Drivers of Corporate Governance.

The following financial factors can influence the corporate structure, governance and performance of corporations:

- The sources of equity;
- The sources of debt or external finance and
- The tax and regulatory regimes under which a company operates.

This section will examine the ways that each of these factors in particular drives governance. As will be seen in the following paragraphs, the above three items are all interrelated and therefore the interrelationship between each item must be borne in mind throughout the discussion.

The relationship between equity and debt financing is referred to as "leverage". Leverage is generally measured in two ways. The first measure shows the amount of debt that a company has as a percentage of its total debt and equity and is measured as follows:

$$\text{Leverage} = \frac{\text{Total Debt of a company}}{\text{Total Debt and Equity of a company}}$$

This method indicates, to a certain extent, the influence of shareholders. If there is a low debt to equity ratio, there will be more assets of the company to be distributed to the shareholders, in the

event that the company is closed down, after the debt holders have been paid, than if there is a high debt to equity ratio.

Leverage can alternatively be measured by dividing the company's debt by the book value of assets. This ratio will show how highly the assets of the company are leveraged and, while important from a governance perspective, is not as significant as the debt to equity ratio as it does not tell a potential shareholder or creditor how secure their investment in a company will be. In this section of this thesis the debt to equity ratio is the leverage that is discussed.

In a perfect financial system, the availability of financial resources to businesses would be entirely dependent on the quality of any underlying assets, either physical or intellectual, against which a company wishes to raise capital (Raghuram and Zingales, 200). However, there is no perfect financial system and the above authors have shown that in practice, often the ease with which companies can raise finance is largely dependent on how developed the financial sector of an economy is.

In spite of the above comments, two views have shaped the discussion on the capital structure of firms. Leland (1998, p. 1213) summarises the view of Modigliani and Miller by stating "the arbitrage argument shows that, with fixed investment decisions, non-firm claimants must be present for capital structure to affect firm value. The optimal amount of debt balances the tax deductions to affect firm value. The optimal amount of debt balances tax deductions provided by interest payments against the external costs of potential default". Alternatively stated, Modigliani and Miller (1958) state that in theory, assuming perfect and complete capital markets, the capital structure of a company will have no effect on its investment decisions. Under these circumstances, a firm's management main purpose should be the maximization of profits and the firm's value. No time is required to be spent on financing issues. However, this view of the capitalist markets is simplistic (Yu Wen *et al.*, 2002; Smith, 1970). The capital structure of a company has profound effects on how a company is run. Williamson (2007) states that debt and equity are not merely alternative financial instruments, but are also alternative modes of governance. In addition, the above view is simplistic because of the multiple ways that debt can be used to finance companies.

The alternate view held by Jensen and Meckling (1976) states that investment decisions cannot be independent of capital structure. The authors suggest that shareholders and bondholders will be in conflict over wealth sharing and risk taking. Bondholders may be at a disadvantage if a company invests in riskier projects than was originally envisaged – the "asset substitution" problem. The assumption of more risk by companies than the bondholders originally agreed to

can raise the cost of that debt. Again, purchasers of investment grade debt have historically had little upside but large potential downside, while investors in junk grade debt have experienced the opposite. Therefore, all debt holders have a vested interest in ensuring that they are adequately protected (Klock *et al.*, 2004). In a takeover situation, if a company has anti-takeover provisions in its Articles there may a significant shift in wealth potential from debt holders to shareholders, as more power is placed in the hands of the shareholders.

With respect to corporate leverage, Berger *et al.* (1997) argue that managers do not always implement the optimum capital structure for their companies. Instead they resist corporate governance pressures and adopt capital structures that will optimise their entrenchment in their companies. An optimised capital structure involves achieving a balance between equity and debt financing. However, managers may not make decisions that optimise their companies' leverage choices for a number of reasons. Less leverage normally means that there is less risk in a company so managers will feel less threatened. Similarly, if there is less leverage there is less need to pay out large sums of money to service the debt. This in turn, will mean that the management will be able to conserve the cash resources of the company, which can then be spent on projects favoured by it.

On the other hand, there are reasons why managers may increase the leverage of their companies beyond an optimal point. If leverage ratios are maintained at a high level the equity levels of management are not reduced thereby not threatening their voting power. Alternatively, by maintaining high leverage levels managers have the possibility of preventing takeovers of their companies. Venture capital companies will often take over a company and finance the take over by leveraging the company's assets. However, if a company's assets are already leveraged this will make it harder for the venture capitalists to raise additional financing on the company's assets.

Discussions on the optimal capital structure of companies have been ongoing since the Jensen and Meckling (1976) article on Agency Theory and the capital structure of companies. While there may never be complete consensus on this issue, there are a number of theories, in addition to the two detailed above, that have influenced the thinking about the capital structure of a company. Frank and Goyal (2003) summarised these as follows: (1) the Pecking Order Theory by which companies will finance their activities, first through retained earnings, then by debt and finally through equity. (2) The Market Timing Theory whereby companies use either equity or debt depending on the cost of each source at any time. (3) The Tax/Bankruptcy Trade-off Theory where companies chose between the tax saving benefits of debt and the expected costs of bankruptcy. (4) The Agency Theory which states that company managers may be tempted to

spend a company's excess cash flows and therefore a company should take on significant amounts of debt to prevent managers doing this. (5) Stakeholder Co-investment Theory where companies use as little debt as possible in order to encourage all stakeholders to invest in the company. Each theory predicts a different optimum debt to equity ratio for companies and therefore the power held by management within their companies.

Empirically, certain relationships surrounding leverage have emerged. Schoubben and Van Hulle (2004) listed the following firm characteristics that were determinants of corporate leverage: company size, profitability, the variability of profits,(an indicator of company risk) the growth potential of the company, the type of assets owned by a company (the ease with which they can be collateralized) and the size of a company's non tax debt shields such as depreciation and investment tax credits. With respect to leverage, the authors also note that existing literature shows that there are both advantages and disadvantages for companies being quoted. The transparency offered by quoted companies would indicate that debt financing should be more readily available to such companies and therefore they will be more highly leveraged than unquoted companies, although quoted companies are faced with the increased agency costs from being quoted. This does not mean unquoted companies do not have access to debt financing, but that sources tend to be fewer in number and more expensive. In spite of this expectation of a higher level of leverage by quoted companies, Schoubben and Van Hulle (2004) have shown that on the whole quoted companies tend to be less leveraged than unquoted companies. This, they explain, is in line with the Pecking Order theory.

There has been much discussion on the optimum leverage of companies. As discussed above, how developed the financial markets are in a country will have an effect on the leverage of a company. However, a firm's appetite for debt is equally important. Assuming that a company can obtain a debt rating it must go through a decision process that in itself will affect its leverage. Alternatively, if a company decides not to seek a bond rating, this can also affect its leverage. Faulkender and Petersen (2006) map out the decision making process available to a company which shows, based on certain decisions, what kind of debt is available to a company, from investment grade debt to "junk bond" debt. It depends on the grade of debt a company seeks as to the corresponding leverage ratio.

Whatever leverage a company decides upon, the ultimate objective of a company must be to maximise the total value of the leveraged company (Ju *et al.*, 2005). Ju *et al.'s* (2005) model, based on this premise, calculates the optimal debt to capital ration is 15.29% whereas in 2000 the median ratio of companies' in the Compustat database was 22.62%. This indicates that the average company is not underleveraged.

An alternative view of a firm's optimal capital structure is taken by Bradley *et al.* (1984) who state that the optimal structure will involve a trade off between the tax advantage of debt and various leverage related costs. In their research the authors examined the leverage ratio of twenty five industries. The ratios ranged from 9.07% to 58.25%. However, the research covered the period from 1962 to 1981 that was a number of years before the founding of the majority of companies under research. In spite of this the authors drew a number of conclusions that are still relevant. Regulated industries are the most highly leveraged, the volatility of a firm's earnings and the amount it spends on research and development and advertising is inversely related to its leverage. Therefore, there is no one optimal leverage ratio for all companies, rather leverage ratios will vary across industries and firms depending different factors. One of these factors is the type of debt available in the marketplace.

Corporate debt can take many forms, from trade debt through to bank loans and structured debt with unrelated third parties. Whichever form of debt a company assumes, a creditor exerts influence over a company through two courses of action: voice and exit (Jensen, 1989; Hirschman, 1970). Voice refers to a creditor trying to influence a company to correct an unfavourable course of action, while exit refers to a creditor terminating his relationship with a company primarily in response to a company's failure to correct management slack. Of the two courses of action, the "exit" action is the hardest for management to react to because, whereas the voice action is either effective or ineffective, the reason for the exit action must be understood before management can react (Jensen, 1989). However, there is the possibility that management will never understand the reasons for the exit action, so it is impossible for it to react effectively.

As well as informing management of their dissatisfaction, it is through both of these actions that creditors have the ability to send messages to other corporate stakeholders signaling that they are dissatisfied with a management's ability to run the company. How other stakeholders react to these signals will depend on their own particular circumstances and their relationship with the particular company. However, due to the often close relationship between companies and their lenders and creditors, any adverse action by one lender, such as the withdrawal of a line of credit, will be quickly disseminated by the capital markets (La Porta *et al.,* 1998) due to the almost instantaneous information flow in the capital marketplace.

The degree of influence that creditors and lenders have over companies is dependent on a variety of factors in addition to the "voice and exit" strategies. In the German and Japanese economies banks tend to be large providers of corporate debt and in many cases hold equity stakes in companies. Collin and Bengtsson (2000) and Balakrishnan and Fox (1993) found that debt providers prefer stable profits and have no incentives to participate in risky operations. This is

because debt providers or banks want the companies they invest in to be able to service their interest and debt payments, and because banks do not require individual companies to diversify their risks as they can do this themselves by holding a large portfolio of investments.

As discussed above taxation plays a part in any leverage decision to be taken by a company, primarily because of the Tax/Trade-off decision that has to be made. However, taxation and corporate governance are related in a further way because taxation on corporations is often seen by shareholders as a diversion of their rightful profits from themselves to the central government. In some extreme cases, shareholders resent this diversion as they believe that governmental spending is often harmful to the efficient working of a capitalist economy. The link between taxation and governance was first identified during the Presidency of William H. Taft who in 1909, when introducing federal corporation tax, noted that the right of the government to raise taxes on corporations incidentally gave the government a supervisory role in all corporations.

From this early start, the role of taxation in corporate governance has expanded considerably. Desai *et al.* (2005) have shown that the level of corporation tax affects the amount of income insiders divert from companies. They have also shown that stronger tax enforcement can raise the stock market value of companies. A different aspect of corporate taxation is raised by Morck and Yeung (2004) who state that the taxation of dividends is intricately connected with corporate governance. Dividends remove funds from companies that would otherwise invest them poorly. The lower the tax rate on dividends, the less likely firms are to retain surplus cash and thus engage in empire building. The Roosevelt Administration introduced taxation as one way to break up the pyramidal business groups that were prevalent at that time. So successful has this policy been that the United States is one of the few countries in the world that does not have business pyramids in its economy. An alternative view is that, because governments rely extensively on corporations for their funding, this makes governments one of the largest de facto minority stakeholders in all corporations. The question then arises whether the government brings any benefits to the other stakeholders and in particular the minority shareholders. Desai *et al.* (2003) make a case that while historically corporate taxation is seen as having no effect on corporate governance, this is not in fact the case. The aspect of corporate taxation and governance that the above authors focus on is the amount of dividends paid to minority shareholders in relation to the amount paid to the controlling shareholders. The authors contend that higher taxation rates lead to greater managerial diversion of profits at the expense of minority shareholders. This is because as tax rates rise there are increased returns from avoidance strategies. By contrast, increased regulation backed up by enforcement will reduce the potential for the diversion of profits by majority shareholders as the likelihood of the fraud being discovered increases at the same time as the penalties for such fraud increases.

Related to the issue of taxation, there is an additional factor that needs to be considered when evaluating the financial drivers of corporate governance. This is the quality of the accounting standards in the company's country of origin (Tzanetakis and Poddar, 2004; Jackson, 2003; Viets, 2003). An example of how this factor can affect the governance of a company is the case of stock options and their use to incentivise staff. While the granting of options was common place in the late 1990s there have been calls by many accounting bodies for their use to be severely curtailed. Any actions along these lines would change the governance structures within companies as one of the main incentives used by owners to incentivise their agents would no longer be available to them. Exactly how the removal of such a major incentive for agents to act in the best interests of their stakeholders is difficult to measure.

While there appears to be a movement towards the standardisation of international accounting standards in the Anglo Saxon corporate environment, this standardisation is not occurring on a worldwide basis. Consequently, local accounting standards and tax regimes can still have as significant an impact on governance as legal regulations. However, in those cases where the standardization of international standards is taking place this may not in itself be a good thing. Evans (2004) raises a number of concerns in this regards, centering around language, culture and thought. She points out that technical terms are hard to translate from one language to another leading to possible confusion. In addition, in Section B1.4.2 the influences of history and culture were discussed and the part they play in different countries interpretation of governance. This influence cannot be eradicated simply by the writing of guidelines. Finally, the legal concepts of one country may not exist in another country thereby making the implementation of international standards impossible.

B1.5 Board Composition

Over the last quarter century the role of the board of directors has changed just as the ownership of corporations has changed. Large institutional investors now control over 50% of the shareholding in the largest corporations in the United States (Williamson, 2007). As a result directors' constituents have changed and whereas the role of directors was to try and ensure the wishes of a disparate group of shareholders their role is now more focused as the disparate group of shareholders has reduced in size. While this fact should make the role of the director more focused, it raises governance issues with respect to the minority shareholders.

The internal governance of a company, established by the company itself, has been found to play a significant part in an organisation's performance (Adjaoud *et al.*, 2007; Yermack, 1996). Boards, by the very fact that they are shareholders' representatives, have the power and obligation to provide direction to a company's management team. Indeed Williamson (2007) states that the

main role of the board is to promote efficiencies within any company so that the composition of a board will be a factor in determining a board's desire and ability to implement governance and entrepreneurship within a company.

Boards of directors have four main roles: executive, monitoring, instrumental and delegation (Williamson, 2007; Hillman and Dalziel, 2003; Lehn *et al.*, 2003; Baysinger and Butler, 1985). The importance of each function is dependent on the number of directors on a board who specialise in each function. Thus, executive directors are usually current or former employees of the company and are most aligned with the top management. Monitoring directors are non-executive directors who should be truly independent and whose main function should be monitoring managers' behaviour and ensuring it is in alignment with shareholders' wishes. The instrumental component of the board consists of directors who can advise management to help them improve their decision-making (Baysinger and Butler, 1985). Finally, all directors should partake in delegation role as they appoint the executive management team.

Of all the functions of boards described above, boards are most often associated with their "monitoring function", i.e. the reviewing of management performance and the taking of action if this performance is found to be inadequate (Conyon and Peck, 1998). Jensen (1993) has described this function of a board more basically by saying that the responsibility of the board is to hire, fire and compensate the chief executive officer. These basic functions of board described by Jensen (1993) above however, are too simple in an era that demands increased performance and transparency in companies.

The monitoring function of a board is closely linked with Agency Theory (Section B1.3) where the alignment of owners' and managers' interests is considered paramount. There are other theories on the alignment of owners' and managers' interests apart from Agency Theory all of which were discussed in Section B1.3 However, these other theories view boards' responsibilities from a one dimensional viewpoint and fail to include such responsibilities as providing advice (Westphal, 1999) and strategising (Kesner and Johnson, 1990). In spite of this, each theory has important implications on board composition. For example, from the Resource Dependency Theory perspective, larger boards would appear to be more appropriate in larger companies in order to carry out the monitoring of management and the accessing of resources functions adequately (Pfeiffer, 1972). From the Stewardship Theory point of view, it would appear that board size is less relevant than the makeup of the board (Donaldson and Davis, 1994). Irrespective of the viewpoint taken on management or boards, their composition and their contribution to the running of companies are fundamental to the governance of any company. The different aspects of boards are therefore now considered:

- *Non-executive directors.* Viewing board composition from the Agency Theory perspective, Zahra and Pearce (1989), state that increasing the ratio of non-executive directors can expand the base of expertise from which a firm's CEO can draw and encourage executives to pursue good corporate governance and corporate entrepreneurship. Haleblian and Finkelstein (1993) support this view by arguing that the main advantage of a large board is its problem solving capabilities. Empirical support of the above is provided by Rosenstein and Wyatt (1990) and Bayesinger and Butler (1985) who found a positive correlation between the number of non-executive directors and a firm's performance. A more recent study confirms earlier findings (Uzun *et al.*, 2004) although to date the optimal size of a board has yet to be determined.

- *Executive directors.* As well as expanding a company's general base of expertise, boards have a direct affect on a company's performance through the advice that executive directors are able to give the CEO because of their detailed knowledge of the company and the industry in general (Mace, 1971). Baysinger *et al.* (1991) also showed that the proportion of executive directors on a board positively affected a company's direction.

While boards with a large number of executive directors offer management a wealth of experience, they can make in depth discussion difficult, which hampers the decision making process (Herman, 1981). Dalton *et al.* (1998) found no correlation between board size and a company's performance while Eisenberg *et al.* (1998) and Yermack (1996) found a negative correlation between board size and a company's performance. Hermalin and Weisbach (1991) also dispute these findings and believe that boards have little effect on their companies. Thus, there is conflicting evidence on the advantages and disadvantages of board size and composition in relation to corporate performance.

- *Board diversity.* In addition to board composition, the impact of board diversity on the performance of companies is now being studied. For example, there have been calls from advocacy groups such as the Interfaith Center on Corporate Responsibility (ICCR) for companies to increase the diversity of their boards (Carter *et al.*, 2003). However, the real issue is whether or not the calls for board diversity are based on a need to "do the right thing" or because diversity will lead to improved governance and increased shareholder value (Brancato and Patterson, 1999).

In the current literature there are arguments both for and against board diversity. With respect to internal control measures, Jensen (1993) found that there was no case to be made to make a board representative of the population as a whole, while the TIAA-CREF (1997) in its policy statement stated that boards should be representative of all shareholders rather than consisting of a number

of directors each of whom is supposed to be a representative of a particular section of the population. Zahra and Stanton (1998) found no significant statistical relationship between the percentage of ethnic minority directors and several accounting measures of financial value. However, Carter *et al.* (2003) found a statistically significant positive relationship between the presence of women or minorities and firm value. Recently, as minorities have become increasingly vocal and shown their preference to purchase from companies that they can identify with, the subject of board diversity has increased in importance. Research has shown that the multicultural market is currently one of the most overlooked markets in the United States. For companies to exploit this opportunity they should have members of senior management who understand these markets (Schaefer, 2003 and Ostrow, 2003). However, on the strength of this author's research and considering the source of some of the research this author considers the case for board diversity is unproven and should be seen more of a political issue than a governance issue.

The above discussion has revolved around the role of boards of directors with relation to corporate governance. Much of this relationship is based on the Agency Theory (See Section B1.3) and the influence of Agency Theory can be seen throughout this relationship. For example, the increasing role of non-executive directors and the insistence that they should dominate on the audit and remuneration committees (see Appendix 6) reflects the importance of Agency Theory. However, much of the research on corporate governance has focused on the structural characteristics of boards and their relations with the outcomes of board actions such as firm performance (Hermalin and Weisbach, 1991) or the absence of a relationship between the structural characteristics of boards and firm performance (Hermalin and Weisbach, 2001). Similarly Daily, Dalton and Canella (2003) have shown that there is a lack of evidence of the monitoring aspect with regards to governance in the role boards of directors.

The shortcomings referred to above, call into question whether or not the research into boards of directors and governance should be re-assessed and redirected. This reassessment is taking two forms (Roberts *et al.* 2005). Firstly, rather than researching the outcomes of board characteristics, more research is being directed to the dynamics of the internal workings of boards and how they carry out their responsibilities with regards to governance. Mace (1971), nearly forty years ago, challenged the idea of the efficiency of boards, stating that board composition was more part of the image of a company than an organization that added value. Secondly with the dominance Agency Theory, alternative theories of governance such as the Stewardship Theory and Resource Dependency (see above) have tended to be ignored. Perhaps it is time to have "theoretical pluralism rather than substitution of one dominant theory by another" (Roberts *et al.*, 2005 p. S8)?

Two further comments have been made concerning boards and their role in governance. Williamson (2007) states that boards are at a disadvantage to top management in respect of access to information and therefore may not be best placed to make governance decisions. Secondly, Selznick (1966) considers that companies like any organizations, have lives of their own and questions how effective boards can be in "directing" these lives.

While, in theory, the concept of the board would appear to be the ideal method of protecting shareholders interests, in practice, this may not always the case. This is for two reasons. Firstly, the composition of many boards is such that executive directors are often board members, and in some cases they represent the majority of a board, thus calling into question the independence of the board. Secondly, the compositions of boards tend to be fairly static over time. Corporations, on the other hand, have to be dynamic in order to survive in a global economy and therefore the expertise required from a board can change over time. Unless a board has a broad spectrum of expertise it is unlikely to be able to meet the challenges of rapidly changing economies. This issue and its relevance to corporate governance are addressed in greater depth later in this section.

Boards of directors in the United States and United Kingdom are unitary boards. However, in Europe the tendency is to have a two tier board system where the managing board consists of company executives and the supervisory board is made up of employee representatives. More extensive research has been carried out on the former model, which is also the focus of this thesis. Overall, there is a general lack of consistent evidence of any significant relationship between the composition of boards of directors and corporate performance (Dalton *et al.*, 1999; Dalton *et al.*, 1998; Johnson *et al.*, 1996; Barnhart *et al.*, 1994). Hermalin and Weisbach (2003, p.14) who carried out a literature search on the subject, state their findings on board composition as follows: "Board composition is not related to corporate performance, while board size is negatively related to corporate performance. In addition, both board composition and size do appear to be related to the quality of the board's decisions on CEO replacement, acquisitions, poison pills, and executive compensation. Finally, boards appear to evolve over time as a function of the bargaining position of the CEO relative to that of the existing directors. Firm performance, CEO turnover, and changes in ownership structure appear to be important factors affecting changes to boards." This view is challenged by Dahya and McConnell (2005) and Kiel and Nicholson (2003) who show that board composition is related to corporate performance and firm value. However, as is the case with the majority of the present research on board composition, neither of these studies report on the relationship between board composition, corporate governance and corporate performance. Indeed much of the research into these three subjects has tended to concentrate on governance and board composition, but with mixed results (Hermalin and Weisbach, 2003; John and Senbet, 1998).

Recently, some research has started to look at the existing theories of board composition to see if these theories provide evidence of links between board composition, governance and performance, rather than just the links between board composition and corporate performance. Raheja (2005) started this line of research and concluded that board composition and how board members voted on issues was largely dependent on how the directors were aligned with the shareholders and the availability of information to make informed decisions. Thus, companies in highly competitive industries or with a high degree of inside ownership required smaller boards. Similarly it is more efficient for high technology companies to have smaller boards due to the difficulty and cost of verifying complex business matters, whereas in companies where it is easier for outside directors to verify projects, there will be a higher proportion of outside directors. Boone *et al.* (2007) followed on the research of Raheja (2005) but extended it by looking at other theories of board composition and firm performance in addition to the theory related to governance. They also concluded that board size, but not board independence, reflects a trade off between firm specific benefits and the cost of monitoring.

Lynall *et al.* (2003) proposed a different research approach by suggesting that research should not be conducted into whether any of the current theories of board composition are relevant, but when each theory is relevant in the life cycle of a company. The theoretical frameworks they reviewed that describe the role of boards in relation to corporate governance are: Agency Theory, Resource Dependency Theory, Institutional Theory and Social Network Theory. Agency Theory and Resource Dependency Theory were described in detail in Section B1.3 of this paper. Institutional Theory (Cebon and Love, 2006) states that organisations adopt the rules and practices of the environments in which they operate while Social Network Theory (Rowley, 1997) refers to the idea that boards' composition will represent the social networks of the principal stakeholders. Thus, Lynall *et al.* (2003) take these four theories and attempt to overlay them over the four stages in the life cycle of a company that has been proposed by Quinn and Cameron (1983). The implication of this is that as companies evolve and change different forces will be exerted on boards so that the composition of boards will change over time to meet the challenges thrown up by the evolutionary process. This idea is contrary to the point stated earlier, that the composition of boards tends to be more static than dynamic over time.

Finally, the most dynamic time for any board's composition is when fund raising activities are being pursued. It is at this time that there is likely to be a shift in the power base of the CEO to the board, as external shareholders exert their leverage over a company with the provision of financing. However, this is not always the case, as much will depend on the reason for the financing. If the shareholders wish to invest in a company to take advantage of a profitable

opportunity, their powers to influence board composition will be a lot less than if they are investing in a company to save it from bankruptcy.

The implication of these dynamics from a governance perspective can be important for a company. As long as the CEO/founder of a company is the dominant force in that company the board will be composed of like-minded individuals whose goals will be aligned with those of the founder. This in all probability, will mean that an emphasis will be placed on steadily growing the company to profitability but an equal emphasis will be placed on minimizing risk. With all major parties interests in a company aligned there are unlikely to be significant corporate governance issues. However, when shareholders are the dominant force in a company there will be an increased emphasis on making the company financially successful while at the same time as minimising agency costs. It is at this time in the life cycle of a company that there are more likely to be corporate governance issues.

B1.6 Stock Ownership

It is increasingly being seen as good business practice that companies should be run for the benefit of all their stakeholders, although this is not universally accepted (Blair, 1998). This is because it is only the shareholders who actually risk their financial capital in the financing of companies and have no recourse to a third party. There are many types of shareholders ranging from the company founders and board members, to individuals and institutional shareholders. Each group of shareholder in a company has its own investment agenda and expectations, who will want to influence the running of the company. This section considers the different groups of shareholders that have the ability to influence governance structure and performance of companies by their presence or absence from corporate shareholder rosters. The two major groups of shareholders in any company are the directors and institutional shareholders and it is the actions of these two groups that are primarily considered below.

B1.6.1 Stock Ownership by Board Directors

Since the publication by Berle and Means (1932) of their work on corporate ownership and control, there has been controversy over the importance of the distribution of stock ownership for companies. Of particular importance is the issue of board directors and the stock holdings they own in the companies they lead. The board of directors in any company, acting as the representative of the owners of that company, are in a unique position to affect the direction of a company. Consequently, it is important to ensure that directors achieve a fair balance between the interests of the shareholders and their own interests.

Much of the early work on equity shareholdings and governance was researched by Jensen and Meckling (1976) who identified equity shareholdings as a fundamental element of corporate governance. Agency Theory suggests that when officers and employees hold sufficiently large shareholdings their interests will be aligned with those of outside shareholders. Salancik and Pfeffer (1980) and Hill and Snell (1989) have theorised that shareholders seek to maximise their return on investments, which in the case of individual holdings in companies, means that the shareholders will encourage, for example, the maximisation of efficiency and the optimisation of related research and development. The maximisation of efficiency will include related, not unrelated, diversification by the individual firms, as related diversification is associated with superior economic performance (Bettis, 1981) due to skill transfers and from resource sharing that enables economies of scale (Porter, 1987).

Himmelberg *et al.* (1999) reiterated that the solution to the agency problem in companies is to provide managers with equity stakes in their firms. Dalton *et al.* (1998) suggest an alternative solution to the agency problem that centres around the effective use of board committees. Himmelberg *et al.* (1999) have shown that in many instances, the agency problem is mitigated by institutional and "blockholder" shareholders who are typically large enough shareholders to ensure that managers serve their interests. Both these views however say nothing about how the category of shareholder or the magnitude of shareholdings will directly influence the performance of a company. Research by Dahya *et al.* (1998) looked at this subject issue. They reviewed the consequences of management ownership of shares and how this ownership affected their relationship with block shareholders with regard to their own and company performance. They found that even quite small ownership stakes by management can give management a disproportionate influence in the running of corporations.

However, as in all situations there are dilemmas of holding shares in companies that shareholders have to resolve. Two important examples are research and development and diversification in a company. On the one hand, the high risk-high reward strategy of investing in R & D and related diversification supported by non-management shareholders is the opposite strategy to that taken by non-shareholding corporate management (Baysinger *et al.*, 1991). Management without a vested interest in a company will be on the whole more risk adverse (Mansfield, 1968). This means they tend to be reluctant to invest in long-term R & D projects because of their high potential for failure. In addition, management's propensity for risk aversion is grounded in the theory that, whereas stockholders are wealth maximisers, managers are more interested in maximising their remuneration, security, status and power. This is achieved in a number of ways. Very often the majority of management's wealth is tied to their companies' performance so they are careful not to jeopardise their opportunities for wealth creation by investing in high-risk, high-

reward projects. Instead, managers will prefer to invest in lower risk projects. This means that, given resource constraints, they will have a tendency to invest in R & D that, is imitating the research of their competitors, knowing that this is less risky or even invest resources to directly imitate the innovations of others (Hill and Snell, 1989). In addition, innovative projects are often high risk and do not have quick payback periods and can consequently have detrimental affects on career prospects (Alchian and Demsetz, 1972).

Another alternative to investing in innovative research, is for managers to pursue unrelated diversification. In this case, managers are trading an increase in efficiency for an increase in firm size and a decrease in operating risks (Marris, 1964). Because unrelated diversification is time consuming, management's attention is diverted away from the painstaking work necessary to maximise productivity in a company's primary industry segment (Hayes and Abernathy, 1980). However, for management to be able to follow the less aggressive investment approach it must be assumed that neither large individual shareholders, institutional investors nor the non-executive directors are fulfilling their duties properly by monitoring the actions of management (Baysinger *et al.*, 1991).

For a less than optimal investment strategy to be followed by a company over a long period of time, it must be assumed that the efficiency of the capital market is not operating across the marketplace uniformly. If it is operating efficiently those companies operating at less that optimal efficiency are soon penalised. However, optimal efficiency can be defined in a number of ways that makes comparisons between companies difficult (Aivazian and Callen, 1979; Elton and Gruber, 1976). Another factor that makes comparisons between companies difficult is the "substitution" factor. It is assumed that under the same conditions all companies will operate in the same way. However, this is not the case. In every company, governance mechanisms operate in different ways. Therefore the management weakness in one company may be corrected by other governance mechanisms while in another company these same mechanisms will not correct management weaknesses.

Ensuring effective corporate governance measures are present in a company is not an easy task. However, when the directors of companies are also shareholders, the problem is compounded because the directors are both principals and agents and the possibility of the conflict of interest arises.

B1.6.2 Stock Ownership by Institutional Investors

In Western economies the ownership and control of corporations has changed considerably in the last 100 years. At the beginning of the Twentieth Century corporations tended to be owned and

managed by their founders. Even the giants of American industry such as J.P. Morgan were owned and operated by their founders. To an extent this trend continues in such companies as Ford Motor Company and in newer companies such as Microsoft.

Since the end of the Second World War however, there have been changes in the ownership and organisational structure of companies. After the War, the dual roles of owner and manager were separated. Corporate ownership became dispersed among thousands of unorganised shareholders who had no hand in the management of the corporations. At the same time the entrepreneurs gave way to professional managers. In the last twenty years ownership structures have changed again with a return to the un-dispersed model where ownership has become re-concentrated, but this time, in the hands of institutional investors. These investors now control half of the United States equity market (Conference Board, 2000) and account for nearly 80% of the daily transactions on the US stock exchanges (Zahra *et al.,* 2000). The dangers of this trend has been discussed by Lemmon and Lins (2003) who highlighted the fact that when companies are controlled by small groups of shareholders there is increased likelihood that these shareholders will expropriate the interests of minority shareholders.

The re-concentration of share ownership has changed the dynamics of the control of corporations in that' whereas previously managers faced unorganised shareholders, they are now being confronted by organised groups of shareholders. These groups take three forms. Firstly, there are the institutional investors who include pension funds, mutual funds, investment bankers and insurance companies, secondly, there are the "blockholders" and thirdly, there are the activist shareholders.

- *Institutional Shareholders.* Institutional shareholders are characterised by the fact that because of the size of their equity holdings, they are unable to move in and out of the markets quickly without affecting the share prices (Pound, 1992). Consequently, these investors have a strong interest in the financial performance and running of the companies they invest in as well as their strategies and activities in general (Smith, 1996). In addition, fund managers are increasingly pressurising companies to improve their performance as their investors demand above average rates of returns from their investments. In a break from past history, these fund managers are now more and more willing to use their voting powers that their substantial shareholdings afford them to try and force changes in the way the companies are run if their performances are not up to expectation or if there are governance concerns (Song and Szewczyk 2003; Carleton *et al.*, 1998).

Zahra *et al.* (1989) however has noted that all institutional investors cannot be considered a "monolithic group". He divided them into two groups: pension fund managers and investment fund managers. He differentiated the two groups primarily by their investment objectives. The former hold their investments longer (Gilson and Kraakman, 1991) and favour companies with longer-term investment strategies (Francis and Smith, 1995). This is because the investors themselves view their investments as long term, as the liabilities the investments are expected to fund are long term (Howell, 1958). Another reason why pension fund managers take a long view on the performance of their investments is that their pay structure is not directly tied to their fund's performance (McGinn, 1997). Instead they tend to be employees of their funds, thus releasing them from short-term performance pressures. Such investors are also more involved in shareholder activism as they seek to safeguard their investments (Davis and Thompson, 1994). The effect of pension fund managers' desire for long-term growth in their investments on corporate investment decisions is that corporate management will be more likely to favour internal research programs that develop new products rather than "buying in" innovations (Hoskisson *et al.,* 2002). Hill and Snell (1998) also reported that there is a positive correlation between stock ownership concentration and research and development spending.

Pension fund managers monitor the performance of their investments and communicate their desire for change in a number of ways. The most direct and effective form of communication is to arrange meetings with corporate management (Smith, 1996). Other means of communication include proxy contests (Pound, 1992), shareholder amendments (Smith, 1996) and floor resolutions made during shareholder meetings (Schwab and Thomas, 1998). However, where pension fund managers do wish to engage a company's management, this is most likely to be done through direct communication with the management rather than through time consuming proxy fights and shareholder amendments (Useem, 1996).

A result of pension fund managers' direct involvement with corporate management and their tendency to be long term holders of investments is that the managers will not only be concerned with corporate financial performance but will also be concerned with companies' relationship with the local communities and the environment (Schwab and Thomas, 1998). This involvement is not entirely altruistic because, given the difficulty of selling their investments quickly, pension fund managers are keen to ensure that their investments do not receive unfavourable press reports. An implication of the fact that pension fund managers have direct access to management is that they will intentionally or unintentionally have an influence on the decision making process of management.

The investment time frame of investment fund managers tends to be much shorter than that of pension fund managers. This is primarily because the managers are rewarded on a short-term basis. Bonuses are paid based on quarterly or annual performance (Starks, 1987). Consequently, they will move in and out of investments depending on the projected results of each company in their portfolio (Chaganti and Damanpour, 1991). This movement in and out of shareholdings will tend to be rapid and the riskiness of managers' portfolios will increase and decrease as attempts are made to maximize potential compensation.

Given the concentration on short term returns, investment managers are not keen to invest their time and resources engaging companies' management to assist them in improving long term profitability (Johnson and Greening, 1999). For companies, this means management has a much shorter time frame to show that an investment in an innovative project is profitable. Consequently those companies will tend to purchase innovations rather than developing them in house (Hoskisson *et al.*, 2002).

In the above paragraphs, it has been discussed that there are potential downsides for the minority shareholders of companies where institutional shareholders hold large numbers of shares. Holstrom and Kaplan (2003) found substance in this issue. In 1980, large institutional shareholders accounted for ownership of 30% of the NYSE. By 1996 this had increased to 50%. As the power of these shareholders increased, so the objectives of corporate management changed. In 1997 the Business Roundtable, a group of 200 CEOs of the largest American companies, changed its position on business objectives to read that the paramount duty of management and the board is to the shareholder and not to...other stakeholders. This change was obviously detrimental to the wider group of stakeholders and may be seen as a result of the increasing influence of institutional shareholders.

- *Blockholder Shareholders.* The "blockholder equity holders" are individuals or groups who hold significant shareholdings (Wright and Ferris, 1996). These individuals or groups can be defined by referring to section 13(d) of the United States 1934 Securities and Exchange Act that requires that "holders of more than 5% of a class of equity securities held by them be regarded as a group and are required to file a Schedule 13D setting forth considerable information concerning the members of the group" (Dalton *et al.*, 2003).

Research has shown that block holding shareholders have the incentive and ability to influence boards of directors to act in the best interest of shareholders (Dalton *et al.*, 2003). However, there is the danger that such shareholders will place their own interests ahead of all other shareholders, encouraging, for example, companies into unnecessary mergers, acquisitions or divestures

(Demsetz and Lehn, 1985). In the 1980's, the phenomenon of "greenmail" occurred where individuals such as Boone T. Pickens were accused of blackmailing companies into certain courses of action.

In recent years, a new type of blockholder has appeared in the marketplace. This is the private equity firm. Over the past few years, these firms have been able to borrow money from banks cheaply. This fact coupled with rising stock exchanges has enabled private equity firms to make significant acquisitions in the market place. There are arguments for and against the actions of private equity firms. On the one hand, the private equity model can be efficient in that firms are made to focus on their core strengths in order to maximize their value, but on the other hand the rush to maximize value can lead to governance problems for the other stakeholders apart from the majority shareholders (Arnold, 2007; Elliott, 2007). Blockholders are discussed in more detail in Section B1.6.3.

- *Activist Shareholders.* The third group of organised shareholders are social and political activists who are demanding a voice in corporate decisions ranging from the choice of CEO and executives' pay to corporate environmental policies. This group, while not having the voting power of the former group, often makes up for the lack of voting power by being more strident and vocal in their demands. The demands of these groups are often unrelated to corporate performance, but more related to social responsibility issues such as governance, environmental and political issues. Until recently, research indicated that that there was a lack of understanding of the importance of corporate social responsibility (Deakin and Hobbs, 2007; Arce, 2004) in the corporate world although governmental organizations were keen to promote it (DTI, 2002). While there is still a certain lack of understanding of the benefits of taking social responsibility seriously in the corporate world, attitudes are changing as recent research shows that activists have a part to play in improving the corporate social performance of companies (Neubaum and Zahra, 2006). However, in any discussion it is important to achieve the correct balance and Hermalin and Weisbach (2007) have shown that there is a point where an overemphasis on social responsibility will adversely affect corporate profits.

B1.6.3 Blockholders

This section returns to the subject of blockholders. The categories of shareholders who are classified as blockholders are not uniform. In the Anglo-Saxon based economies, blockholders tend to be members of management or institutional shareholders. In European economies, blockholders tend to be the banks or governments and in the Far East blockholders are often governments. Who the blockholders are puts another perspective on the effect that blockholders can have on the performance of a company and how the assets of a company are utilised. If public money is involved, the blockholders can use their power to disperse wealth to a much

wider, or narrower, circle of stakeholders than would be normal in a company run purely for the benefit of shareholders (Denis and McConnell, 2003). The type of blockholder in a company therefore must be clearly identified and understood before research can be carried out on a company.

Corporate ownership, control and performance are all interlinked. The first two factors also have a significant impact on corporate governance in a company. When reviewing corporate ownership, control and governance a number of hypotheses can be made:

- if there is a high correlation between ownership and control in a company, the result will be a higher firm value. This relationship should hold whether the major shareholders are members of management or unrelated to management (Dahya *et al.*, 1998);
- if there is a high correlation between ownership and control in a company there will be less governance issues (Zahra and Pearce, 1989);
- if the major shareholders are members of management, the benefits derived from this fact should also accrue to minority shareholders;

If these hypotheses are true it can be concluded that ownership of companies by one or a number of large shareholders should be beneficial for the governance of companies.

These issues and the benefits and disadvantages of blockholders' influence on companies are considered below. Holderness (2003) has classified the benefits of blockholders under two main headings: the shared benefits of control and the private benefits of control. With regards to shared benefits, if the ownership rights are in the same hands as the control rights there should be a greater incentive to increase the firm's value. If this assumption holds true, then all shareholders will benefit. Holderness shows there is evidence that the trading by large blockholders leads to price increases in stock. Holderness' study (2003) is largely supported by that of Maury and Pajuste (2005) and Claessens *et al.* (2002) who state that firm performance will improve if there is more than one large shareholder as this prevents a single large shareholder expropriating the rights of minority shareholders, thus multiple shareholders have a significant part to play in corporate governance.

It is more difficult to test whether the potential private benefits that could accrue to blockholders, favourably affect share prices. However, once again Holderness (2003) has provided evidence that private benefits increase the premium at which the shares will trade. He also points out that the increase in share values accruing from the private benefits will benefit minority shareholders, so they will in effect have the same effect as shared benefits of control.

Huddart (1993) has suggested other benefits to companies because of blockholders. Because blockholders have significant proportions of their wealth concentrated in one company, they have a greater incentive to engage in management monitoring activities, thereby limiting the possibility of impropriety by management. While a blockholder may lose the benefits of holding a diverse portfolio, he can make up for this loss by having more control over his portfolio. In addition, because a blockholder will be close to management, the high costs of monitoring are reduced thereby increasing the firm's profitability. However, studies by Shleifer and Vishney (1997) and Morck *et al.* (1988) have shown that lower firm value is associated with large shareholders.

The supposed beneficial relationship derived from management stock ownership and control is not universally considered positive. A negative consequence of this relationship is the possibility that with significant ownership, management can become entrenched in the company (McConnell and Servaes, 1990; Stulz, 1988). Management may feel that they are the best qualified people to run a company and refuse to step down even if the results of the company indicate otherwise. This fact, if it affects the company's share price, will have a detrimental effect on the minority shareholders as well as the management. However, if management are running a company effectively, these and the other benefits that accrue to management may, in the minds of minority shareholders, be worth the increased value of their investment. Other such management benefits include the use of corporate assets for private use, the sense of power and access to other business owners who may assist them in other business ventures.

The presence of blockholders in company's ownership structures has always been considered to be more prevalent in Europe and the Far East. Dispersed ownership on the other hand is more associated with the US economy. As a background to this section of this thesis, two questions require investigation. The first is the extent of management blockholders in US and the second is the correlation between the presence of blockholders, governance and the performance of the companies.

In the first instance Holderness *et al.* (1999) carried out a longitudinal study of managerial ownership of publicly traded companies between 1935 and 1995. they found that the mean percentage of common stock held by a company's management rose from 13% to 21% and over the same period in 1995 dollars management holdings rose in value over four times from $18 million to $73 million. The authors investigated a number of hypotheses to explain the increase in managerial ownership. In their research they were able to discount a number of hypotheses. Firstly, they discounted the hypothesis that management needed to increase their ownership in the face of weak corporate governance. In fact, they found an increase in management incentive devices over the period studied. Secondly, they found no relationship between firm performance

and the level of management ownership. Finally, they found the firm specific characteristics that might affect the level of managerial ownership were largely unchanged over the study period.

The one factor that appeared to affect the level of managerial ownership was the financial volatility of the environment in which the company operates. The general decline in volatility over the period along with innovations in the financial markets, such as hedging and the ability to diversify, has meant that the cost to managers of holding relatively large stakes in their companies has declined and thus managerial ownership has increased.

Other research has found the size of blockholders' shareholdings in companies to be dependent on several characteristics of those companies. Demsetz and Lehn (1985) have shown that the extent is inversely related to the size of the company, primarily due to risk and wealth considerations. The extent of regulation imposed on companies also affects the size of blockholders' shareholdings. Holderness *et al.* (1999) and Demsetz and Lehn (1985) have shown that with more regulation blockholdings tend to be smaller as there is less opportunity for the blockholders to accrue the benefits of such holdings and the increased regulation is a partial substitute for increased monitoring opportunities that comes with larger shareholdings.

The second question raised above was concerned with the relationship between the presence of blockholders, governance and the performance of the companies. To date the majority of research has been concerned with the relationship between blockholders and firm performance. Morck *et al.* (1988) found that a firm's value increases as the percentage of managerial stock ownership increases. However, this is only up to 5 percent; between 5 percent and 25 percent of managerial ownership firm value decreases and then after the 25 percent mark firm value starts to increase again. An interpretation of these results is that at lower levels of ownership the interests of owners and managers are aligned, but at higher levels of ownership the effects of entrenchment start to take hold.

A number of other studies (Himmelberg *et al.*, 1999 and Holderness and Sheehan, 1988) found that changes in managerial ownership seem to have no effect on firm value. It is therefore very difficult to arrive at any firm conclusion. This appears to be for a number of reasons. Firstly, it is difficult to determine which way the causality flows. Do blockholders have an affect on firm value or vice versa; or is there a third factor in the relationship that has not yet been considered? Secondly, there are often multiple blockholders (management, institutional shareholders and employees) each with their own agendas, so it is difficult to determine the effect each may have on a firm's value.

More recent research (Thomsen *et al.,* 2006) has shown in Anglo-American market based economies blockholders have no effect on firm value. In continental Europe, where blockholders are more prevalent, it has been shown that blockholders have a significant negative effect on firm value and profitability. The implication of this research is to reinforce the need for good governance measures to protect minority shareholders.

Following on from the studies of blockholders and firm performance, is the equally important question as to the effectiveness of blockholders on corporate governance. Peck (2004) found that blockholders do not play a significant role in improving a firm's corporate governance. Where they do take action is usually in replacing the CEO and restructuring a company as these actions can be taken quickly and their impact will be almost immediately reflected in the price of the stock. The reason that more fundamental changes are not made is that these types of changes take too long to implement and blockholders do not in many cases tend to be long term investors.

A more recent study by Chen and Yur-Austin (2007) looked at the effect that blockholders have on governance from three perspectives: managerial extravagance, asset management and underinvestment. The authors cite a number of studies as examples of earlier research on the effect that blockholders have on governance, amongst them, Brickley *et al.* (1994) and Demetz and Lehn (1985) who suggest that blockholders are likely to be able to favourably affect corporate governance decisions and the study of Singh and Davidson (2003) who state that insider blockholders are more likely to positively affect governance issues than outsider blockholders. Expanding on this research Chen and Yur-Austin (2007) found that outside and inside blockholders affect corporate governance in different ways. Outside blockholders are vigilant in controlling managerial extravagance while inside blockholders are more effective at improving asset efficiency and overcoming underinvestment problems.

B1.7 Executive Remuneration

To understand the importance of executive remuneration in the corporate context it is important first to review a number of statistics. In 2000, cash compensation for the CEOs of the largest 365 US corporations increased by 18% compared to the pay increases granted to salaried workers of 4.3% (Business Week, 2001). Since then, with the temporary decline in the world stock exchanges after the internet bubble burst, the rate of increase in CEO remuneration declined but very few CEOs saw their remuneration actually decline. Thus, there appears to be a discrepancy between companies' performance and management's cash remuneration. This discrepancy is compounded if total remuneration is taken into consideration. The 20 highest paid CEOs in 2000 earned on average $117.6 million up from $112.9 million in 1999, again in spite of the then decline in the world's share prices. In 2006, the average CEO pay in the top 500 US firms was

$14.8 million, 420 times that of the ordinary factory worker, compared with 42 times in 1980 (Caulkin, 2007).

Agency Theory and corporate governance are both concerned with the relationship between principals and agents. This relationship relies on the assumption that there will be "arms length" contracting between shareholders and managers and that self interest opportunitism will not form the basis of this relationship (Bruce *et al.,* 2005). In order to align the interests of these two parties, the crafting of executive pay arrangements is seen as crucial to this process.

It is very difficult to measure the alignment of the interests of principals and agents or shareholders and managers, as many factors affect this relationship. As stated earlier a primary objective of management and especially senior management should be to maximise the interests of shareholders (Kerr and Bettis, 1987). Maximising the interest of shareholders usually refers to maximising their wealth and this is most often done by maximising the net profits or performance of a company. However, performance can also be defined as maximising sales and a number of studies have shown compensation to be positively related to sales and unrelated to net profit (Meeks and Whittington, 1975; McGuire *et al.,* 1962).

Sales and net profit are only two measures of performance. Lewellen and Huntsman (1970) measured the relationship between compensation and performance using the following measures: sales, assets, profits and rates of return. They discovered a relationship between net profit and compensation, but no relationship with sales. Other measures used have been stock price and comparisons with other firms in the same risk class (Murphy, 1985). Of all the corporate performance indicators, the latter two indicators are believed the best by this author, as they independently evaluate the performance of a company.

The same line of research has found that different performance measures affected compensation in different ways. Benston (1985) found no relationship between compensation and performance and explained this lack of relationship by saying that executives' wealth was tied to stock performance rather than paid remuneration. Coughlan and Schmidt (1985) agreed with Benston and suggested that salaries and bonuses were more meant to provide a level of income security than represent a reflection of firm performance.

The difficulty of understanding the relationship between CEOs' pay and performance has been researched by Jensen and Murphy (1990) who found little relationship between pay and performance and suggested there are other factors outside Agency Theory to explain CEO's pay. This finding was supported by Tosi *et al.* (1998) who concluded that less than 5% of CEOs' pay

was explained by performance criteria. If performance is not a major determinant of executives pay, then other factors have to be found that influence executive pay and therefore govern the principal-agent relationship.

Two of the most important factors that have an effect on executives' pay are shareholders and the remuneration committees appointed by boards of directors. Both these factors have governance implications. In the case of shareholders it has been shown that there is a link between executive pay and performance in organisations with large blocks of shareholders (Gomez-Mejia and Wiseman, 1997). A summary of factors that affect executives' pay as seen by Barkema and Gomez-Mejia (1998) is depicted in Figure 1 below. Brickley *et al.* (1988) showed that the presence of institutional shareholders tended to lead to lower levels of executive pay but a higher proportion of long-term incentives in overall compensation. However, this was only the case where the investors were not largely dependent on the businesses in which they invested. Where the investors were dependent on the results of their business investments this relationship was not found to be prevalent leading to the conclusion that these CEOs had more influence over their investors.

A General Framework for Understanding Executive Compensation

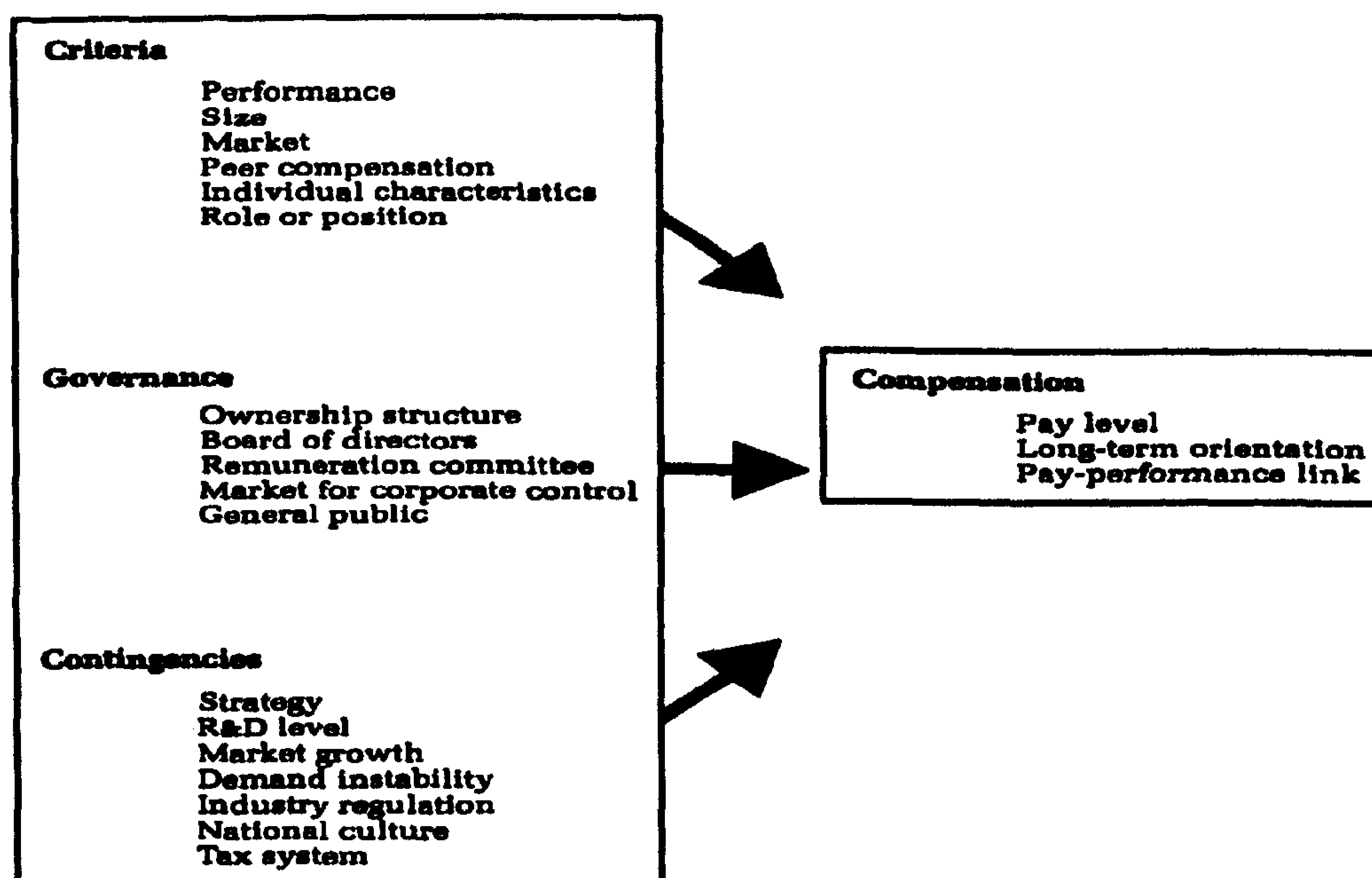


Figure 1

Barkema, H.G. and Gomez-Mejia, L.R. (1998) Managerial compensation and firm performance: A general research framework. *Academy of Management Journal*, 1 (2): 140.

All major US corporations have remuneration or compensation committees (Barkema and Gomez-Mejia, 1998). These committees are formed under the authority of and report to the board

of directors. The members are supposed to be non-executive directors rather than executive directors thereby isolating members' decisions on executive pay from undue influence. Daily *et al.* (1998) questioned whether higher levels of CEO pay and lower levels of performance related pay would occur if committee members depended on the firm for their business, or were appointed during the tenure of the present CEO or were CEOs themselves. However, empirical evidence showed this not to be the case (Daily *et al.,* 1998). Two possible explanations for this are offered. The study was conducted in the 1990s, a period that directors' pay was under scrutiny from both shareholders and the popular press. The second explanation is that it is possible that favourable compensation treatment of CEOs was hidden so that it was not easily detectable in academic studies (Barkema and Gomez-Mejia, 1998). This evidence is supported by Conyon and Peck (1998) who found that the presence of a remuneration committee does not necessarily mean lower levels of management pay. However, the authors did find a positive correlation between the proportion of outside directors on the remuneration committee and the level of pay and the strength of the link between management pay and firm performance. Another finding by David *et al.* (1998) was that where large institutional shareholders were involved in a company, lower levels of CEO pay and strong long-term orientations were likely to occur.

In a different approach to the study of executive remuneration, Ezzamel and Watson (1998) investigated the hypothesis that CEOs based in the UK must be paid the "going rate" of pay (what CEOs in similar firms earn) or else they would leave. If they did not leave, they hypothesised that subsequent pay raises would raise the remuneration levels up to the going rate. Their studies supported their hypothesis, thereby questioning the link between CEO's pay and performance.

Senior executives' remuneration comprises of four main components: salary, annual bonuses, share options and other long term incentive plans. These may be supplemented by the additional benefits of restricted stock and enhanced retirement plans. It was shown in an earlier paragraph of this section that in 2000 the cash compensation element of US CEO's pay increased dramatically. This was mirrored in the UK, although CEO cash compensation had been increasing at a steady rate of 10% from 1989 (Conyon and Murphy, 2000). In the decade of the 1990s this steady increase in the US and UK remuneration packages was hardly noticed as the stock market continued to rise year after year. In addition, with the internet boom requiring increasing numbers of qualified executives, market forces lifted the compensation packages of such executives which in turn lifted the compensation packages of all senior executives.

While salary and annual bonuses have always been the largest component of an executive's pay package, share options offer the greatest potential for wealth generation. The 1990s saw an

increase in the use of options as a part of executives' compensation. This was for three reasons. Firstly, the issuance of share options "costs" companies nothing. No cash leaves the company and while the exercise of options may lead to the EPS dilution, this is relatively unimportant to the existing shareholders if their overall wealth rises with the share price.

Secondly, the issuance of share options mitigates criticisms that shareholders may express over the size of corporate compensation packages. While cash compensation is not dependent on corporate performance, share options, in theory, are only exercisable if and when the share price rises over a certain level. If executives do exercise their options this is indicative that the company's share price is rising, thus increasing the wealth of all the shareholders. Consequently, executives have the opportunity to increase their remuneration while the interests of executives and shareholders are being aligned.

Thirdly, until recently stock options were a benefit offered by the company that did not hit its net income. This benefit was "cost free" to the company as the cost of the options did not have to be expensed on the income statement. In the United States, FASB 123R maintains this status quo. However, on February 19, 2004 the IAS issued IFRS 2 that stipulated that all companies should take an accounting charge for all share-based payments including share options from January 1, 2006. In the UK, the Accounting Standards Board (ASB) issued FRS 20 on 7 April 2004 which endorsed the IAS rules for all UK companies.

To date, research has shown little correlation between CEO compensation, governance and company performance (Jensen and Murphy, 1990). However, much of this research has been based on large, well established companies (Conyon and Peck, 1998; Daily *et al.*, 1998). Little research has been performed on newer, entrepreneurial firms (Conyon and He, 2004). This paper is more concerned with these newer entrepreneurial firms rather than the older established firms.

B1.8 Conclusions

Chapter B1 has reviewed the literature on corporate governance. Each of the drivers of corporate governance was investigated and the results of the literature review are summarised below. From this review, research propositions were derived in Section C1.4.

The legal institutions in an economy that influence corporate governance in companies are diverse. This is because there are many constituent parts to a legal system, all of which have their own influence on the system. The most important drivers were discussed and range from whom should be responsible for regulating corporate governance and how the regulation should be carried out to what are the political systems behind the corporate governance systems. In

addition, the literature review was concerned with investigating whether corporate governance regulations decided at a national level could be effectively instituted at a company level.

The discussion of the historical drivers of corporate governance started at a macro level and moved down to the part that individuals can play in shaping an organization, not least the corporate governance structures in a company. This broad spectrum was taken as all aspects of an economy's history, from a country's culture to how the actions of individuals are influenced by history. Consequently, it is impossible to examine one aspect of an economy's history in isolation.

With regards to the influence financial issues have over the governance structures in companies, three main influences were identified: the debt structure of companies, international and local accounting standards and the influence of tax regimes. All three influences have a significant impact on the way governance issues are dealt with within a company by a board of directors. The section of the financial drivers however, was primarily concerned with the debt structure of companies and the imposition of accounting standards.

The section on board composition dealt with the relationship between boards of directors and corporate governance. It was shown that board composition plays a vital role in the governance and therefore performance of companies, although it is not always the case that these roles are positive for a company. In the latter part of the section it was shown that criticisms have begun to be raised as to the relevance of the mainstream of governance and the question has been raised that it may be time to view the role of boards of directors with regards to governance from different perspectives. These issues are researched and discussed in more detail in Part D.

The literature review showed that research into stock ownership by board members and institutional investors and the effect these holdings have on corporate governance is inconclusive. Agency Theory indicates that the alignment of interests of owners and their representatives and management, encourages good governance, but this alignment is not conclusively proven from current research. In addition, the research into stock ownership by board members is an area that is continuing to evolve. For example, until the scandals of Enron and WorldCom and the increased interest in stock options, the importance of stock holdings by board members was not at the forefront of research. This debate is further complicated by the increasing importance of social responsibility in the corporate world. The situation exists therefore, that on the one hand Agency Theory suggests that an alignment of principals and agents can be achieved so that the requirements of good corporate governance are met. However on the other hand, with the increasing complexity of the categories of shareholders on companies' shareholder registers, their

different interests and the manner in which each category of shareholder can affect corporate financial and governance decisions there is a need for further research to understand the implications for companies of the actions of shareholders in the areas of corporate governance and financial performance.

This chapter concluded with a review of the role that executive pay plays in corporate governance. While executive pay is one of the cornerstones of the principal-agent relationship, it has been difficult to determine exactly how important pay is in this relationship and what factors determine the level of executive pay. Corporate performance, remuneration committees and the role of shareholders were reviewed. However, no single factor was found to significantly affect executive pay and therefore the question remains as to what part executive pay play in corporate governance, but also what part does corporate governance play in determining executive pay? Section B1.6.2 discussed the potential negative role that institutional shareholders play in corporate governance as suggested by Holmstrom and Kaplan (2003). In the same research, these authors state that by 1994 almost 50% of CEO compensation was equity based. This, in conjunction with the increase in institutional shareholdings, means that CEOs' interests are now more than ever, likely to be aligned to those of the shareholders rather than a broad spectrum of stakeholders. Consequently, while it is recognised that the interests of CEOs and shareholders should be aligned, it is a question as to how far this alignment should go. It is hoped that the research carried out by this author will provide answers to these questions.

This chapter has highlighted the many different aspects of corporate governance. However, what is clear is that governance is continuing to evolve. For example, economies with high concentrations of corporate ownership have tended to have poor governance legislation. However, as these economies become increasingly integrated into the global economy and stakeholder activism increases in all stock markets, research shows that history will play a decreasingly important part in determining the extent of governance in an economy. Rather, the demand for good governance from stakeholders, no matter the extent of their current influence, will in future be the driving force for governance change. This change can already be seen. Teranishi (2007) has documented Japan's gradual move towards global governance standards and away from its own historical standards, in spite of the fact that this move could be harmful to certain sectors of the economy. Similarly Ndikumana (2005) has suggested that countries, in structuring their economies, will from now on be more concerned about implementing international governance standards rather than relying on their own historical governance standards.

CHAPTER B2 - ENTREPRENEURSHIP

B2.1 Introduction

The study of entrepreneurship is a relatively new phenomenon, although the concept appears to go back to 1730 when it was introduced by Richard Cantillon. Schendel and Hofer (1979) proposed that entrepreneurship was one of a group of new areas in the strategic management paradigm where opportunities for further study existed. They pointed out that the survival of any business required the renewal of key ideas on which the organization is built. This implies that continual change is involved so that any entrepreneurial organization must be adept at handling change. Thirty years later and this view of entrepreneurship still applies (Shane, 2006; Shane and Venkataraman, 2000).

Entrepreneurship is often associated with new venture creation (Vesper, 1985). However, entrepreneurship is a wider concept than enterprise creation and covers two broad processes: (1) the formation of new business ventures, either in existing businesses or established outside the realm of an existing business environment, and (2) the transformation of an existing business through the process of strategic revival (Dess, 1999). In either case, entrepreneurship involves the re-alignment of resources as a result of changes in strategies rather than small modifications in the alignment of resources (Guth and Ginsberg, 1990). Thus, entrepreneurship and the field of strategic management, are closely aligned (Zahra and Dess, 2001; Stopford and Baden-Fuller, 1994; Guth and Ginsberg, 1990). Guth and Ginsberg (1990) depicted this relationship diagrammatically (Appendix 1). While the diagram shows how entrepreneurship fits into strategic management it also shows those components of a corporate organisation and its environment that have a direct effect on entrepreneurship. This shows that entrepreneurship affects all the components of any organization.

However, any discussion on the factors affecting the realignment of resources in a corporate environment that brings about change, centres round the actions of upper management and particularly those of the CEO. However, the actions of middle management are equally important because middle management "provides the raw material – the requisite diversity - for strategic renewal" (Burgelman, 1983: p. 1350). Entrepreneurship is therefore crucial to the success of all businesses but successful entrepreneurship requires the participation of all members of a company.

This chapter looks at the field of entrepreneurship, corporate entrepreneurship, how entrepreneurship occurs in different types of firms and the field of entrepreneurial leadership. All these aspects of entrepreneurship are important in the consideration of corporate success and

governance because, as will be discussed, entrepreneurship plays a crucial role in any corporate success or failure.

B2.2 Entrepreneurship Defined

The concept of entrepreneurship is seen as the centrepiece of economic growth in that it "spurs business expansion, technological progress and wealth creation. Entrepreneurial activity represents one of the major engines of economic growth and accounts for the majority of new business development and job creation in the United States" (Lumpkin and Dess, 1996: p. 135). Ahmed and Hoffman (2007, p.4) state that entrepreneurship is concerned with "the generation of value, through the creation of economic activity, by identifying and exploiting new products, processes and markets" These views are supported by Audretsch and Thurik (2004) who have summarized the work of a number of authors and show three ways that entrepreneurship contributes to growth: by creating knowledge spillovers, creating competition and by providing diversity among firms. To understand the concept of entrepreneurship, definitions of the term are discussed below.

The word "entrepreneurship" originates from the French verb entreprendre (Oxford Dictionary, 1999), which means to undertake. The meaning of the word has now evolved in English to imply the undertaking of a new project. A new project may cover any of the following areas: new products, new services or new processes by businesses or individuals.

The term "entrepreneurship" is most often associated with the actions of individuals and in particular the actions of owner-managers. Consequently, the study of entrepreneurship is often associated with the study of small businesses, although these terms are in no way synonymous (Carland *et al.*, 1984). While the importance of small businesses to an economy is well recognised, the focus of this research is on the relationship between entrepreneurship and corporate governance in larger existing firms. This type of entrepreneurship is often termed "corporate entrepreneurship". The definition of entrepreneurship is examined in the following paragraphs and the definition of "corporate entrepreneurship" is examined in Section B2.3.

Entrepreneurship as a process, is tied to the concept of uncertainty (Jones and Butler, 1992). As opposed to wage workers and land owners who both receive a certain/fixed income or rent, the entrepreneur earns an uncertain profit from the difference between a known buying price and an uncertain selling price (Iverson *et al.*, 2006). Knight (1921) and Schumpeter (1934) defined uncertainty as a situation where it is impossible to find a perfect solution due to imperfect foresight or the inability of the persons concerned. An entrepreneur is a person who takes advantage of this uncertainty by reorganising the factors of production to take advantage of

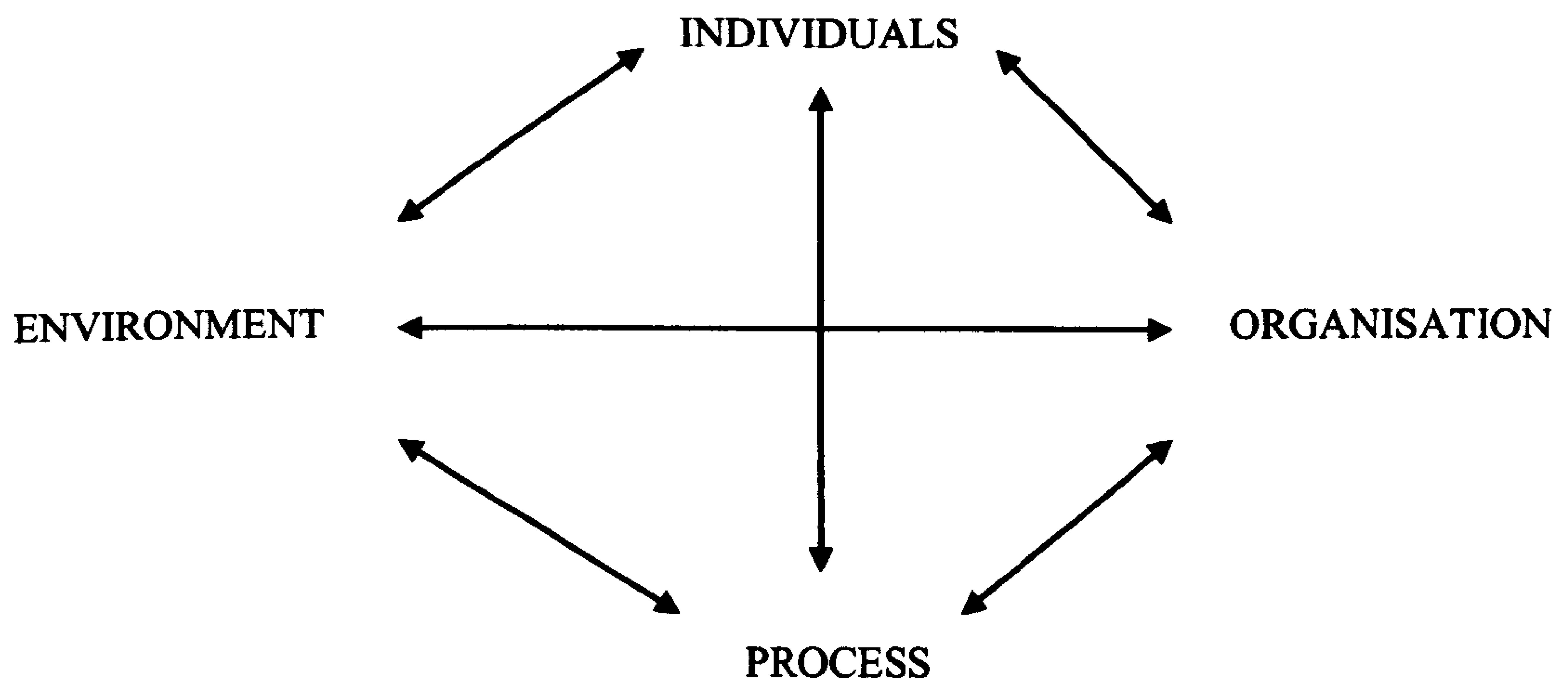
market opportunities so that a surplus is produced above the cost of production (McMullen and Shepherd, 2006). This surplus is otherwise termed entrepreneurial profit and is the reward of the entrepreneur for his actions in the face of uncertainty. The entrepreneur would expect these profits to be above the normal rates of return in a business due to his willingness to take actions in the face of uncertainty. The difference in Schumpeter's and Knight's definitions of entrepreneurship is that Schumpeter believed an entrepreneur was a leader of men who organised the new factors or production in the face of uncertainty, whereas Knight believed that an entrepreneur is a person who assumes the responsibility for uncertainty (Iverson *et al.*, 2006).

Uncertainty should not be confused with risk. Risk refers to future events that are predictable even if the probability of the predictable outcome is very small (Alchian, 1950). Therefore, profits arising from risk-taking are a normal part of transacting business and should not be expected to be greater than a normal salary.

An alternative concept of entrepreneurship has been presented by Gartner (1985) who developed a multi-dimensional framework to the subject after examining the published research on the subject. This framework involved the interaction between the following four dimensions: (1) individuals – the persons involved in starting the business, (2) organisation – the kind of business started, (3) environment – the outside factors influencing the organisation and (4) the new business process – the actions taken by the individual to start the venture. Gartner states that a number of attempts have been made to describe entrepreneurship using two or more dimensions but his four dimensional model is necessary to fully comprehend all the interactions that make up entrepreneurship (see Diagram 2, below). Gartner's concept of entrepreneurship however is similar to that of Long's (1983) who said entrepreneurship involves 1) uncertainty and risk, 2) complementary managerial competence and 3) creative opportunism.

The greatest problem with trying to define entrepreneurship is the number of different concepts that the terms covers. This problem is compounded by the fact that it is difficult to quantify and therefore is difficult to know when it is present or has indeed occurred. Definitions of entrepreneurship can be quoted from numerous sources by different authors (Lumpkin and Dess, 1996; Gartner, 1985; Schumpter, 1934) but it essentially involves three factors: the presence of opportunities, the presence of enterprising individuals and the action of individuals taking advantage of the opportunities presented. When these three forces meet entrepreneurship can occur, but a fourth element must also be present and that is the institutional structures must be in place in an economy that will facilitate entrepreneurship to flourish (Hwang and Powell, 2005). These institutions include investors who will finance entrepreneurs in their activities, religious institutions who will permit entrepreneurship in their communities, colleges which will teach

Figure 2: Gartner's Framework for describing entrepreneurship.



Gartner, W.B. (1985) A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review,* 10 (4): 698.

entrepreneurship and a judiciary which will defend the right of entrepreneurs.

B2.3 Corporate Entrepreneurship

Entrepreneurship is not necessarily the preserve of new businesses. Existing business must continually evolve, adapt and change in order to survive. To do this they must be as entrepreneurial as new businesses. Entrepreneurship within existing businesses, or Corporate Entrepreneurship, is not distinct or separate from the entrepreneurship that has been discussed above, but is a part of entrepreneurship (Guth and Ginsberg, 1990). As companies increasingly compete in a global economy, corporate entrepreneurship performs a unique role of continuously renewing firms' competencies to compete (Yiu and Lau, 2007).

The following paragraphs attempt to place corporate entrepreneurship in perspective with entrepreneurship in general. Various definitions are presented along with the ways in which existing corporations try to be entrepreneurial, the attributes of corporate entrepreneurship and how the corporate entrepreneurship process operates in companies.

Entrepreneurship has been broadly defined above as creating "something new". Burgelmann (1998) has shown that this "something new" can be the development of new businesses in established companies or in other words corporate entrepreneurship. Stopford and Baden-Fuller (1994), in their literature review, defined three concepts of corporate entrepreneurship – (1) corporate venturing or intrapreneurship, (2) the transformation or renewal of existing organisations and (3) "where the enterprise changes the rules of competition for its industry in the

manner suggested by Schumpeter" (p. 521). Stopford and Baden-Fuller (1994) go on to describe corporate entrepreneurship as involving "changes in the pattern of resource deployment and the creation of new capabilities to add new possibilities for positioning in markets" (p. 522). These characteristics are present in all three types of corporate entrepreneurship, but each type also has unique features. To understand corporate entrepreneurship in greater detail, the three types of corporate entrepreneurship are discussed below.

- *Corporate Venturing.* New business venturing is often associated with individuals but there is no reason why small teams of individuals within a corporate organisation should not be able to influence the new allocation of resources (Burgelmann, 1983). Indeed, from as early as the 1970s a number of large corporations have actively established venturing units within their existing organisations. These ventures have been classified either by their purpose (Campbell *et al.,* 2003) or by the way they were financed (Miles and Covin, 2002). In the former instance, these units typically followed one of two business models (Campbell *et al.,* 2003). The first model saw companies making strategic investments in companies for a specific reason. For example, an investment may be made in a supplier to guarantee the availability of components (Ecosystem Venturing). The second model saw companies investing in projects to improve the technical functionality of its core business (Innovation Venturing). Whilst it is easy to label the different types of corporate entrepreneurship, Burgelmann (1984) warns any company, irrespective of size, of the difficulties that they will encounter when they embark on the road of corporate venturing.

The classification of corporate entrepreneurship ventures by their mode of financing was developed by Miles and Covin (2002) to assist corporate executives in selecting potentially appropriate forms of corporate venturing, given specific venturing objectives and corporate circumstances. However, this classification criteria adds little to the understanding of corporate entrepreneurship and is therefore explored in no more detail.

- *Transformation.* The renewal of an existing organisation often starts with "financial engineering" but to be sustainable will involve in depth changes within an organisation and requires a wide spread acceptance that change is required. Usually this type of renewal will involve a company changing the allocation of its resources to achieve a better and more sustainable economic future. However, above all it will also involve the commitment and involvement of management (Srivastava and Lee, 2005).

- *Schumpeterian Entrepreneurship.* Schumpeterian competition suggests a new way of thinking about competition. Competition has traditionally been concerned with dominance in the

marketplace and the efficient allocation of resources (Harrigan, 1988, and Porter, 1980). However, at another level corporate entrepreneurship is concerned with concepts of strategy. Where a company is faced with entirely new ways of doing business, it will either have to innovate or face the consequences as was shown by Japanese car manufacturers when they entered the US market (Womak, Jones, and Roos, 1990).

Whichever type of corporate entrepreneurship is under discussion, research suggests that they all have a number of common attributes (Stopford and Baden-Fuller, 1994). These include pro-activeness, ambition, teamwork, a capability to resolve dilemmas and a capability to learn. These attributes are discussed in further detail in Appendix 2. However, to summarise, corporate entrepreneurship can be viewed "as the driver of new businesses within on-going enterprises as achieved through internal innovation, joint ventures or acquisitions; strategic renewal; product, process, and administrative innovations; diversification; and processes through which individuals' ideas are transformed into collective actions through the management of uncertainties (p. 351)". Similarly, Sharma and Chrisman (1999) define corporate entrepreneurship as ". . . the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization, or instigate renewal or innovation within that organization (p. 18)".

To explain the nature and role of corporate entrepreneurship, Burgelmann (1983) proposed a diverse model of the dynamic interactions between strategic behaviour, corporate context processes and a firm's concept of strategy. He divided an organisation's entrepreneurial activity into two parts. The first part he termed "induced strategic behaviour" which is a firm's structured entrepreneurial behaviour and operates in line with the company's concept of strategy. The second part is "autonomous strategic behaviour". This part operates outside the company's concept of entrepreneurship and comes about when middle managers question the current concept of entrepreneurship. Managers, by questioning the corporate status quo, provide the raw material of a company's renewal. However, for this renewal to be successful the behaviour must ultimately be incorporated into the organisation's induced strategic behaviour. This incorporation changes the organisations' induced strategic behaviour thereby showing diversity changes the existing order.

If an organisation exhibits entrepreneurial tendencies, there are two paths that it can take to corporate entrepreneurship. One approach involves a change process over a period of time, where incremental changes are made gradually (Lindblom, 1959). The second approach involves more rapid and dramatic change process where rapid changes are interspersed with periods of inertia (Eccles, 1993). The former scenario relies on the premise that change takes time. Change can start to occur at the lower levels of the hierarchy or in one department, but slowly the

entrepreneurial spirit spreads until it is pervasive throughout the organisation. The latter scenario is most likely to occur in emerging industries but also occurs in mature industries. This scenario implies that any time-frame is short and therefore there must be triggers that start the rapid change within an organisation. These triggers can be both internal and external factors. Internal factors will include reaction to a specific challenge such as the need for a new manufacturing process or a conscious decision to reverse the declining fortunes of a company. External factors will include the challenges thrown up by a hostile or dynamic environment (Kelly and Amburgey, 1991) or in some cases success will further ambition for greater success (Mansfield, 1963).

This section has attempted to define and explain corporate entrepreneurship. Much research has gone into the subject over the past 20 years, but there still exists an uncertainty as to what it actually is and how it occurs. In addition, a number of criticisms have been levelled at corporate entrepreneurship. For example, life cycle theory contends that it is normal for an organization to form, grow, mature, decline and die. Therefore, are companies spending too many resources to survive (Hoy, 2006)? Would it be more efficient for companies to simply go out of business at the end of their life cycles and the resources they consumed in the past to be utilised by newer more efficient businesses? This author considers this scenario would be too disruptive to many aspects of an economy and would be unacceptable to shareholders, employees and politicians. Consequently, companies will continue to view corporate entrepreneurship as fundamental to their existence. However, it must be stated that once the process of corporate entrepreneurship has started in an organisation, it is by no means certain that the process will continue successfully (Campbell *et al.*, 2003). Inertia, change in management or lack of commitment are all factors that can cause the process to fail. As stated above, if failure does occur this will have important consequences for all the stakeholders of an organization.

B2.4 Entrepreneurial Leadership

Lumpkin and Dess (1996) concluded that entrepreneurship is crucial for the viability of any company. However, entrepreneurship does not naturally occur as a part of nature but is started by a catalyst. This may be opportunity recognition (Park, 2005), local levels of knowledge, an area's acceptance of new ideas or the amount of unemployment in an area (Audretsch and Keilbach, 2007). Whatever the catalyst is, entrepreneurial leadership is primarily concerned with people and their actions. Thus the type of leadership in any organization, defines whether or not that organization will be entrepreneurial. Gupta *et al.* (2004) defined entrepreneurial leadership as "leadership that creates visionary scenarios that are used to assemble and mobilize a 'supporting cast' of participants who become committed by the vision to the discovery and exploitation of strategic value creation" (p. 242). Tarabishy *et al.* (2005) in an attempt to define entrepreneurial leaders, as opposed to leadership, characterised entrepreneurial leaders as confident, visionary,

creative, visionary and principle centred while Robinson states that entrepreneurial leadership is closely aligned with the personal values of entrepreneurial leaders. Santos-Cumplido and Linan (2007) have summarised many of the qualities required by an individual to have "entrepreneurial quality" (p. 92) many of which are influenced by their personal environment but also the global environment.

Gupta *et al.* (2004) definition of entrepreneurial leadership emphasises that a leader must be able to create an environment in which entrepreneurship can flourish. This means a group of committed individuals must be assembled who all have the same vision of creating value above and beyond what is normally expected. In the world today, with increasingly scarce resources, a global market where good ideas are almost instantaneously copied and where political volatility is part of everyday life, creating real value in a company becomes increasingly difficult. This must all be done against a backdrop of containing risk, so that the future of a company is not threatened by an ill judged or badly executed idea. In order for all this to happen, the presence of an entrepreneur is required and those qualities that make an entrepreneur successful.

Literature (Gupta *et al.,* 2004; Hitt *et al.,* 1999) has stressed that a leader must ensure that four conditions or environments are present for entrepreneurship to occur in a company. The first is open communication so that the entrepreneurial vision is understood. One way to do this is to break down the traditional barriers between corporate departments so that there is continual interaction between all members of an organization. For example, cross-functional teams, where team members are drawn from different departments, can be brought together to solve specific problems.

The second condition that a leader must ensure is present, is an environment that encourages and fosters innovation. This means a company must have processes in place that allow innovation to occur within a company. The third condition is the availability of the resources to execute the entrepreneurial process. In many companies this may be the hardest environment for a leader to foster as some parts of the company will be asked to give up scarce resources with the possibility of no immediate payback. The fourth condition that a leader must foster, is the willingness and ability within the company to continually experiment and generate new ideas. This means that employees must accept the notion of failure in so far that it must be understood that not every new idea will lead to the successful development of a new product or idea. Again, this can be a difficult mindset to instil in a company where so often the number of successes is the measure by which employees are rewarded rather than the number of failures.

Even if all the above conditions exist in an environment, entrepreneurship will not necessarily occur without the right leader. Gupta *et al.* (2004) have found that leaders face two main challenges in their attempts to be successful entrepreneurs. The first is to create the opportunities that can be used by the organization's members to revolutionize the organization. The second is to convince all the organization's stakeholders that change is possible and that the necessary resources will be committed by all parties to enact the change.

If a leader can surmount these challenges, he will still not necessarily be a successful entrepreneur. Gupta *et al.* (2004) state that "entrepreneurially orientated firms are capable of corporate transformation by effectively translating emergent options into platforms for continuous value creation" (p. 244). The important word in this statement is "continuous" in so far that in today's world successful leaders are those who are able to lead their companies through successive changes that result in the company reinventing itself, remaining at the forefront of its industry sector and staying profitable.

The above section has described the personal qualities necessary for a leader to be an entrepreneurial leader and the environmental conditions necessary to foster successful entrepreneurial leadership. As with all aspects of entrepreneurship, entrepreneurial leadership is a hard concept to define. Gupta *et al.* (2004) have emphasised the necessity for continuous value creation and while this may be the true measure of an entrepreneurial leader it is also extremely hard for an entrepreneurial leader to ensure he continually creates value in his firm. This need for continuous value creation can also have serious governance implications, as a leader is tempted to cross the boundaries of good governance in order to achieve continuous value creation.

B2.5 Entrepreneurship and Firm Typology.

For individuals or firms to be "entrepreneurial" involves a conscious decision making process. Entrepreneurship therefore must be a component of a corporation's "strategy making". This section will review the various types of companies and how each type adopts entrepreneurship. This typology is referred to in Section D2.2 where each company researched is classified according to Mintzberg's typology. Mintzberg (1973) identified in literature three classes of companies defined by the strategy they use to adopt entrepreneurship. These are: (1) the entrepreneurial mode, (2) the adaptive mode and (3) the planning mode. These three modes are not discrete. Instead they can appear in a number of combinations. For example, there may be entrepreneurs who are unable to move beyond the adaptive stage in their firm's life cycle. Alternatively, different modes may be found within the same organisation. Departments within an office or subsidiaries within one company may approach the decision making process from

different perspectives. Finally, because no organisation is static over time, firms will experience all these modes over their life cycles.

Mintzberg's three modes of strategy making, provide three broad environments in which decision-making can take place. The question whether decisions actually taken in these environments are entrepreneurial in nature is not answered. Miller (1983) however, takes Mintzberg's three strategy modes and uses them to formulate a basic classification of firms and correlates the likelihood of entrepreneurship with each type of firm. These are summarised in Appendix 4.

The hypotheses formulated by Miller to test the correlation between entrepreneurship and firm typology were largely borne out in his tests. He classified companies under three headings:

- *Simple (Entrepreneurial) Firms*: Miller showed that in "Simple" firms, entrepreneurship is closely linked with the "dominance" of the owner-manager. The more dominant this person's personality is and the more powerful he is, the more likely it is that the firm will engage in entrepreneurial activities to the extent that environmental, structural and decision making factors will be unimportant. However, owner-managers' dominant character cannot explain completely why small firms tend to be entrepreneurial. Another important factor is that entrepreneurship in small companies is a relatively simple process and consequently does not require a complex infrastructure to support it.

- *Organic (Adaptive) Firms:* Organic firms, lacking the ability to react quickly to market forces and the resources to be able to control their environments, tend to be the most adaptive. They make efforts to respond to market conditions as quickly as possible by fostering an open infrastructure with collaboration, delegation of authority and a high use of technology occurring at all levels of the firm. This kind of corporate culture arises because of the environment in which these companies operate. In order to survive in dynamic environments, firms must be decentralised, flexible, and technologically cognitive, with an ability to survive uncertainty.

- *Planning Firms:* In "Planning" firms, entrepreneurship is more difficult to foster. Because these companies focus on efficiency, stability and the production function of the operation, entrepreneurship tends to be neglected. These traits are offset, to a certain extent, by strong central management and an adherence to a clear strategy. However, this latter characteristic means firms do miss opportunities that are thrown up

randomly by the operational environment, because they tend to try and control their environment rather than seeking advantages from it.

The papers of Mintzberg's and Miller's represent a key stage in the study of firm strategy and typology (Zahra *et al.,* 1996) and form the basis for much of the subsequent research that has taken place. However, not all authors believe the typology of Mintzberg and Miller serves a useful purpose. Miller and Cardinal (1994) state that while the classification of companies is a valid exercise it results in rigidity rather than promoting entrepreneurship. Subsequent to the work of Mintzberg and Miller, Zahra *et al.* (1996) performed a comprehensive review of forty-five empirical papers on firm level entrepreneurship. Each paper viewed their subject matter from a different perspective. No single typology was found to be all encompassing. However, the one conclusion the authors did reach from their study was that "companies that engage in entrepreneurial activities achieve superior performance"...but that...."the state of the art in this area indicates that many research questions still need attention (p. 56)."

B2.6 Corporate Governance and Entrepreneurship

The current state of the literature on corporate governance and entrepreneurship has been reviewed in this and the previous chapter (Chapter B1). This section reviews the current literature available on the interaction between corporate governance and entrepreneurship.

This chapter has shown that entrepreneurial activity is most often associated with ventures in the early stage of their lifecycle although there is increasing interest in the role of corporate entrepreneurship (Zahra *et al.*, 1999; Zahra, 1996) in large companies. Corporate governance on the other hand tends to be more focused on large corporations which are in a later stage of their life cycle. Whether or not governance and entrepreneurship can be successfully implemented in large companies, is a question that needs to be addressed following the failures of such companies as Enron and WorldCom. Indeed the failure of such companies is a clear indication that corporate governance does not always operate in the manner that it is supposed to, and the concept of governance as it is known today has yet to develop into an effective force to prevent such failures (Clarke, 2005). While little relationship has been shown to exist between governance and entrepreneurship, research shows that governance does improve corporate performance (Hendry and Kiel, 2004; Carter *et al.*, 2003; Kroll *et al.*, 1997) although Rose (2007) disputes these findings and states that there is no positive relationship between good governance and firm performance.

While a number of the above studies show the positive effects of corporate governance on corporate performance, a third factor in today's business needs to be considered, which is the part

entrepreneurship plays in the relationship between corporate governance and corporate performance. Entrepreneurship has been shown to be crucial to the continued success of a company, but by its nature will disrupt the status quo of any organization (Song *et al.*, 2008). The question for any company therefore is how to balance the competing demands for strong corporate governance, good corporate performance and continual change brought about by entrepreneurship. A literature search on this particular relationship shows that little currently appears in the public domain. The following papers were identified:

- Klein (1999) looked at entrepreneurship and corporate governance in relation to the Austrian school of economics. He was interested in understanding the role of the entrepreneur and the problem of corporate governance from the Austrian perspective.

- Taylor (2003) discussed the need for boards to achieve a balance between entrepreneurship and corporate governance and warns boards against being preoccupied with their monitoring duties so that they have little time to concentrate on their duty of corporate renewal.

- Carlsson (2003), citing the example of the Swedish Wallenberg family, shows the benefits of active ownership and describes how the family over a number of generations has evolved competencies and structures that has enabled them to help such companies as ABB, Ericsson and Electrolux become world leaders in their particular fields.

- Strikwerda (2003) researched corporate entrepreneurship and governance concentrating particularly on the role of subsidiary boards in developing entrepreneurship in the corporate environment.

- Colin and Smith (2006) studied entrepreneurship and corporate governance in two riding school, one privately owned and one owned by an association. They found that the market place had an influence on the relationship between these two concepts.

- Audretsch *et al.* (2007) studied agency theory and corporate strategy in new ventures and identified those instances where the power of the managers can exceed that of the venture's owners.

- Nayak *et al.* (2007) studied corporate governance and entrepreneurship in India and argued that the two concepts were entwined with national identity and cultural

traditions, so much so that they continue to impact managerial priorities, attitudes and dispositions.

- Audretsch *et al.* (2009) again studied "the agency theory ... in relation to strategic entrepreneurship in new ventures". They stated that the function of managers in entrepreneurial new ventures is fundamentally different from their counterparts in large established, incumbent corporations.

However in general, there appears little in current literature that considers corporate governance, corporate performance and entrepreneurship together.

This author considers the apparent lack of research on corporate governance and entrepreneurship may well be due to the fact that these two aspects of a corporation are often considered to be irreconcilable (see Section A1.1). Whereas governance is concerned with control, entrepreneurship is more associated with environments where there are few controls and where individualism is highly regarded. However, governance and entrepreneurship are both concerned with improving corporate performance and it is in this dichotomy that the research statement lies. The following chapter looks at how this author intends to research this dichotomy.

B2.7 Conclusion

In this chapter, various aspects of entrepreneurship were reviewed. Entrepreneurship requires organizations to be able to continually evolve and create value for their stakeholders. In order for this to occur a leader with the right qualities who can identify opportunities and pursue them to a successful conclusion is required. However, for entrepreneurship to be successful over a long period of time requires more than the action of the head of the organization. A culture of entrepreneurship must be cultivated throughout the whole organization, which means that the organization must be able to accept continual change. However, change brings uncertainty with it and uncertainty can lead to lapses in proper procedures, as corporate procedures fail to keep pace with the change. It is in these circumstances where there are inadequate checks and balances, that lapses in governance will occur either by design or by error. Part C looks at the research framework, design and the methodology to be used in this research to answer the apparent conflict between corporate governance and entrepreneurship.

PART C: RESEARCH METHODOLOGY

This part sets out the theoretical framework and research design that were followed in this research. The part begins with the development of the theoretical framework of the research and moves through the design stages. The part comprises of four chapters:

C1: Theoretical Framework

C2: Research Design 1: Methodology

C3: Research Design 2: Sampling

C4: Research Design 3: Data Collection

CHAPTER C1 – THEORETICAL FRAMEWORK

Part B presented a review of the current literature on corporate governance and entrepreneurship. This chapter developed the theoretical framework which was used to study the relationship between these two concepts and corporate performance. As a first step, a research statement was derived from the literature review. This research statement is based on the fact that Section B2.6 identified a gap in the literature on the relationship between corporate governance and entrepreneurship. Once the research statement is made (Section C1.1 and C1.2) the conceptual framework is discussed (Section C1.3) and the research propositions are developed (Section C1.4).

C1.1 Research Statement - Introduction

The importance of effective corporate governance procedures in producing or promoting corporate performance and entrepreneurial environments in young, privately held firms has been recognised (Arthurs and Busenitz, 2003; Markman *et al.*, 2001). This is especially the case for companies just before major milestones in their development occur, such as initial public offerings, when the interests of all the stakeholders must be closely aligned (Markman *et al.*, 2001). In publicly quoted companies such major milestones occur less frequently and therefore the opportunity for the alignment of interests occurs less often. Berle and Means (1932) first discussed the alignment of the different interests of stakeholders in a company when they published their seminar work on Agency Theory.

The problems arising from the owner/agent situation outlined by Berle and Means (1932) are not limited to companies where the two parties are separate and distinct (see Section B1.6). Entrepreneurs, who are also the managers, face similar problems plus a variety of conflicts and dilemmas, all of which have profound effects on their companies. These dilemmas can be as fundamental as how he/she is to be remunerated (i.e. salary versus a share of the residual profits). Robinson *et al.* (2007) list a further twenty six such general dilemmas that face entrepreneurs and these dilemmas range from how to manage risk or how to raise capital to how to maintain their credibility. The authors also found that all these dilemmas were affected by a number of circumstances such as environmental and personal backgrounds. Morris *et al.* (2006) found that in addition to general dilemmas, specific segments of the business community face specific dilemmas, the case these authors researched were those dilemmas faced by female entrepreneurs. Entrepreneurs therefore can face unique problems, but these are compounded as their companies grow by the usual problems faced by companies.

All businesses therefore, from a small company with a few employees to a large multinational company, face problems when trying to be both entrepreneurial and compliant with best corporate governance practices. While there is much literature on these two subjects, as Chapters B1 and B2 have shown, Section B2.6 has also shown that there is comparatively little research on how these two concepts interact in the corporate world. Section C1.2 summarises the problems in this relationship in the form of a research statement. The research statement is then expounded by the formulation of research propositions surrounding corporate governance (Section C1.4). With regards to entrepreneurship no propositions are made. Instead the subject is examined in the manner discussed in Section C1.5.

C1.2 Development of the Research Statement

In studying the relationship between corporate governance, entrepreneurship and corporate performance, there are numerous environments in which this relationship can be studied. Section A1.2 outlined the potential conflict between corporate governance and entrepreneurship and hypothesised that the stringent enforcement of corporate governance can lead to a restriction in the growth of entrepreneurship and corporate performance. However, at the same time unrestricted entrepreneurship can lead to best corporate governance practices not being followed. Therefore in all companies, there is a need to achieve a balance of strong corporate governance practices at the same time as allowing the spirit of entrepreneurship to flourish. In order to research this potential conflict this author chose to research those companies that faced rapid technological change as it in these kinds of dynamic companies that the dilemmas, problems and stresses arising from the governance/entrepreneurship relationship are most accentuated. In addition, only US based companies were researched due to the fact that corporate data is more available than on US companies, due to SEC regulations, than from other countries (See Section C3.2). Finally, because the author has spent much of his career working for US companies and indeed has spent many years living and working in the US he has more experience of the workings of American companies than British companies. It therefore appeared more sensible to select companies for research from a population solely made up of US companies. Therefore the following research statement is posed – what is:

The Influence of Entrepreneurship on the Relationship between Corporate Governance and Corporate Performance.

Each component of this statement is defined in more detail in Section C3.6.

C1.3 Conceptual Framework

The conceptual framework is an important part of any research as it helps to organize the exploration of the research statement. "Conceptual frameworks are connected to outcomes or problem resolution because they aid in making judgements" (Shields and Tajalli, 2006, p. 315). Thus frameworks are a systematic way to organise inquiry. They are used to outline possible courses of action or to present a preferred approach to a research project. Shields and Tajalli compare the conceptual framework to a map in that ..."maps are problem solving tools. They help navigate through the experience or the experiential world" (Shields and Tajalli, 2006, p. 316). This view of the conceptual framework therefore emphasises the conceptual framework's connective function between a literature review, research statement and the data collection.

The literature review identified a potential lack of understanding in the relationship between corporate governance and entrepreneurship (Section B2.6). This section will develop the conceptual framework that will be used to develop the research propositions (Section C1.4) which in turn will give the necessary direction to the research. Conceptual frameworks are grounded in the review of the literature. More specifically the conceptual framework chosen should be able to accomplish two goals. The first is a backwards connection which links the problem with the literature while the second is a forward connection which links the problem to the collection and analysis of data. In order to understand the conceptual framework of any research Shields and Tajalli (2006) recommend the use of micro conceptual frameworks, of which there are, two kinds: those that are ready made and those that must be created. By using the micro-conceptual framework approach, once a conceptual framework and purpose are linked, the methodology to be used can be determined. Table 1 lists five micro conceptual frameworks and links each one to a research purpose.

In order to correctly classify the research purpose and therefore develop the research propositions, a number of questions have to be answered, all of which will start with the determiners: what, why, who and how? By reference to Table 1 below the research purpose can be classified into one or a number of the different categories described above, i.e.: exploratory, descriptive, decision making, gauging and explanatory. The research statement from Section C1.2 leads to the selection of the exploratory and gauging categories as the categories that will be used to study the governance/entrepreneurial relationship. This is because the micro conceptual frameworks of "working hypotheses" and "practical ideal type" (See column 3 in Table 1) are the frameworks that are the most suitable on which to base this type of research. In addition to the above table, the exploratory "research purpose" can be justified by the fact that the research purpose is not specifically referring to pre-existing hypothesises or theories that will be tested but is exploring a problem into which little research has been carried out (see Section B2.6). The gauging "research

purpose" can be justified because the research is attempting to examine the governance/entrepreneurial relationship – what is the relation, how does it work, can it be improved and what have been the consequences to corporations when this relationship does not appear to work? Thus, the backwards connection (i.e. micro-conceptual framework to research purpose) is established. At the same time the exploratory purposes and gauging of any research lend themselves to the qualitative methodology which establishes the forward connection between the micro conceptual framework and the methodology of the research.

Table 1: Classifying Micro Conceptual Frameworks

Research Purpose (1)	**Research Question (2)**	**Micro-Conceptual Framework (3)**	**Research Technique/Methodology (4)**	**Statistical Techniques (5)**
Exploration	Anything goes: what, when, where, why, who, how, or any combination of the above.	Working hypothesis.	Usually qualitative techniques: field research, structured interviews, focus groups, document/archival record analysis.	Qualitative evidence may not be statistical. But anything goes. Any type of statistical analysis possible.
Description	What	Descriptive categories.	Survey and content analysis.	Simple descriptive statistics: Mean, median, mode frequency distribution, percentages, t-statistics.
Gauging	How close is process/policy to an ideal or standard? How can x be improved?	Practical ideal type.	Case study, survey, content analysis, document analysis, structured interviews.	Simple descriptive statistics: Mean, median, mode frequency distribution, percentages, t-statistics.
Decision Making	What is the best decision? Which approach?	Models of operations research.	Cost benefit analysis, cost effectiveness analysis, linear programming, decision tree, etc.	Quantitative techniques of operations research.
Explanation	Why?	Formal hypothesis: if x then y.	Usually quantitative, experimental and quasi experimental, design, survey, existing data analysis.	t-statistics, correlation, chi-square, analysis of variance, simple and multiple regression.

Shields, P.M. and Tajalli, H. (2006) Intermediate Theory: The Missing Link to Successful Student Scholarship. *Journal of Public Affairs Education*, 12 (3): 318.

Having defined the research purposes as exploratory and gauging the research propositions are developed and are presented in the following section with this in mind.

C1.4 Development of Research Propositions

In order to be able to test the research statement stated in Section C1.2, a number of research propositions were developed. Yin (2003, p. 22) states that "each proposition directs attention to

something that should be examined within the scope of the study". These propositions were initiated and organized as a result of the literature review and with reference to the conceptual framework of this research that was discussed in Section C1.3. Proposition numbers 1 to 12 below (section C1.4.1) were designed to examine each of the major drivers of corporate governance (Section A1.2) with the intent of understanding their effect on corporate performance. The proposition on entrepreneurship (section C1.4.2) relates to how entrepreneurship influences the corporate governance/corporate performance relationship.

C.1.4.1 Corporate Governance Propositions

Section B1.4.1 highlighted the fact that corporations are formed and operate under legal frameworks that govern the relationship between stakeholders, management and employees. These frameworks affect two major stakeholders, investors and creditors (La Porta *et al.,* 1998). The rights and obligations conferred on shareholders and creditors help to explain the financial and ownership structure of companies (Bebchuk, 1994; Harris and Ravi, 1988). Of particular interest is the fact that La Porta *et al.* (1998) state that common law countries afford the best protection to shareholders and those countries adhering closest to the strict principle of one-share-one-vote best protect shareholders (Grossman and Hart, 1988). In spite of the protection afforded to shareholders, the review of the literature showed two additional factors are required to ensure companies operate efficiently in an economy which in turn encourages potential shareholders to invest in companies. These are firstly the macro-economic environment in which companies operate must be stable . The second is the regulations that govern how companies operate should not be so complex that they hinder companies from operating efficiently and profitably.

In the case of a macro-economic environment, a company is primarily concerned with the stability of the financial markets of the economy in which it operates. Section B1.4.1 summarised a number of definitions of financial stability (Das *et al.,* 2004; Caprio and Klingebiel, 1996). With regards to the regulatory environment in which companies operate the organisations that issue the regulations must ensure that the economic environment has independence, accountability, transparency and integrity (Das *et al.,* 2004). Today many of these regulations are often controlled by non-governmental, self regulating bodies as well as central governments. This mixture of enforced regulation backed up by self-regulation has largely come about because the public has demanded governmental action in response to corporate fraud and the need for economic stability in a rapidly changing global economy (Witherell, 2002) but also because the professional bodies representing interested parties wish to be seen as proactive players in the field of corporate governance. Both enforced regulation and self-regulation have advantages, but the most important and most difficult aspect of any regulation is to achieve an equitable balance between ensuring the rights of shareholders and managers.

With regards to the legal drivers of corporate governance the following propositions are made. They are stated with the intention to determine if the economic and regulatory conditions prevalent at the time of this study could have had an effect on the corporate governance enacted by the companies under research:

Proposition 1: National institutions impose corporate governance regulations with the intention of promoting economic stability and growth within economies. These regulations are passed in response to macro-economic influences (e.g. the lack of or presence of banking crises and asset price stability/volatility).

Proposition 2: Corporate governance in companies is driven by the corporate governance practices enacted by national institutions.

The study of the historical drivers of corporate governance has most often been concerned with the influence of firm characteristics on governance (Durnev *et al.*, 2005 and Francis *et al.*, 2005) but Doidge *et al.* (2007), Bushman *et al.* (2004), Dyck and Zingales (2004) and Stulz and Williamson (2001) have shown that country characteristics are equally important. Measuring a country's historical characteristics however is not easy due to the many aspects of this concept. Consequently "culture" (Coffee, 2001) is seen as one way to measure a country's historical characteristics, although this "yardstick" can also be problematic (Licht *et al.*, 2005).

Returning to firm characteristics, John and Kedia (2002) have shown that the corporate structures of companies, and their corporate governance, tend to be self perpetuating even when a company enters a new marketplace (section B1.4.2). Thus if a company has a history of good corporate governance, it will tend to retain these characteristics as this is seen as beneficial for the performance of the company (Belkaoui, 2001).

The third historical influence on corporate governance that is examined is the influence of the individuals that make up the management team of a company and especially the CEO. Individuals influence their environment in the same way that environments influence individuals. Therefore, for example, charismatic leaders produce the very "best" from employees as they are able to effectively motivate them (Luthans *et al.*, 1998). Charismatic leaders have always been important in the success of firms but this has been especially true in the latter part of the 20th Century and the first decade of the 21st Century.

Section B1.4.2 identified the skill sets required of a successful leader and the circumstances under which such a leader can fail. Similarly, the traits of entrepreneurial leaders were discussed along with the circumstances under which they can either succeed or fail.

In the light of the above discussion, the following statements are proposed. These propositions are designed to investigate historical influences on corporate governance which the literature review identified but which this author believed did not discuss in sufficient detail with regards to corporate governance and corporate performance.

Proposition 3: The history of a country affects the corporate governance structures adopted by companies.
Proposition 4: The history of a company affects the corporate governance structures adopted by that company.
Proposition 5: The background of business leaders influences companies' attitude to corporate governance.

The financial drivers of corporate governance can be classified under three headings:

- The sources of corporate equity.
- The sources of corporate debt or external finance.
- The tax and regulatory regimes under which a company operates.

The issues surrounding importance of the relationship between the first two topics above were debated in Section B1.4.3 which was followed by a discussion on how the availability of capital affects corporate structures. Raghuram and Zingales (2000) have stated that whereas in a perfect financial system, the availability of financial resources to businesses would be entirely dependent on the quality of any underlying assets against which a company wishes to raise capital, in the commercial world a company's ability to raise capital is in fact more dependent on how well developed the financial sector of an economy is. With this in mind, two views have tended to shape the discussion on the capital structure of firms.

Modigliani and Miller (1958) stated that assuming perfect and complete capital markets, the capital structure of a company would have no effect on its investment decisions. Instead, the ratio of equity to debt is affected by tax considerations. The alternate view is that of Jensen and Meckling (1976) who state that the capital structure of a company and its investment decisions is dependent on compromises being reached between shareholders and bondholders. However, in any compromise there will be vested interests of all parties that have to be taken into consideration.

Schoubben and Van Hulle (2004), Faulkender and Petersen (2006) and Ju *et al,* (2005), Bradley *et al.* (1984) have all researched the optimal leverage ratios for companies and have reached different conclusions based on the type of companies they were researching and the environments in which the companies operated. Whatever the optimal leverage ratio for a company may be there are governance implications as the demands of both equity holders and debt holders have to be balanced.

In addition to the capital structure of companies, two other financial issues influence corporate governance. The first, which is referred to above, is taxation (Desai *et al.*, 2005) and the second is the GAAP standards (Generally Accepted Accounting Principles) in force in an economy (Tzanetakis and Poddar, 2004; Jackson, 2003 and Viets, 2003). In the former case taxation affects corporate governance because of the attitudes it instills in people. At one extreme, taxation is seen as the diversion of profits from shareholders but on the other hand the lower taxation rate levied on dividends by central governments is seen as a way to encourage companies to distribute their profits rather than leaving management to make potentially dubious investments with surplus cash.

With regards to the enforcement of GAAP standards these standards often have the same "authority" as government regulations and therefore can have a significant impact on corporate governance. While both the aforementioned issues are important with regard to corporate attitudes to governance the leverage issue remains the singularly most important financial driver of corporate governance. Therefore while proposition 6 covers all the above issues corporate capital structure is the most important issue:

Proposition 6: Financial issues influence the capital structure of corporations which in turn contributes to management's attitude to best corporate governance practices.

Boards of directors, as representatives of shareholders, have a vital role to play in the structure of any company which includes it's attitude towards corporate governance. Exactly how this attitude to corporate governance is viewed is somewhat dependent on how the relationship between boards and corporate management is viewed. Section B1.5 discussed a number of theoretical frameworks on the composition of boards and their roles and whether or not all the theories were relevant at some point of time in a company's life (Lynall *et al.*, 2003). The section also presented the importance of the composition of boards and the role of each type of director in the running of companies. The importance of executive directors was shown to be in their detailed knowledge of their companies and of their industries in general. Non-executive directors were shown to be important by the fact that they are independent. An additional factor that needs

to be considered is board diversity. On the one hand Zahra and Stanton (1998) and Jensen (1993) found no significant statistical relationship between the percentage of ethnic minority directors and several accounting measures of financial value. On the other, Carter *et al.* (2003) found a statistically significant positive relationship between the presence of women or minorities and firm value. However, as minorities have become increasingly vocal and shown their preference to purchase from companies that they can identify with, the subject of board diversity has increased in importance. This is especially important as minorities in the US become increasingly affluent.

Much of the research referred to above has been solely concerned with board composition and firm performance. Increasingly research is turning to look at the links between board composition, governance and performance. Raheja (2005) started this line of research and concluded that board composition and how board members voted on issues was largely dependent on how the directors were aligned with the shareholders and the availability of information to make informed decisions. Thus companies in highly competitive industries or with a high degree of inside ownership required smaller boards. Similarly, it is more efficient for high technology companies to have smaller boards due to the difficulty and cost of verifying complex business matters, whereas in companies where it is easier for outside directors to verify projects, a higher proportion of outside directors will be seen.

This research intends to investigate further the relationship between board composition, governance and corporate performance, as these relationships have not been researched specifically with regard to large, entrepreneurial high technology companies. Three main propositions are presented. Each deals with a specific aspect of board composition, performance and governance. However the first and last propositions are split into two parts for ease of understanding:

Proposition 7a: Companies in the early stages of their life cycle will experience steady growth as they strive to gain market share. Corporate governance issues will be at a minimum as management and company owners' interests are closely aligned.

Proposition 7b: Quoted companies will outperform companies whose boards have been largely selected by a CEO/founder and are therefore less diverse in experience. However, corporate governance issues will increase as management and company owners' interests diverge.

Proposition 8: Boards of directors appoint CEOs with the expectation that they will grow the companies rapidly, increase profitability and promote best business practices.

Proposition 9a: The more static the composition of a board of directors the less growth a company will experience. However, corporate governance issues will decrease as management and company owners' interests are more aligned.

Proposition 9b: Companies whose boards of directors are comprised largely of executive directors will experience less growth than those companies whose boards are dominated by non-executive directors, but more corporate governance issues due to the lack of independent board directors.

Shareholder registers of companies contain different groups of individuals and organisations with differing reasons for holding their shares. Proposition 10 is concerned with investigating those shareholders that have the ability to influence governance structure and performance of companies by their presence on corporate shareholder rosters. The two major groups of shareholders in any company that have this ability are the directors and institutional shareholders.

Boards of directors are in a unique position in a company because of their relationships with both the shareholders and the management of companies (Berle and Means, 1932; Jensen and Meckling, 1976). Section B1.6.1 discussed this issue along with the motives of directors and used the examples of research and development and diversification as two areas where the motives of individual directors can affect the outcome of such decisions on these issues. This discussion was followed by a discussion on the importance of institutional shareholders. These shareholders also have different reasons for investing in companies depending on the type of shareholder they are, which in turn affects the way in which they will try and influence the management's decisions. However, in the context of this discussion, perhaps the most influential group of shareholders in corporations today are "blockholders".

The influence of blockholders on corporations is potentially enormous, but how this influence is exercised is dependent on the type of blockholder under discussion. Until recently pension funds and institutional shareholders were the most important blockholders. However, in recent years the emergence and importance of private equity companies has increased as wealthy private individuals have become an important component of the investment community. The literature review showed how the size of shareholdings of blockholders affects firm value, the implications of blockholders on governance and whether or not the benefits that accrue to blockholders also accrue to minority shareholders. The conclusion was reached that the advantages and disadvantages of blockholders can vary but in general the influence of blockholders on corporate governance and performance is largely seen to be favourable (Dahya *et al.*, 1998 and Zahra and Pearce, 1989), although a number of authors have disputed this assumption (Himmelberg *et al.*, 1999 and Holderness and Sheehan, 1988). Therefore proposition 10 states:

Proposition 10: Corporate ownership, control, and corporate performance are interlinked. It is expected that blockholders, in particular, will have a favourable impact on corporate governance and performance.

Executive remuneration is at the heart of the alignment of shareholders' and managers' interests, as it is one of the primary ways used to align the interests of these two parties. However, the average size of the remuneration packages of the CEOs of large corporations' today is so large that governance issues are almost inevitable.

The relationship between executive remuneration, corporate governance and corporate performance was examined in Section B1.7. A number of corporate performance factors that drive executive compensation were discussed among them sales, net profit (Meeks and Whittington, 1975; McGuire *et al.,* 1962) and stock price (Murphy, 1985) although from the research reviewed it was difficult to reach conclusions as to the main factors that influence executive remuneration and corporate governance. Also discussed were the different forms of executive remuneration and how these different forms affect executive actions. Finally, two other influences on executive remuneration were examined which are unrelated to corporate performance. These were shareholders and the remuneration committees appointed by boards of directors. Finally, the different components of executive remuneration were discussed and the relevant part they play in corporate governance. From these discussions the following propositions are stated:

Proposition 11: There is a relationship between executives' salaries and corporate governance. Increasing the size of executives' salaried remuneration will improve corporate governance practices.

Proposition 12: There is a relationship between executives' non-salary compensation and corporate governance. Increasing the size of executives' non-salaried remuneration will improve corporate governance practices.

The research propositions formulated above are based on each of the six drivers on corporate governance. The legal, historic and financial propositions outlined make statements about the existing external institutions to a corporation that are in place in an economy, and attempt to determine the effect these institutions and their pronouncements have on the corporate governance practices within corporations. As such, these propositions deal with areas of governance that corporations have little control over in their enforcement, but do have control over how they are implemented within their corporations. These propositions are in contrast to

those made about board composition, stock ownership and executive remuneration that deal with those aspects of corporate governance that are directly controlled by the management of corporations. The purpose of these propositions is to explore data to gain an understanding of how the governance mechanisms within corporations function.

C.1.4.2 Entrepreneurship Propositions

It is proposed to study corporate governance by reference to a number of research propositions that have been outlined in Section C1.4.1. The operation of entrepreneurship in companies is a more difficult concept to research (Section C.4.5.2). This is because entrepreneurship is comprised of three factors: entrepreneurship, corporate entrepreneurship and entrepreneurial leadership. Each_factor is influenced by different stakeholders of a company: shareholders, management and employees and the influence of each component of entrepreneurship on governance is hard to measure. In spite of this fact the following proposition is made:

Entrepreneurship will influence how effectively corporate governance is operated within companies.

This proposition was not studied separately but was studied in conjunction with the corporate governance propositions. The study of this overarching proposition was assisted by defining each company in the study by the type of entrepreneurship it displayed. Miller's (1983) Typology of Firms (Section B2.5) was used for this purpose. This classification made it possible to explore the influence of entrepreneurship on the relationship between corporate governance and corporate performance in detail.

CHAPTER C2 – APPROACHES TO THE RESEARCH

This research was carried out in such a way that there was no manipulation of the events. Consequently, it took place in a non-contrived environment. Moreover, this author was not in a position to influence the events that occurred in any way. There was, therefore no interference in the subjects of this study. These facts influenced the philosophical and methodological approaches to this research which are described in the following sections.

C2.1 Research Approach

There are two approaches that can be taken in order to achieve the purpose of this study as described in Section C1.1. These are:

The "empirical" approach, which is defined in The Oxford Companion to Philosophy (1995) as 'based on experience', i.e. "an idea or concept is empirical if it is derived ultimately from the five senses, to which introspection is sometimes added" (p. 226).

The "theoretical" approach, which is defined as "an attempt to bind together [in] a systematic fashion the knowledge that one has of some particular aspect of the world of experience" (p. 870).

The empiricist tends to draw conclusions from studying, observing and collecting related evidence and will then add his research to the body of knowledge on the subject. While this study is empirical in nature, it does not neglect the work of theorists. Using the work of theorists and by empirical study the overall aim of the study is to add to the body of knowledge on the relationship between corporate governance and entrepreneurship with regards to corporate performance.

In order to carry out any research certain guiding principles are required. Spencer *et al.* (2003, p. 7) have identified four guiding principles that research should be:

- contributory in advancing wider knowledge or understanding of the subject matter;
- defensible in design by providing a research strategy that can address the evaluative question(s) posed;
- rigorous in conduct through the systematic and transparent collection, analysis and interpretation of data and
- credible in claim through offering well-founded and plausible arguments about the significance of the evidence gathered.

It is these four principles that this author attempted to adhere to in the conduct of this research (Part D).

C2.2 Philosophical Perspective of the Author

C2.2.1 Introduction

This section summarises the underlying philosophical stances that have been drawn upon in this study. The philosophical perspective of a author is important, as it influences the way in which a author develops his methodological approach to his research.

Philosophical elements widely associated with research are the epistemology and ontology doctrines (Bryman and Bell, 2003). Epistemology is concerned with answering the question "what is knowledge"? A central issue is whether or not the social world can be studied according to the same principles as the natural sciences. The stance that asserts the importance of imitating the natural sciences is known as positivism (Remenyi *et al.*, 1998). The contrasting stance to positivism is interpretivism or non-positivism. Interpretivism is based on phenomenology and takes the view that the social sciences are fundamentally different from the natural sciences and therefore require a different logic or research procedure. It strives to understand the subjective and meaningful construction of the complex social world without reference to the laws of the natural world.

Ontology is concerned with the ways that social reality is constructed, in other words does social reality exist independent of human conceptions or is social reality governed by "laws" that are immutable or generalisable (Richie and Lewis, 2006).

C2.2.2 Epistemological and Ontological Underpinnings of this Research

Positivism is more suited to the numerical sciences where generalisable conclusions are more often the norm whereas interpretivism is more suited to understanding phenomena in depth (Remenyi *et al.*, 1998). "Interpretivism asserts that reality, as well as our knowledge thereof, are social products and hence incapable of being understood independent of the social actors (including the authors) that construct and make sense of that reality" (Orlikowski and Baroudi, 1991, p.13). It is the intention of this author to carry out research that furthers the understanding of the relationship between corporate governance and entrepreneurship (Section A1.2) so that corporations can pursue the goal of adopting best corporate governance practices. In other words, this author is interested in understanding why data take the form that have been identified, to account for patterns, linkages, processes or apparent contradictions but most importantly to understand the relationship between variables. In order to achieve this objective, this author intends to adopt the interpretivist approach.

With regards to the ontological preferences of this author constructionism, which asserts that social phenomena and their meanings are continually being accomplished by social actors, is

viewed as the preferred stance. This is because in depth case studies show whether the "social actors" involved in the case studies influenced the cultures that surrounded them or were influenced by the culture in which they operated.

C2.3 Methodology

C2.3.1 Introduction

Until recently, the qualitative methodology has been used more as a way to provide information for the further development of quantitative research (Lewis *et al.*, 1995). In addition, qualitative methodology has more often been associated with research in the social sciences of anthropology or sociology rather than with business research (Silverman, 2005; Kaplan *et al.*, 1988). In spite of this, the qualitative methodology is increasingly being recognised as an important methodology in its own right (Marschan-Piekkari and Welch, 2004).

The heart of qualitative research is to explain or build explanations (Richie and Lewis, 2006). However, there is a danger in trying to establish causal relationships because, while one variable may appear to drive another variable the relationship may, upon further investigation, show that the relationship is in fact in the reverse direction (Bryman and Bell, 2003). Consequently, this research is not essentially causal in nature but seeks to understand the part that the corporate governance/entrepreneurial relationship plays in the ultimate performance of companies. It is for this reason that the research propositions (Section C1.4) have been structured in such a manner that they do not aim to seek causal relationships but instead aim to understand the relationship between corporate governance, entrepreneurship and corporate performance.

C2.3.2 Qualitative Methodology

Myers (1997, p.241) summarised the motivation for the qualitative research methodology as follows: "The motivation for doing qualitative research, as opposed to quantitative research, comes from the observation that, if there is one thing which distinguishes humans from the natural world, it is our ability to talk! Qualitative research methods are designed to help authors understand people and the social and cultural contexts within which they live". This stance on qualitative research is supported by Kaplan and Maxwell (1994) who argue that the goal of understanding a phenomenon from the point of view of the participants and its particular social and institutional context is largely lost when textual data is quantified. Therefore, research methods should be chosen that are appropriate to what a author is trying to find out (Punch, 1998).

With regards to qualitative research, "qualitative authors are concerned in their research with attempting to accurately describe, decode, and interpret the meanings of phenomena occurring in

their normal social contexts. The authors operating within the framework of the interpretative paradigm, are focused on investigating the complexity, authenticity, contextualization, shared subjectivity of the author and the researched, and minimization of illusion" (Fryer, 1991, p. 3). Furthermore, qualitative research is in general more likely to take place in a natural setting (Marshall & Rossman, 1989; Lincoln and Guba, 1985). This means that topics for study focus on everyday activity as defined, enacted, smoothed, and made problematic by persons going about their normal routines (Van Maanen, 1983).

In addition to the advantages of the qualitative methodology listed above, Matveev (2002) has listed a number of characteristics of qualitative research which should be considered in any qualitative study. Firstly, qualitative research is the study of symbolic discourse that consists of the study of texts and conversations. Secondly, qualitative research is the study of the interpretive principles that people use to make sense of their symbolic activities. Finally, qualitative research is the study of contextual principles, such as the roles of the participants, the physical setting, and a set of situational events that guide the interpretation of discourse. Inherent in these characteristics however, are certain disadvantages. For example, it is easy to depart from the original aim of the research in response to changing circumstances; personal preferences can affect the outcome of any research and the lack of consistency in the methods that a author applies in gaining information from multiple respondents can all adversely affect the quality of the research.

Finally, the disadvantages of qualitative research have been seen to be its lack of validity and reliability. However Seale (2000) states that these two perceived disadvantages can be overcome as long as the qualitative research data and research reports can be shown to provide true value, applicability, consistency and neutrality. The research propositions (Section C1.4) have been carefully structured with these four concepts in mind and by this author taking an objective approach to their formulation so that this research will meet these tests (see Section C.2.3.7).

C2.3.3 Qualitative Methods

The term "research method", as opposed to "research methodology" refers to the technique used for collecting data (Bryman and Bell, 2003). Yin (2003, p. 5) and Rowley (2002) state that the choice of method selected is dependent on the answers to three questions: "(a) the type of research question posed, (b) the extent of control an investigator has over actual behavioural events and (c) the degree of focus on contemporary as opposed to historical events". In addition to the above three questions the author must decide the form of his/her research question, in other words what type of question is he trying to answer? Is the form of question a how? why?, who?, what?, where?, how many? or a how much? question? (See Section C1.3) The research method

used is dependent on the type of question being answered. Detailed below is a summary of the qualitative methods available to answer the questions above:

Table 2: Qualitative Methods

Qualitative Method	Summary of Method	References
Action Research	Action Research seeks to research both the practical concerns of individuals in a problematic situation at the same time as contributing to the stock of scientific knowledge.	Lewin (1947); Corey (1953).
Ethnography	Ethnographic research involves authors becoming totally immersed in the lives of the people they are studying and seeks to place the phenomena studied in its social and cultural context.	Lewis (1985); Marschan-Piekkari and Welch (2004).
Case Study	A case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident. Case Study research is different from Action Research in that it does not involve manipulation or control of variables, instead it is concerned with the in depth study of a phenomenon and its context.	Eisenhardt (1989); Tellis (1997); Yin 2003.
Direct Observations	Direct observation including participant and non-participant observation, ethnographic diaries, and more recently photography and video.	
Grounded Theory	Grounded Theory is a research method that seeks to develop theory that is grounded in data systematically gathered and analyzed. In trying to understand a situation, by observation, interview and conversation, a author is concerned with developing a theory. The objective of grounded theory is not to test hypothesises but to discover theory through the study and interpretation of data.	Myer (1997); Whiteley (2000); Glaser (2004).
Qualitative Interviews	Qualitative interviews can range from semi-structured questionnaires to open-ended ad hoc conversations.	Patton (1987); Rubin and Rubin (1995); Kvale (1996).
Written Records	The analysis of written records has an important contribution to make to our understanding of the processes and consequences associated with new technologies.	

In Section C1.3 it was discussed that the purpose of this research was exploratory and gauging and Table 1 indicated that the method most suited to these purposes was the case study. Table 2 above supports the case for this research to be based on the case study method. However, the suitability of the case study method is discussed in more detail in the following section to shows its suitability to this research.

C2.3.4 Suitability of the Case Study Strategy for this Research

Yin (2003, p.13) defines a case study as "... an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly stated". Thus the case study is a method best suited for those situations where a author wants to cover contextual issues where these issues are relevant to the phenomenon of study. Other research methods tend to divorce the phenomenon from the context, such as an experiment where the context is controlled in the laboratory or the survey where in depth research into the context is limited. The research propositions (Section C1.4) were structured to ensure that in order to be able to answer them the phenomenon could not be separated from the context. In addition, the corporate governance/entrepreneurship relationship that t relies on so many variables external to the relationship itself and on multiple sources of information that other research methods were insufficiently robust or structured to be able to meet these requirements.

From a theoretical perspective, reasons why the case study method is the preferred approach for this research are as follows:

- As this research is primarily concerned with the detailed and intensive analysis of a few number of cases this makes the case study approach an ideal approach (See Section C2.8).

- The case study method is most applicable for answering the "how" and "why" questions which were first discussed in Chapter C1.3 (Table 1) where the framework of this research was introduced. With respect to the "how" question, the research is attempting to answer the following question: "**How** do the concepts of corporate governance and entrepreneurship interact in the corporate environment – do they complement each other or lead to poor corporate performance?" This leads to the second question – "**Why** have a number of important entrepreneurial companies failed in recent years? What part did corporate governance or entrepreneurship play in these companies' performance? All the research propositions are aimed at answering these two questions.

Further evidence for the appropriateness of the case study method for this research is provided by Dube and Pare (2003) and Benbasat *et al.* (1987). The former authors suggest that the key characteristics of any case study research are:

Table 3: Key Characteristics of Case Study Research I

- A contemporary phenomenon is examined in a real life context or setting.
- One or few entities are examined.
- The complexity of the unit is studied intensively.
- The phenomenon of interest is not isolated from its context, especially at the data analysis stage.
- No controlled observation that involves manipulation is involved.

while the latter authors suggest the following are the key characteristics of any case study research are:

Table 4: Key Characteristics of Case Study Research II

- Phenomenon is examined in a natural setting.
- Data is collected by multiple means.
- One or few entities (person, group, or organization) are examined.
- The complexity of the unit is studied intensively.
- Case studies are more suitable for the exploration, classification and hypothesis development stages of the knowledge building process; the investigator should have a receptive attitude towards exploration.
- No experimental controls or manipulation are involved.
- The investigator may not specify the set of independent and dependent variables in advance.
- The results derived depend heavily on the integrative powers of the investigator.
- Changes in site selection and data collection methods could take place as the investigator develops new hypotheses.
- Case research is useful in the study of "why" and "how" questions because these deal with operational links to be traced over time rather than with frequency or incidence.
- The focus is on contemporary events.

The applicability of the criteria suggested by all three authors Yin (2003), Dube and Pare (2003) and Benbasat *et al.* (1987) for the use of the case study method in this research are summarised in Table 5.

In spite of the strong argument for the case study method, for this research a major criticism of this approach has to be addressed. This is that some authors believe that it is impossible to arrive at generalized conclusions if a case study only consists of one, two or even six cases (Yin, 2003, p.10). The answer to this viewpoint is that this case study research is not trying to support or test a hypothesis but rather is primarily carrying out exploratory research on the subject matter that can be followed up by other authors who can arrive at generalisable conclusions as a result of their research.

The remainder of Chapter C2 discusses in detail the decision process that has been taken in this research in deciding the type of case study method that has been used.

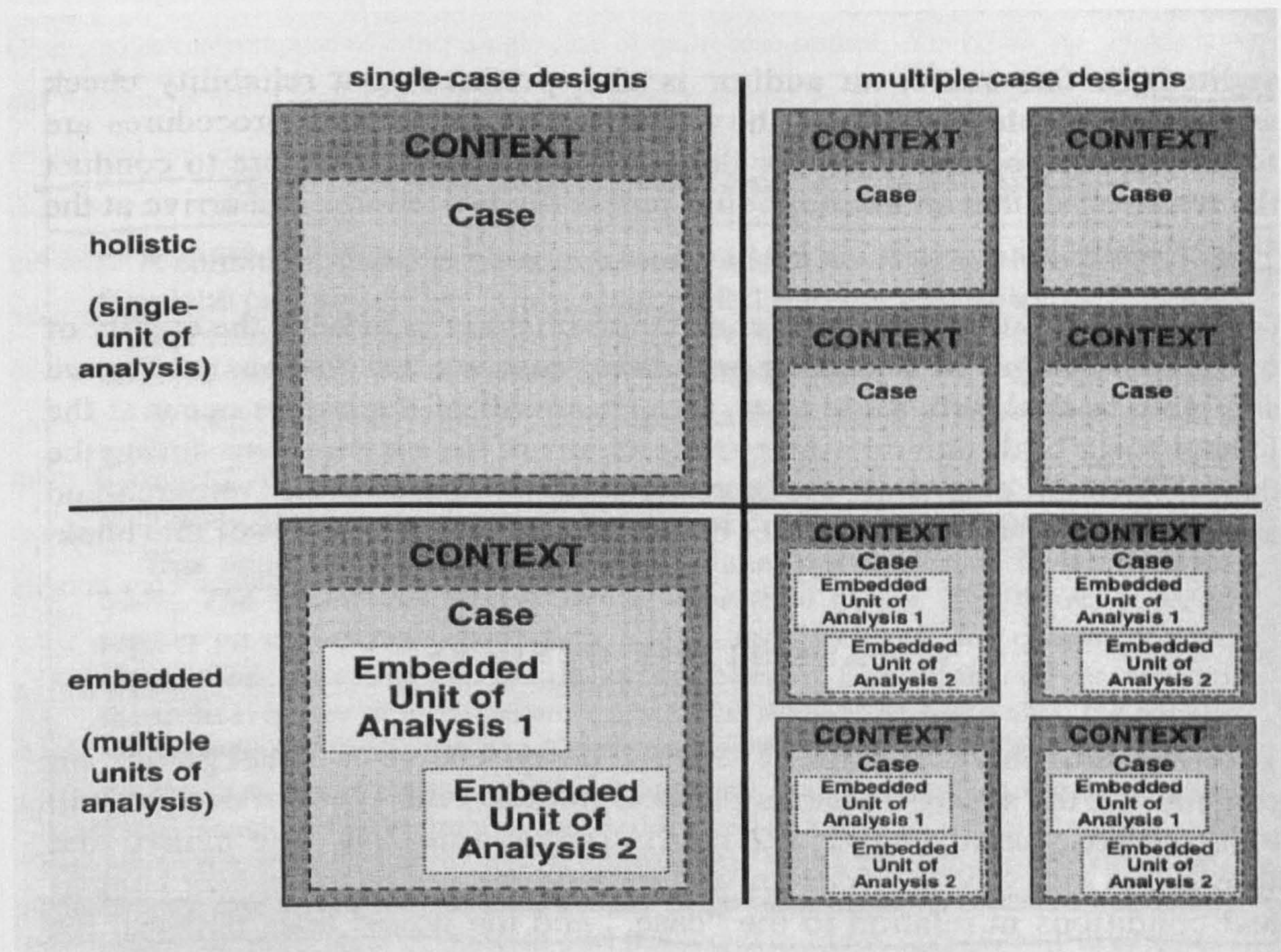
Table 5: Criteria that the Case Study Methodology should meet.

The Case Study Method should meet the following criteria:	Is the criteria met?
Answers the "How" question.	Yes. The "How" question relates to the question: How does corporate governance interact with entrepreneurship in the corporate environment? This is the primary objective of this research.
Answers the "Why" question.	Yes. The "Why" question attempts to answer a two part question: Why do entrepreneurial companies have a tendency towards poor corporate performance and can corporate governance play any part in stopping this tendency?
Answers the "What" question.	Yes. The "What" questions attempts to determine what can or has been learnt from this research. This question will be answered at the conclusion of the research.
A contemporary phenomenon is examined in a real life context or setting.	Yes. Each company selected for research is a recent phenomenon and it is examined in a real life context.
One or few entities are examined.	Yes. Six companies have been selected for in depth research.
The complexity of the unit is studied intensively.	Yes. In attempting to answer the "how" and "why" questions each of the six companies will be researched intensively.
The phenomenon of interest is not isolated from its context, especially at the data analysis stage.	Yes. Every attempt will be made not to isolate the companies selected for research from their environment, although Section A1.6 recognised this as a potential weakness in this research.
No controlled observation that involves manipulation is involved.	Yes. This author had no influence over the companies researched and therefore no manipulation was involved.

C2.3.5 Case Study Variants

In the design of any case study, there are two choices that have to be made as a first step. The first centres on whether to conduct a single case or a multiple case study. The second entails a decision on whether the design should be holistic or embedded in nature as defined by Yin (2003). These decisions can be summarised in a 2 x 2 matrix. The matrix first shows the necessity to analyze contextual conditions in relation to the case. The matrix then differentiates between the single and multiple case studies and within these two types of case studies shows there two variants; the unitary unit or multiple units of analysis as shown in Figure 3 below.

Figure 3: Basic Types of Design for Case Studies



Source: Yin, R.K. (2003) *Case Study Research, Design and Methods*, pp.40. 3rd edn, Newbury Park: Sage Publications.

The resulting four types of case study design are:

- Type 1 (top left corner of Figure 3), single-case holistic design, which involves the study of one case which is itself the single unit of analysis.
- Type 2, (bottom left corner of Figure 3) single-case embedded design, which requires one case with multiple units of analysis.
- Type 3, (top right corner of Figure 3) multiple-case holistic design, which is the study of multiple cases, each constituting the single unit of analysis.
- Type 4, (bottom right corner of Figure 3) multiple-case embedded design, studies more than one case, each consisting of more than one unit of analysis.

The choice of which design is most suitable for this research and the rationale behind the choice are discussed in the sections below.

C2.3.5.1Single versus Multiple-Case Design

Case studies can comprise of either single case of multi-case studies. Yin (2003, pp. 39-42) lays out the criteria when single or multiple case studies should be used. Single case studies are considered appropriate under the following circumstances: there is a single critical scenario, there is an extreme or unique case to be studied, there is a single case that is representative or typical of the relationship being studied, there is a "revelatory" case or the study is a longitudinal case. Multiple case designs are applicable when the intent of the research is description, theory building or theory testing. Multiple case studies also allow for cross case analysis and as a result, yield more general results (Benbasat *et al.*, 1987). In addition, the results of a multi-case study will be more compelling and therefore more robust just as the results of, for example, multiple experiments are considered to be more valid than the result of a single experiment (Rowley, 2002; Herriott and Firestone, 1983).

In this research a multi-case study was adopted. This is because the aim of this study (Section A1.2) and the propositional statements (Section C1.4) raise multiple and complex issues which are unlikely to be found in a single case study. In addition, a multiple case study approach allows cross case comparison which in turn allows more compelling conclusions to be reached. This is particularly the case here as both "successful" and "failed" companies were included in the study.

C2.3.5.2 Holistic and Embedded Studies

Just as there is the choice to design a case study involving single or multiple cases, there is also a choice of conducting a single case study with a single unit of analysis or multiple units of analysis (embedded units). The latter occurs when within a single unit there are multiple units that can be studied. For example, if a company has multiple autonomous subsidiaries, by studying each subsidiary, an overall picture of the whole group of companies can be obtained. If, on the other hand a case study only examines the holding company of a group of companies, then the study is termed a holistic case study (Yin, 2003).

Both kinds of case study have their advantages and disadvantages. In the case of embedded studies, there is the advantage of being able to break one unit down into sub units that are easier to study. However, there is a danger that a author will concentrate on one sub unit of the overall unit, thereby neglecting other important sub units. Holistic case studies are more suited to studies where there are no identifiable logical subunits. On the other hand, there is the danger that the emphasis of the study may shift without the author being aware of this, although some authors believe this flexibility is in itself an advantage of the holistic case study.

This study takes the holistic case approach as the research involves studying a number of large organizations rather than multiple sub units of a number of organizations. The rationale behind this approach is that the research involved decisions that were made at the very top of the organisations that affected the whole organization rather than decisions that were made at a subsidiary organizational level. Thus, for example, whether or not a company is proactive in its approach to corporate governance or is entrepreneurial in its outlook, is largely dependent on the attitude of the CEO and the board of directors rather than middle management throughout a company (See Section A1.1). In addition, this approach allowed this author to concentrate on a few large organizations rather than multiple sub units of those organizations.

C2.3.6 Unit(s) of Analysis

The unit(s) of analysis of this research is derived from the scope specified in the conceptual framework (Chapter C1). It is important to accurately define a unit of analysis to ensure that the practical research fulfils the research aim or purpose. Thus a unit can be an organisation, a team or a department within an organisation. Alternatively, a unit can be a process, such as how decisions are made or the dynamics within an organization. It is therefore difficult to define the boundary of a unit of analysis but a key issue is that the case study should only ask questions about the unit(s) of analysis that are directly related to the research aim and the evidence gathered should only be that which is within the boundaries (Rowley, 2002). In this study, the unit of analysis is the corporate entity where the decisions concerning corporate governance and entrepreneurship are made. (For the purposes of this research a corporate entity or company is defined as a unit that produces or distributes products or services in an attempt to make a profit; Kalleberg *et al.*, 1990).

C2.3.7 Reliability and Validity of Research Data

The concepts of reliability and validity of research data are more associated with quantitative research. This is because both terms infer a degree of measurement of data which is more applicable to quantitative data collection than qualitative data collection. However, these concepts are important to qualitative research as they provide validity and rigour to any research (Bryman and Bell, 2003)

LeCompte and Goetz (1982) define the terms of reliability and validity by breaking them down into four categories:

- External reliability, by which they mean the degree that a study can be replicated.
- Internal reliability, by which they mean when there is more than one member of the research team, the degree to which the team members agree on what they see and heard.

- External validity, which refers to the degree that the findings are generalisable across different social settings.
- Internal validity, by which they mean whether or not there is a similarity between the authors' observations and the theory they develop.

These definitions are similar to the way they are used in quantitative research and as such, must be considered a first step in defining reliability and validity of qualitative research data. Building on these definitions Lincoln and Guba (1985) and Guba and Lincoln (1994) have proposed alternatives to reliability and validity in the form of trustworthiness and authenticity. Table 6 below defines each of these terms and shows how the Guba and Lincoln approach is followed in this research.

Table 6: Ensuring Trustworthiness and Authenticity of the Research

Trustworthiness and Authenticity	**Trustworthiness and Authenticity Defined**	**Trustworthiness and Authenticity of the Research**
Trustworthiness is made up of four components:		
Credibility	Credibility is concerned with ensuring that the research is carried out according to best practices.	Part C of this thesis lays out the methodology that has been used in this research which has been in accordance with best practice.
Transferability	Transferability is concerned with ensuring that the research is of sufficient depth, rather than breadth, so that fellow authors can refer to the database when deciding on the transferability of the findings to other potential studies.	As explained in Chapter C3 (Section C3.2 to Sections C3.7) the number of companies selected for research was such that in depth research could be carried out as opposed to superficial research on a large number of companies.
Dependability	Dependability. This equates to reliability in quantitative research and entails ensuring complete records of all stages of the research are kept for later reference.	All research material has been retained for future reference.
Confirmability	Confirmability is concerned with, as far as possible, ensuring that objectivity is maintained throughout the research.	Objectivity has been considered throughout this research from the selection of the companies for research to the conclusions reached. This author is not conscious of any personal bias entering any stage of the research.

Table 6: Ensuring Trustworthiness and Authenticity of the Research (Cont.)

Trustworthiness and Authenticity	Trustworthiness and Authenticity Defined	Trustworthiness and Authenticity of the Research
Authenticity:		
Authenticity	Authenticity is concerned with understanding the wider impact of research. For example, does the research fairly represent the different viewpoints among the members of the research community and does the research help those affected by the research better understand their environment?	This research has been carried out with the specific goal in mind that the results of it will be seen to be practical in nature. The conclusions reached will be such that they can be considered by companies for consideration and possible implementation.

C2.3.8 Closed Designs versus Flexible Designs

In an ideal research environment there would be no deviation from a author's original research design. However, this would mean the study's design could not be modified by the discovery of new information at any point in the study. If the research design is not flexible the study may become invalid as new factors are discovered about the units under research. During this research there were changes in the original design of the study, but such modifications were incorporated in such a way that the research design process was not compromised in any way.

C2.3.9 Cross Case Analysis

"Cross-case analysis is a research method that facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies" (Khan and VanWynsberghe, 2008; pp.1). In order to be able to draw conclusions from this study, this author used cross case analysis techniques. There are multiple cross case analysis approaches and techniques as summarised in a paper by Khan and VanWynsberghe (2008). However, as this author is interested in searching for cross case patterns, an approach suggested by Eisenhardt (1989, pp. 540) is utilised whereby the author "selects dimensions and then looks for within-group similarities coupled with intergroup differences". Eisenhardt (1989) states that the dimensions selected can be suggested by the literature review or the research statement or just selected by the author. In this case the dimensions have been developed primarily from the research statement but also from the literature review. The cross case analysis is presented in Part E.

C2.3.10 Conclusion

This chapter has discussed the methodologies and methods available to the author. It was stated that the qualitative methodology was the preferred methodological approach for this research. Consequently, the qualitative methodology approach was discussed followed by discussions on qualitative methods, the case study approach and in particular its applicability to this study.

CHAPTER C3: SAMPLING

C3.1 Introduction

Chapter C3 continues the methodology section with a discussion of the population and sample frame of this research and the sampling methodologies to be used to select the entities for in depth research. The chapter concludes with a list of companies selected for research.

C3.2 Population

The process of identifying the population from which a sample is chosen and the process of choosing the right sample are important if the sample is to be considered representative of its population. In the case of exploratory research, the issue of bias is not as significant an issue as in quantitative research, as a sample is primarily selected based on its ability to provide relevant data for the author. In spite of this fact, this author has attempted to eliminate bias in the selection of the companies selected for research as much as possible.

As a basis for this research, this author has selected as his "population" large United States based corporate organizations or entities that were entrepreneurial in outlook. The reasons for selecting this population were explained in Section C1.2 but these reasons are expanded upon below. Firstly, the problems caused by the conflict in the relationship between corporate governance and entrepreneurship appear to be more magnified in the USA than in any other part of the industrialised world, as evidenced by the failures of such companies as Enron, Arthur Andersen and WorldCom. Secondly, with the failures of such companies, the way these companies operated is now transparent due largely to the legal cases that resulted from their failures but also due to the Congressional hearings into these companies. In the case of successful companies information is also transparent due to SEC reporting requirements. Therefore information on large companies is more readily available in the US than is the case with similar companies in other countries. Finally, in order to be able to understand the results of the research and to be able to offer insights into these results it is necessary to select a population with which the author is familiar. The author has spent much of his career working for US companies and indeed has spent many years living and working in the US and therefore he has more experience of the workings of American companies than British companies. It therefore appeared more sensible to select companies for research from a population solely made up of US companies.

C3.3 Sampling Frame

Pinsonneault and Kraemer (1992) defined the sample frame as a surrogate of the real population of interest. In other words, a sample frame is the source of information that a author uses to extract a sample of the population in which he is interested. In this case, the sample frame could

have been all companies listed on the NYSE or the Fortune 100 list of companies. As the case study methodology has been selected, whatever sample frame is used it must firstly produce companies that are relevant to the research and secondly, if possible, produce companies that are representative of the population that is under research.

In this research however, no single sample frame was relied upon to select the sample of companies for research. This is for a number of reasons:

- This author is unaware of any independently produced sample frame that is representative of the research population as a whole.
- As the case study method is being used by this author the sample selected from the population is not necessarily expected to be truly representative of the population.
- As the companies to be selected for in depth research are very small in number and easily identifiable it is not anticipated that difficulty will be encountered in selecting them.

C3.4 Sampling Methodology

Sampling methodologies fall into two categories: probability sampling and non-probability sampling (Taylor and Ramsey, 2006; Maitland-Smith, 2000). Probability sampling, otherwise known as non-judgemental sampling, means that samples are selected from a universe in which every sample has a known chance for selection. Non-probability sampling, or judgemental or purposive sampling, means that samples are selected by experts that are thought or known to be representative. Probability sampling is generally held to be the most vigorous approach to sampling but is largely inappropriate for qualitative research (Richie and Lewis, 2006).

This author used non-probability, judgemental sampling to ensure that the selected samples from the population possess the attributes that the author is interested in studying. No cross validation with other studies was performed due to absence of compatible studies. The method used to select the samples used in the research is described in detail in Section C3.6.

C3.5 Sample Size

Section C2.3.6 discussed the fact that a multi-case design was to be used in this research. The next step in the research design process is to determine the sample size. A balance must be reached between selecting a number of case studies with the relevant characteristics so that the robustness of the research is guaranteed, and selecting too many case studies so that there is insufficient in depth research performed on each case study. Richie and Lewis (2003) discuss in detail the criteria to be used in selecting sample size. The most important point they make is that

case studies are, by their nature, intensive and therefore as much information can be obtained from a small sample as a large sample. Unlike survey sampling there is no need to draw statistical inferences with a required precision. Therefore, author judged that six case studies was the optimal number of cases for research. This allowed extensive in-depth research to be carried out within a reasonable timeframe and it allowed cross case analysis to be performed with the result that robust findings were achieved (Yin, 2003).

C3.6 Sample Selection Criteria

This section describes the approach and the criteria that were used to select the cases for research in order to address the research statement made in Section C1.2 and the research propositions described in Section C1.4. These criteria are: the industry sector, technological change, entrepreneurial leadership and corporate performance. Corporate governance is not specifically included in this list as it is a feature of all companies.

• *Industry Sector:* "High Technology" sector companies were chosen for the reasons discussed below. Technology has been defined as "the practical application of science to commerce or industry" while high technology has been defined as "technology that involves highly advanced or specialized systems or devices" (www.answers.com). The high technology sector has been chosen for two reasons. Firstly any technology based business should experience rapid change because that is the very nature of its business and rapid change within corporations always has the potential to produce governance issues (see Sections A1.2 and C3.6). Secondly, technology-based businesses, again by their nature, tend to be entrepreneurial in order to remain competitive (see Section A1.2 and C3.6).

In order to be able to select "high technology companies" using a valid methodology, it was decided to make use of Standard Industry Classifications (SIC) indices. Industry classifications select essential characteristics of technology and markets and condense the vast heterogeneity of competitive environments into a smaller number of salient types (Peneder, 2003). These indices are then used to classify companies by industry types. The indices are compiled and recognized by both governments and industry. As with any classification system, there are multiple ways that industries can be classified from a simple high-low technology classification to very specialized classifications as shown by Peneder (2003). However, there are three broadly recognized industry classification schemes in use to-day (Bhojraj *et al.*, 2003):

- The Standard Industrial Classification (SIC) was first developed in the US in the 1930's "to classify establishments by the type of activity in which they are primarily engaged and to promote the comparability of establishment data describing various facets of the

U.S. economy" (http://www.naics.com/info.htm). In 2002 an enhanced classification system was introduced called the North American Industry Classification System (NAICS) which incorporated the economies of the US, Canada and Mexico.

- The Global Industry Classifications Standard (GICS) system which was jointly developed by Standard and Poors and Morgan Stanley Capital International and is used by financial practitioners.
- The Fama and French algorithm which is primarily used by academics.

The problem with multiple classification systems is that the composition of each system is different and each system has its own advantages and disadvantages as shown by Kahle and Walkling (1996). However, in a study carried out by Bhojraj *et al.* (2003) it was found that the GICS classification is the preferred method to group firms by industry in the majority of research settings.

In the GICS classification, there are two high technology sectors. When comparing the performance of these two sectors (the IT and Telecoms sectors - see Figure 4) with the overall performance of the whole of the GICS Index, it can be seen that in the early part of the period that is graphed, before the internet and telecoms boom suffered a downturn, both sectors were more volatile in their performance than the GICS Index as a whole. It is considered that these two sectors provide a number of companies that faced significant corporate governance issues, on which to perform in-depth research.

• *Technological Change:* An additional consideration in selecting high technology companies is to select those companies that have experienced rapid technological change. This is an important issue as this author believes that these companies will be more likely to be entrepreneurial and at the same time will face governance issues. This is because for a company to embrace rapid technological change often requires a quick internal decision making process. In order to achieve this, corporate governance issues can be compromised. Aspects of technological change are discussed below in order to clarify the meaning of the term, so that the reason for the selection of companies facing technological change can be understood.

Romer (1990) saw technological change as the primary influence in the reduction of the average cost of producing individual units of production. In a manufacturing based economy, units of production are relatively easy to define because the units are tangible. In a service economy "units of production" are harder to define because the "units" are not tangible. However, such units are not impossible to define. Therefore, for example, in the telecommunications industry, a

unit of production will be the cost per minute of a telephone call or the cost to transfer "X" megabytes or gigabytes of information across a communications network. Thus in selecting companies for research it is anticipated that it will be necessary to understand the unit of production relevant to each company that is being considered for further research and how the costs of production of these units have changed over the period of research.

As discussed above Romer (1990) saw the reduction of the average cost of producing individual units of production as an indication of technological change. In competitive markets this should result in the price of products falling. However, this is not always the case because all markets are complex in the way they function and consequently are not solely governed by the simple laws of supply and demand. Appendix 3 is a detailed discussion of prices and technological change in a number of high technology industries. This discussion is presented to examine Romer's findings in relation to high technology industries to determine if his premise is still valid.

While it is impossible to conclude that falling prices in an industrial sector means that the industry faces rapid technological change, this is only one indicator. There are other indicators of technological change in industries (Rubinstein and Tsiddon, 2004; Colwell and Ramsland, 2003; Card and DiNardo, 2002) but falling pricing is a primary indicator of rapid technological change so this factor will be considered as an important factor in the selection process for companies for research.

• *Entrepreneurial Leadership*: Section B2.5 discussed the characteristics of an entrepreneurial leadership style and the conditions or environments that foster such leadership. Within the definition of entrepreneurial leadership, there are a number of different types of entrepreneurial leaders (Thompson, 2004) who display different behaviours and skills (Cunningham and Lischeron, 1991) and who, as a result of these behaviours and skills, have an impact on the success or failure of their companies (Dowell *et al.*, 2005). With regard to the different types of entrepreneurial leaders, this study is interested in those entrepreneurs who have managed to move from being simply entrepreneurs to being entrepreneurial leaders. This differentiation is important because in today's global economy where entrepreneurs are now commonplace, one of the signs of a true leader is the ability to move an entrepreneurial idea from the concept stage to the marketplace and ultimately to make money from that idea. At the same time, this study is interested in the corporate entrepreneur who has either transformed his industry (a "transformer"), his company (an "entrepreneurial leader") or has managed to start a whole new industry (a "venturer") (Thompson, 2004).

Bolton and Thompson (2004, 2003) have identified a number of key characteristics of entrepreneurs. Two of these are "ego" and the "desire for economic autonomy". Both these traits essentially mean that the entrepreneur has a "desire to be in charge of his or her own destiny" (p. 248) which may not always be compatible with the ability to work within recognised guidelines, especially if they are established by third parties. It is this potential incompatibility that will be one of the causes of conflict between governance and entrepreneurship.

The selection of companies headed by entrepreneurial leaders is based largely on judgemental factors (Section C3.5). However, in order to reduce any potential bias, this author has attempted to select those industry leaders who displayed the entrepreneurial characteristics described above, but who are also considered entrepreneurial by their peers, by recognised publications or by independent bodies and at the same time lead companies that fulfil all the other criteria of this research project. Thus, for example, in the case of Guidant Corporation the most recent CEO was named by Worth Magazine to its "50 Best CEOs" list in 1999.

In the selection of companies, for research the extent of the leadership qualities described above was evaluated to determine if these qualities are found in each leader and if these qualities had any influence in the adoption (or non-adoption) of governance measures in their companies and what influence the adoption (or non-adoption) of governance measures had on the success or failure of their companies.

- *Corporate Performance:* Evaluating corporate performance is a complex issue. Therefore, at one extreme poor corporate performance could be described as when a company goes into bankruptcy and the shareholders lose all or part of their investment. Alternatively, poor corporate performance could be described as when a company is taken over by another company. In this instance the former company may have "failed" in that the "market" considered the assets of that company could be managed more effectively by a third party. However, the shareholders may well have received a premium for their shares as a result of the takeover. In this type of case it is very difficult to quantify corporate performance objectively.

For the purposes of this research project, poor corporate performance is defined as when a significant loss in shareholder value of a company occurs in relation to its peer group, as this is the most important criteria upon which investors rank the success or failure of their investments. In addition, this criterion has been chosen as the literature review has shown that a relationship exists between corporate governance and shareholder value (Dittmar and Mahrt-Smith, 2007; Carter *et al.*, 2003; Lemmon and Lins, 2003). In an attempt to remove subjectivity from the

process of choosing companies for research, loss in shareholder value of selected companies is compared against the loss of companies in the companies' peer group (Figure 5).

• *Shareholder vs Stakeholder*: A final matter to be considered is the perspective from which each of these companies is to be considered, namely will the success of the companies' overall governance, entrepreneurship and performance be considered from shareholders' or stakeholders' stance? In a market economy, companies have traditionally pursued economic profitability over social responsibility believing that maximising value for shareholders will result in societal wealth being maximised. Increasingly however a more "stakeholder" view of corporations is taking place that advocates responsibility over profitability. This view sees companies as a coalition between various resource supplies none of which have an absolute right to the benefits created by a company.

This research considers corporate governance, entrepreneurship and performance more from a shareholders' perspective than a stakeholders' perspective. However, this research does not neglect the stakeholder perspective but it is considered that more focused research can be performed if the interests of shareholders are primarily considered. If the interests of all stakeholders were considered the shear number of parties and their interests that would have to be evaluated would make it very difficult to arrive at meaningful conclusions. Once this research is completed, it would be valuable to consider this type of research from different stakeholder perspectives rather than the shareholders perspective alone.

Figure 4 - S&P Global 1200 Indicies

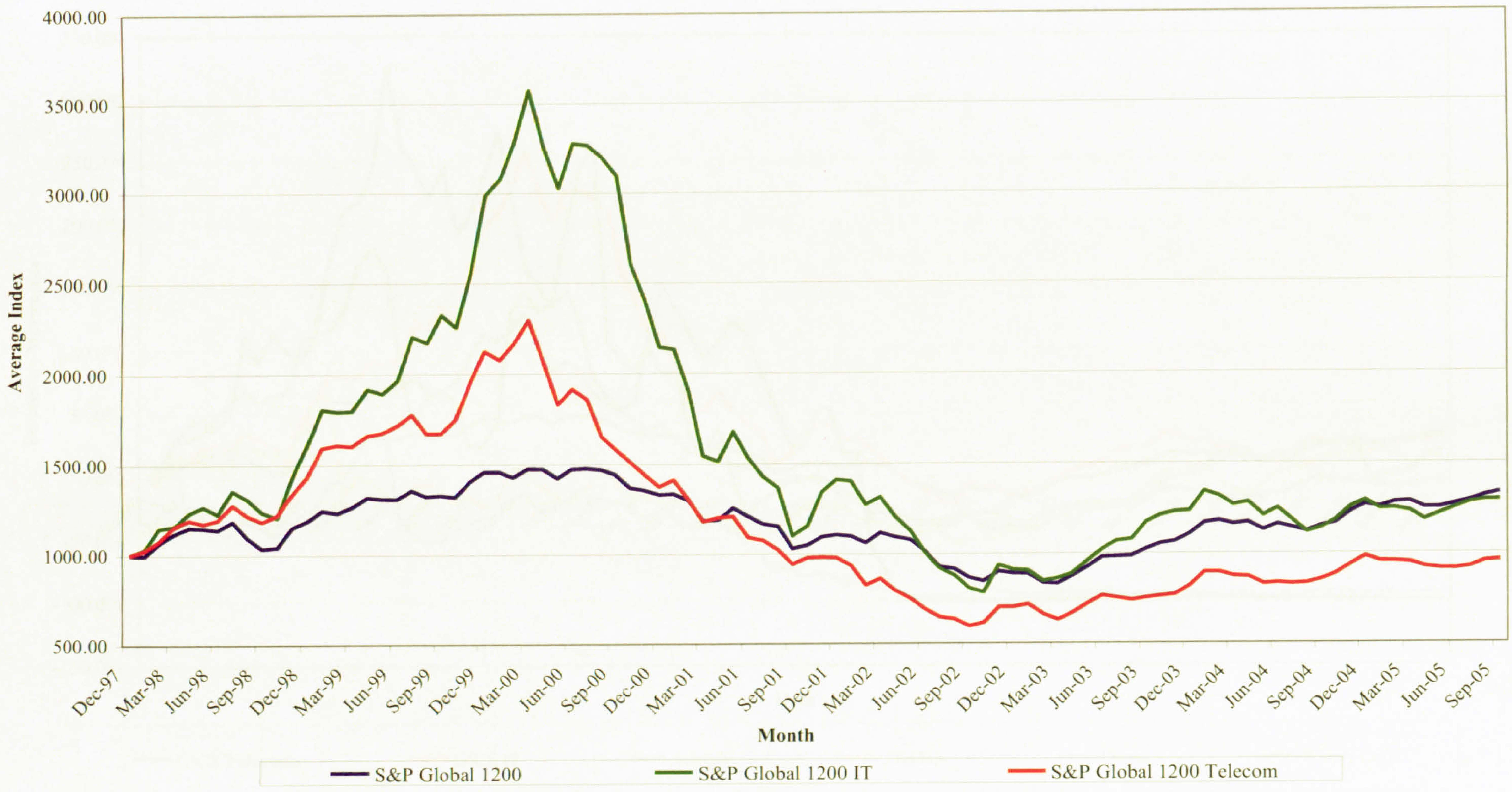
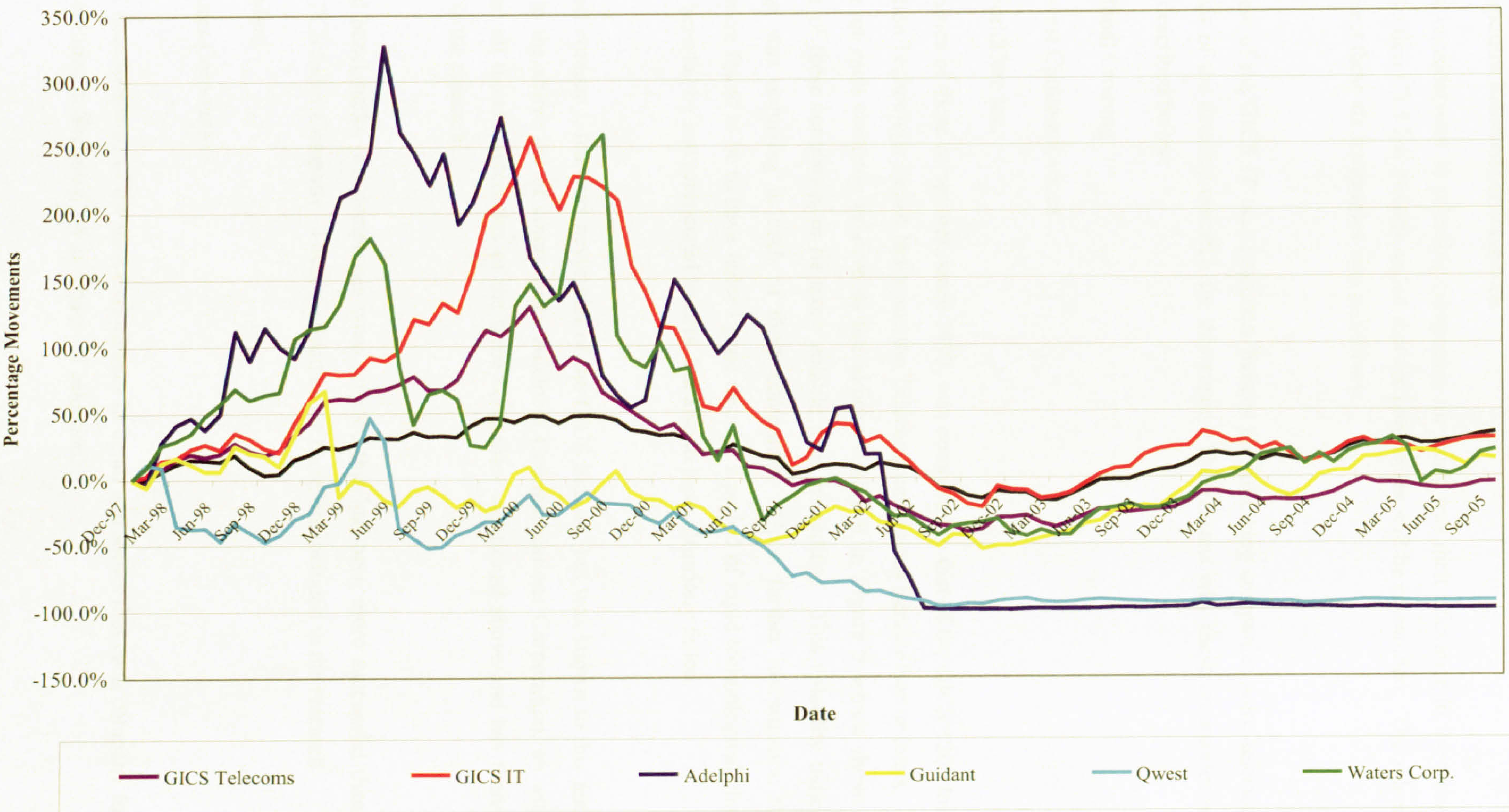


Figure 5 - Percentage Movements in Share Prices ('98 - '05)



C3.7 Companies Selected for Research

The principal consideration in selecting companies for study was their relevance to the research statement. Section C3.5 has already stated that six companies will be researched. The selection process to select these six companies was as follows:

From a review of the GICS IT and Telecoms Indices the following companies were selected to form the basis of the detailed research for this paper. The reasons why these companies were selected are described below:

- Global Crossing
- Qwest Communications
- WorldCom Inc.

The performance of these companies, since 1997, was compared to that of the GICS 1200 Index, the Information Technology Sector Index and the Telecommunications Service Sector Index. The performance of each company relative to the indices is shown in Figure 5 which shows the performance of these companies to be more volatile than the indices. This volatility indicates rapid change was occurring in each of these companies. Upon further investigation these companies were found to be to have indeed gone through a period of rapid technological change and to have been led by entrepreneurial leaders, but also to have ultimately failed.

An additional company, that was never part of the GICS Indices, but was known to this author, was added to the above list of companies. Adelphia Communications Corporation, as will be seen, showed all the characteristics of the three companies mentioned above and has therefore been added to the research.

As potential benchmarks two companies were selected that had been more successful than the "average" GICS Index Company. These companies are therefore included in the research.

- Guidant
- Waters Corporation

Appendix 7 describes each of the above companies in detail and shows that each company fulfils the criteria outlined in Section C3.6 as a basis of selection.

More failed companies were researched than successful companies. This was a conscious decision by this author, as it is believed that more will be learnt from those companies that failed and a benchmark of two successful companies is sufficient to provide a contrast to the "failed" companies.

C3.8 Conclusion

The above three chapters have discussed the methodological approaches and research methods available to this author to carry out this research. The qualitative methodology has been selected along with the case study method. Chapter C4 discusses the issues surrounding the collection of data.

CHAPTER C4: DATA COLLECTION AND DEVELOPMENT OF RESEARCH OBJECTIVES AND INFORMATION SOURCES

C4.1 Introduction

Chapter C4 discusses the data collection techniques and data sources that were used in this research. In order to determine the research data required each research proposition was reviewed and the objective of each proposition was identified, which allowed for the necessary data to be determined along with the sources (Section C4.3). This approach was used as this author felt that additional material, in addition to the literature review, was required to properly define or clarify each proposition. This is followed by a discussion on how the documentation and archival records were interpreted (Section C4.4). As the basis of this research is researching individual companies, Section C4.5 looks at how it is intended to rate each company's attitude to corporate governance and entrepreneurship in order to arrive at conclusions.

C4.2 Data Collection

C4.2.1 Mapping of Data Sources against the Data Requirements

The research statement (Section C1.2), the conceptual framework (Section C1.3) and the research propositions (Section C1.4) were used as guides to select data to be extracted from the data sources. Documents were examined, interviews were conducted and the results were put in narrative form. This narrative is presented in Part D.

As stated in Section C2.3.9 this research took the flexible approach. This allowed adjustments to be made to data collection instruments which in turn permitted opportunities to probe emergent themes and allowed for additional data sources to be included as they occurred. Eisenhardt, (1989) considers this approach permissible in qualitative research.

The documentary data sources were primary the Annual Report of each company (Form 10K), Proxy Statements (Schedule 14A), filed with the United States SEC, complaints filed with the SEC, statements filed with various US Bankruptcy Courts, US Department of Justice Complaints and other literature pertaining to each of the companies researched. Interviews were conducted with bankers in the City of London where their input was considered necessary to fully understand the data analysed.

C4.2.2 Data Collection Sources and Techniques

To address the Research Statement stated in Section C1.2 and the Research Propositions stated in Section C1.4 required the collection of data for analysis. Data for case studies can come from a number of sources. Yin (2003) lists six main sources: documentation, archival records, interviews, direct observation, participant-observation and physical artefacts.

The techniques that can be used to collect data from the above sources are as follows:

- observation of people and the settings as a background observer. This can be done either through structured or unstructured data collection methods;
- interviews with participants central to the process. Interviews can be conducted either with key informants or through focus groups;
- questionnaires;
- analysis of third party data, such as literature searches, US Government statistics and
- triangulation. Triangulation is not strictly a data collection technique as "Data triangulation describes the use of multiple data sources, all with a similar focus, which are used to obtain differing views about a situation in order to validate findings" (Begley, 1996, p. 124). However, it has been included in the above list as it is considered an important technique in the validation of the data collected through the other techniques described. Also the ability to use data triangulation is one of the strengths of the case study methodology and is not always useable in other qualitative methods.

The relative strengths and weaknesses of each above techniques are described below in Table 7.

C4.2.3 Strengths and Weaknesses of Data Sources Utilised

The majority of the data was collected from document analysis rather than, for example, archival records and therefore there were none of the weaknesses associated with the latter type of data. There was no author bias as the data was primarily sourced from US Government or Department of Justice sources. Research by third party authors was used so any biases or inaccuracies by these authors may be evidenced in this research but wherever possible the facts reported by these authors were interpreted rather than their opinions expressed.

In the case of interviews, bias due to poorly constructed questions did not arise, as the interviews were used for the purpose of clarifying issues on data that had already been collected.

The one area of weakness that requires addressing, is the fact that interviews were not conducted with the principals involved in each of the companies selected. At the time that this research was

conducted, a number of the principals of the "failed" companies were serving prison sentences for fraud and were therefore unavailable. The CEOs of the two successful companies were also unavailable as their companies had been taken over by larger rivals. This author believes however that this weakness was countered by the transparency of information available on US corporations (see Section C3.2).

Table 7: Relative Strengths and Weaknesses of Qualitative Data Collection Techniques.

Data Collection Technique	**Strengths**	**Weaknesses**
Observation	• covers the event in real time. • covers the context of the event. • insightful into interpersonal behaviour and motives.	• time consuming. • problem of selectivity unless care is taken. • event may proceed differently because it is being observed. • costly. • bias of the observer.
Interviews	• targeted – focuses directly on the subject matter. • insightful.	• bias, if questions are poorly constructed. • bias of the respondent. • inaccuracies in record taking. • interviewee may give the interviewer. what he/she wants to hear.
Questionnaires	• as above for interviews. • bias of interviewer removed as they will not be present.	• as above for interviews.
Third Party Data	• stable – same data can be reviewed repeatedly. • independent of the case study in question. • exact and referenceable.	• problems of retrieving the data. • bias in selecting and retrieving data. • reporting bias of the author. • access to data - may be difficult due to multiple reasons.
Triangulation	• in conjunction with other techniques it will increase the confidence of the results.	• time consuming technique. • replication is difficult.

Source: Modified from Yin (2003, p.86): Six Sources of Evidence.

The techniques described below will be used in the research of each factor affecting corporate governance, entrepreneurship and corporate success or failure.

Table 8a: Information Techniques to be used in this research – Corporate Governance

	Legal	History	Finance	Board Composition	Stock Ownership	Executive Remuneration
Observation						
Interviews			X			
Questionnaires						
Third party data *	X	X	X			X
Triangulation	X		X	X		X
Document Analysis	X		X	X	X	X

Table 8b: Information Techniques to be used in this research – Entrepreneurship

	Entrepreneurship	Corporate Entrepreneurship	Entrepreneurial Leadership
Observation			
Interviews			
Questionnaires			
Third party data *	X	X	X
Triangulation	X	X	X
Document Analysis	X	X	X

* Examples of third party data used was US Government published statistics and data derived from literary articles.

Having defined the data sources and techniques, Section C4.3 discusses in depth the types of information that was collected in this research. Each proposition is considered in turn.

C4.3 Research Propositions Revisited

C4.3.1 Legal Drivers

Proposition P1:

The stability of any banking system affects the legal and political structures in an economy, which in turn will affect the strength or weakness of the corporate governance systems in that economy. For example, it is expected that in a stable banking system where credit is readily available, stringent corporate governance regulations will not be necessary as companies will have ready access to capital. If, on the other hand there are stringent controls on credit, it would

be anticipated that there would be an increase in the number of corporate governance pronouncements as "issues in corporate governance do not arise in a vacuum but rather from an identifiable process" (Jones and Pollitt, 2003).

The foundations of any banking crises can be classified into two categories – those based on poor banking operations, such as excessive risk-taking or a lack of internal controls, and those based on adverse macro-economic circumstances, such as sudden changes in foreign exchange rates or difficulties arising from lending boom and burst cycles (Ingves, 2003; Gavin and Hausmann, 1996). The former causes are often due to poor governance, while the latter causes are more often due to local governmental mismanagement or events that have taken place elsewhere in the global economy. Typical macro-economic "trigger events" that can cause banking crises are illiquidity in the banking system, mismanaged financial liberalization or a loss of confidence in the government. Therefore to investigate this first proposition it is necessary to determine the state of the economy in the period under research and the number of corporate governance regulations produced in the period. It should be restated that Proposition P1 is a general proposition and is directed at understanding the driving force behind the enactment of corporate governance regulations in an economy and companies in general so that corporate governance in general can be better understood

Proposition P2:

Having determined the state of the economy (Proposition P1) and the number of corporate governance pronouncements issued within the timeframe of this research, corporations' attitude to these pronouncements is next investigated. In order to determine if companies follow the recommendations and regulations of third party governing bodies, the workings of board committees are examined as directors delegate many of their day to day responsibilities to these committees as a matter of expediency. From a review of the annual accounts of many public companies, it is evident that the most common committees established by boards of directors are: the Audit Committee, the Compensation Committee, the Governance and Nominating Committee and the Finance Committee.

The four committees listed in the above paragraph were investigated in each of the companies under review. Research into the effectiveness of board committees has been selected as boards' attitudes to corporate governance can be gauged by how seriously boards take the composition and recommendations of the each of the committees (Spira and Bender, 2004; Greenbury, 1995; Cadbury, 1992). Often the formation of these committees is a legal requirement but boards have the discretion to either actively embrace the formation and recommendations of their committees

or they can accept their existence with reluctance. Research shows which path a company chooses can have an effect on its performance and stock price (Standard and Poors, 2003).
In order to understand the responsibilities of the committees outlined above, the types of functions and responsibilities of each of the four board committees is briefly detailed below.

• *Audit Committees:* The importance of audit committees has been recognised since the 1970s when the SEC required all NYSE listed companies to appoint audit committees. Their importance was further emphasised in 1999 with the Report and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees produced by a committee composed of members of the NYSE, Nasdaq, public companies, and CPA firms. This, and a number of other reports, the most recent being the Sarbanes-Oxley Act, has recommended guidelines on the composition, duties and responsibilities of audit committees. A summary of these recommendations is as follows:

- The audit committee should consist of three to five members, depending upon the size and business of the company. Some committee members should have experience in the company's primary industry or company-related expertise. The board may consider setting term limits for the committee members. The Sarbanes-Oxley Act requires that each member be independent and recommends that at least one member be an "audit committee financial expert."

- Audit committee members should be independent of the company. This means they cannot accept any fees from the company other than for serving as a director. In addition, they cannot have worked for the company in the past three years and there should be no potential conflicts of interest that may interfere with their ability to act independently from management.

- Audit committee members must have an understanding of economic and accounting principles, comprehend how financial reporting choices and accounting policies can affect a company's financial reports, and possess an understanding of internal controls and procedures.

- Companies must adopt audit committee charters which lay out the required duties of the committees members.

- The audit committee should meet regularly and as needed with the company's CFO, comptroller, internal auditor, and other personnel responsible for the company's

financial reporting process and internal controls, as well as with the outside auditor. http://www.nysscpa.org/cpajournal/2003/0303/features/f031803.htm

- *Compensation Committees:* In a study of the Fortune 1000 companies it was found that 99.6% of the companies had compensation committees. This exceeded the percentage of companies that had audit committees, nominating committees or finance committees. The date of this study was 1986 (Kesner, 1988). At the time of this study there were few clear regulations governing compensation committees, with the result that information on corporate compensation plans tended to be reported in a free form narrative description. In 1992, regulations were introduced that required that compensation information in annual accounts be in tabular form so clear comparisons between companies could be made. In 2002 with the passing of the Sarbanes-Oxley Act additional requirements were placed on compensation committee members. In particular, any form of company loans to executive directors and officers were prohibited. On August 11, 2006 the SEC published a 436 page report on executive remuneration and other governance issues. A summary of the current requirements placed on compensation committees of listed companies is as follows:

  - Compensation committees must be from the ranks of non-management directors.
  - The responsibilities of the compensation committee are: to set the compensation packages of the CEO, other senior executives and the directors themselves. In addition, it must approve the size of the bonus pool for the remainder of the workforce. However it is management's responsibility to decide how to allocate the bonus pool. The committee must also determine how far down in the employment ranks to extend incentive compensation such as stock option awards.
  - Compensation committees must decide how to use a company's pay philosophy to best advance its overall business principles and goals.
    http://www.aicpa.org/PUBS/jofa/dec2002/myers.htm

- *Nominating and Governance Committees:* The nominating committee is the oldest board committee in many companies. It is also the committee that owes its existence most directly to Agency Theory, in that it ensures management does not have the exclusive right to nominate board directors. In spite of this, until recently, many CEOs have had sufficient influence over the board to be able to influence the workings of the nominating committee.

In recent years, the role of the nominating committee has been extended to include not only the nomination of board members, but also to have overall responsibility of the corporate governance of companies. For example, Dell Corporation lists the responsibility of its nominating and

governance committee as "(a) monitoring and overseeing matters of corporate governance, including the evaluation of Board performance and processes and the "independence" of directors, and (b) selecting, evaluating and recommending to the Board qualified candidates for election or appointment to the Board" (http://www.dell.com).

The role and responsibilities of a nominating and governance committee can be summarised as follows:

- Companies must have a nominating/corporate governance committee proposed entirely of independent directors.
- Committees must have written charters listing the committee's purpose and responsibilities.
- Committees should list the minimum qualifications and skills that it feels are necessary for board members to possess. *http://www.sec.gov/rules/sro/34-48745.htm*

• *Finance Committees:* Of all the four committees that boards may establish, boards are least likely to form finance committees. This is because the work of a finance committee is often carried out by audit committees. In addition, there are no legal requirements on boards to form finance committees. However, many large companies do form such committees and the terms of reference of one such committee is detailed below: "The Investment/Finance Committee is authorized to review and approve the Company's global investment policy which applies to all equity and fixed income investments made by the Company and by its subsidiaries worldwide; review the Company's minority investments and fixed income assets; authorize the issuance of debt securities of the Company; oversee stock repurchase programs adopted by the Board of Directors; review the Company's currency, interest rate or equity risk management policies and programs; review the Company's insurance risk management policies and programs; review the Company's tax program; and approve charitable contributions on behalf of the Company." http://investor.cisco.com

To summarise Propositions P1 and P2:

Table 9: Legal Propositions, Research Objectives and Information Sources.

Proposition	Detailed Research Objectives	Information Sources
P1. National institutions impose corporate governance regulations with the intention of promoting economic stability and growth within economies. These laws are passed in response to macro	• to investigate if and how macro economic environment factors (e.g. the size and credit worthiness of the stock and credit markets) can ultimately affect the legal institutions that provide the framework for corporate governance in the economy and in	*Documentation & archival records:* This will involve reviewing (i) government reports on macro economic factors during the research period for example the Percentage Changes in

Proposition	Detailed Research Objectives	Information Sources
economic influences (e.g. the lack of or presence of banking crises and asset price stability/volatility).	companies.	Interest Rates/Money Supply as prepared by The Federal Reserve Board and (ii) regulations on corporate governance issued by the government and quasi-governmental institutions.
P2. Corporate governance in companies is driven by the corporate governance practices enacted by national institutions.	• to investigate if good corporate governance procedures have been adopted effectively and in a timely manner in the companies under investigation. If companies adopt corporate governance measures proactively there should be no need for the legal enforcement of the majority of corporate governance measures. It is anticipated that companies' attitude to corporate governance will assist in the understanding of the factors that lead to the success or failure of companies.	*Documentation & archival records:* This will involve reviewing the workings of corporate committees and their attitude to corporate governance regulations issued by such bodies as the FASB, SEC, OECD , IMF and the IAS.

C4.3.2 Historical Drivers

Proposition P3:

Every country possesses a unique history and culture that affects its institutions, whether they are political or economic institutions. The United States is no different and is in many ways especially unique in the world. This "uniqueness" is no better seen than in the term "American Exceptionalism". Alexis de Tocqueville first coined the term in 1831 in his book "Democracy in America" and who said, "Everything about the Americans is extraordinary". At the time of writing his book, de Tocqueville was primarily referring to the American attitudes towards liberty, egalitarianism, individualism, populism and laissez-faire. However, the perception that America is unique predates the nineteenth century and can be traced back to the Puritan founders of the country. Many Puritans believed that God had made a covenant with them and preordained them to make America a leader of nations. This belief was epitomised by such Puritan preachers as John Winthrop, who in his sermon "A Model of Christian Charity" given in 1630 coined the phrase "City upon a Hill".

While the idea of American Exceptionalism may originally have been partially based on the belief of moral superiority, this is not now necessarily the case. Instead, the American belief in liberty and equality, as espoused by Abraham Lincoln in his Gettysburg Address, influences many of American institutions today and gives them their uniqueness. This is not only true of American political institutions but also of their economic institutions.

The economic history of the United States is, by definition, short in comparison to the rest of the Western World. However, in its relatively short life the United Stated economy has exerted more influence on the economics of the world than any other country. Similar to many other countries, much of the economic power was quickly concentrated into corporations controlled by a few plutocratic families. These families controlled huge amounts of wealth and welded power absolutely, relying little on the opinions of others.

This situation may well have continued but for the occurrence of a number of events. Two world wars in the space of thirty years led to the need for the US government to raise huge amounts of capital. This led to the acceptance of share ownership by the general public, which, with the long period of economic growth after World War Two, led to a rapid rise in share ownership by "Middle America". On the political front, the rise of the Progressive Movement had an effect on the business oligarchs such J. P. Morgan and the Rockefellers. Although the Progressive Movement in the United States was far less radical than its counterparts in other parts of the world, the movement helped to lead to the break-up of such corporate giants as the Standard Oil Trust in 1911.

Post World War I, the power of the oligarchs was further broken during the Great Depression when a number of wealthy families were bankrupted in spectacular stock market crashes. Their power was further weakened by Acts of Congress that placed controls on the banking and financial institutions and utility companies. Congress's reforming work was supplemented by that of the Supreme Court. In 1957, the Supreme Court ordered the DuPont family to sell its equity in General Motors for anti-competitive reasons and in 1974, it ordered the break-up of AT&T. Faced with such challenges and presented with rising stock markets, other families sold out and turned to philanthropy. However, not all families have sold out and companies such as Ford are still family controlled. These have been joined by newer corporate dynasties, such as the family controlled firms of Microsoft and WalMart.

The effect of these changes has been that the control of much of Corporate America passed from a few powerful families to a wider, more democratic ownership basis. From a governance perspective, this has meant that the management of corporations has shifted from a few individuals to a cadre of professional managers (Morck and Steier, 2005) watched over by independent boards of directors. The one threat to this status quo is the rising power of the financial institutions such as pension funds which, because of the one vote one share voting rights, now wield enormous power.

Proposition P4 and P5:

In the late 1990s and the early years of the 21st Century, high technology companies in the United States were challenging a new frontier. Advances in technology were seen as the area that would provide the growth in the economy and enable America to compete against the low cost producers of Asia. However, for high technology companies to be successful, requires research into new products and processes which requires leaders with the vision. While it is vital that the leaders of companies have the necessary vision, the history and culture of the companies themselves play a part in how a company is run. If a company is brand new there is no history or corporate culture for a company to draw upon. However, if a company has a history this will provide management with a guide and reference points as to how they should act in the future.

Historical drivers on corporate attitudes to governance will be researched by looking at three different areas to understand the influence of each on corporate governance:

- The history of the US.
- The history of the companies selected for research.
- The background of the CEO of each selected company will be reviewed.

Therefore propositions P3, P4 and P5 can be summarised as follows:

Table 10: Historical Propositions, Research Objectives and Information Sources.

Proposition	Research Objectives	Information Sources
P3. The history of a country affects the corporate governance structures adopted by companies.	• to investigate if and how the history of the US has affected the corporate governance and the performance of corporations of US companies.	*Documentation & archival records:* Review the history of corporate governance in the US and the history of each company in an attempt to understand how the history of each company has affected its attitude to corporate governance. Such information will be sourced from statutory financial reports filed at the SEC.
P4. The history of a company affects the corporate governance structures adopted by that company.	• to investigate if and how the history of a company affects the corporate governance and the performance of corporations.	As above
P5. The background of business leaders influences companies' attitude to corporate governance.	• to investigate if companies faced by rapid technological change attract entrepreneurial leaders. If so, are the actions of these leaders affected by historical and governance drivers.	*Documentation & archival records:* Review available sources of literature to understand the background, work ethic and attitude to corporate governance of each of the corporate leaders under examination. Such

Proposition	Research Objectives	Information Sources
		information will be sourced from statutory financial reports filed at the SEC.

C4.3.3 Financial Drivers

Proposition P6:

If quoted companies resort to leveraging, the question arises which is, what is the optimal level of leveraging and what is the relationship between leverage and corporate governance? As discussed above (Section C1.4.3) there appears to be little agreement overall on the optimal level of leverage for companies as a whole. If there was, the percentage of leverage in companies would be expected to be within certain boundaries. To explore this idea, the amount of leverage of the six companies under research was graphed over the period from 1995 to 2005. The leverage percentages over the period varied from over 200% to a negative 380% (see Figure 6). With this range in leverages in only six companies, it is not easy for overall conclusions to be drawn on the matter. To better understand the financial drivers on each of the companies under research and therefore the data collection requirements for this proposition, it is necessary to look at the three industrial segments represented by the six companies.

- *Telecoms Companies.* Three of the six companies under research were involved in the telecoms industry, so this industry will be reviewed first. In July 2002, the Economist magazine wrote a cover story titled "The Great Telecoms Crash". The story described the extent of the downturn in the telecoms industry. It estimated that "the telecoms bust is some ten times bigger than the better known dotcom crash" (p. 364) and predicted that the fall of the telecoms industry may be the largest bubble in history. During the telecoms bubble, the worldwide telecoms industry accumulated debt of over $1 trillion, stock values declined $4 trillion and in the US alone the industry lost 180,000 jobs. To service this debt it was estimated that some European telecoms companies had to earn $10 million a day (Noam, 2003, 2006).

To understand why this debacle occurred, a number of events have to be discussed. Up to the 1980s the telecoms industry had been a model of stability. In Europe the industry was monopolistic, being owned by each country's government. In the US the situation was almost identical as the industry was dominated by just one company AT&T. Up to 1984 when the Federal Courts ordered the break-up of AT&T, the company was structured into 22 operating companies, a long distance division, a research division and a manufacturing division. In 1984 the company accounted for 83.2% of network activity and equipment manufacturing. This dominance by one company brought stability to the industry. AT&T's stock was widely held and

was treated by many investors like any other utility stock in so far that the dividends were predictable and steady.

This predictability was supported by the strength of the telecoms market. Since the industry's inception in 1875, access lines increased every year for over a century, except for three years in the Great Depression, call volume rose by 2.5% each year and telecoms revenue grew every year. Between 1920 to the end of the 20th Century revenue grew 8.4% per annum except for the three years mentioned above during the Depression (Noam, 2006). By the end of the 20th Century, this stability in the telecoms market had come to an end and instead the industry entered a boom period, only to suffer a bust period in the early years of the 21st Century.

This dramatic turn of events was caused by a number of circumstances. As previously discussed, the federally ordered break up of AT&T initiated the process. On the back of this, the Telecommunications Act of 1996 deregulated much of the telecoms industry. However, these two facts alone did not disrupt the stability of the industry. Noam (2006) has suggested that the industry has now entered a period of cyclicality and advances a number of macro economic reasons for this, among them Schumpeter's theories of Creative Destruction. However, in addition to macro economic reasons Noam (2003) offers more practical reasons, amongst them corporate malfeasance and over capacity that created what he terms a "Perfect Storm". It is perhaps this last factor that is the most evident cause of the "bust" in the telecoms market. Between 1996 and 2001, capital expenditure grew at an annual rate of 29% annually and totalled in excess of $500 billion (Brookings Institute, 2002). All the companies added capacity in an attempt to beat their competitors and increase their scale of operations. Unfortunately, this huge increase in capacity was never taken up by the marketplace. It was not because companies and the population as a whole did not take up the new services, it is just that they did not require such capacity.

This low "take-up" rate of the population would not have been a problem in an industry that was not capital intensive. However, an important feature of the telecoms industry is that it is very capital intensive requiring huge investments in fixed costs. The marginal costs on the other hand are low, as the costs of sending signals over fibre optics or cable is negligible. With over capacity and low marginal costs, competition forced prices down to an almost unsustainable level. The result of all these forces was to largely bankrupt the industry in a very short period.

• *Medical Research Companies.* The next industry segment under review is the medical field. The medical industry has some of the same characteristics of the telecoms industry, but is also unique in many ways. The greatest similarity is its need for high capital investment. A new drug

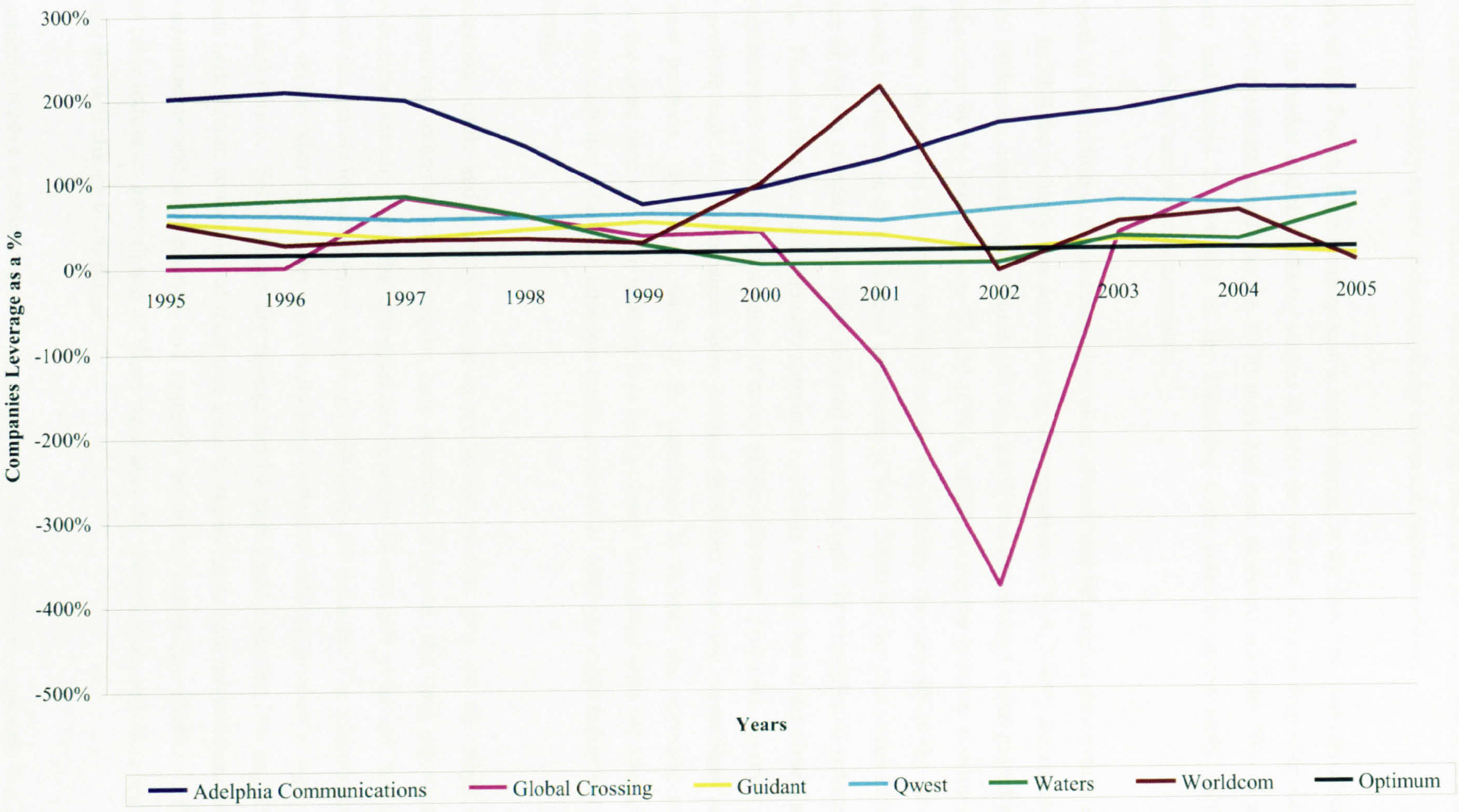
can take 10 to 12 years to develop and cost up to $800 million (https://www-3.ibm.com/solutions/lifesciences/pdf/2010exec_launch_20thNov02.pdf). Additional specific pressures facing the industry are: falling research and development productivity, a long lead time between the development of new drugs and the receipt of government approval for their sale in the market place, the expiration of existing drug patents, a shortage of potential billion dollar block busters and finally a thriving generic drugs market largely based outside the US that is quick to copy and market the most popular drugs. These challenges are causing the market to take action. Pfizer, the world's largest pharmaceutical company, announced on January 23, 2007 that it was cutting 10,000 jobs from its worldwide workforce in an attempt to achieve annual savings of $2 billion. In addition, it announced it was closing factories and research facilities and withdrawing from certain medical fields. These rationalisations were in addition to the sale of its consumer healthcare business to a rival. Some of the expected savings are to be channelled into additional research in an attempt to produce new drugs (Financial Times, 2007).

In spite of these challenges, the medical industry is not in the same state as the telecoms industry. Much of the industry is already consolidated and hugely capitalised. Pfizer for example has a market capitalisation of $193 billion while GlaxoSmithKline has a capitalisation of £81 billion. In addition, in spite of the ever present need to cut costs and improve productivity, the increasingly aging population of the Western world, the rising affluence of the Far East and the rising population of much of the Third World will mean that new drugs will always be needed. Therefore while the industry continues to face challenges and the prospect of further consolidations, it is not and has never been in the financial state that the telecoms industry found itself in at the turn of the last century.

• *Cable Companies.* The last industry sector represented by the companies under research is the cable industry. The cable industry, like the telecoms industry, has experienced huge growth over the last thirty years. Also, similar to the telecoms industry, the cable industry has been subject to close scrutiny by the Federal Communications Commission (FCC) so much of the fortunes of the industry have been tied to Acts of Congress.

After steady growth in the industry in the 1970s, the Cable Act of 1984 established a more favourable regulatory framework than had been in existence up to that date. The result of this was a huge investment program by the industry and a large investment in program development. These costs were passed onto the consumer by raising prices which caused concern among Washington policy makers. In spite of these concerns, the cable industry continued to grow

Figure 6: Leverage Percentages



through the 1990s and in 1996, the industry was aided by the passing of the Telecommunications Act which opened the industry to new competition and increased consumer choice.

The early years of the Twenty First Century saw a rapid change in the industry. New products were brought to the market and the industry started to enter the market for providing telephone services. By 2002 it was estimated that the 70/70 mark had been achieved whereby 70% of all US households had access to two out of the following three communication tools: cable television, cellular phones and personal computers.

The rapid growth of the industry, the plethora of services offered and the market penetration all came at a cost. In 2004 the industry was dominated by six companies (CWA, 2004); the industry had spent $100 billion on capital expenditures (NCTA, 2007) and the average value placed on each cable subscriber by the industry was $3,820 (CWA, 2004) giving the industry a value of nearly $200 billion. In spite of the large value placed on the industry, the majority of the cable companies showed net losses in their financial statements (CWA, 2004) for the year ended 2003. However, each of the six companies in 2003 reported operating cash flow margins of between 28% and 39%. The fact that the cable industry appeared to be loss making but at the same time generating huge amounts of cash was the cause of many of the industries' problems. In order to access these positive cash flows companies spent billions of dollars acquiring competitors and rolling out new products. However, much of the cash used to finance this spending was borrowed. At the same time the cable industry was being closely associated with the telecoms industry, with the result that when the telecoms crash occurred in 2002 the cable industry was similarly affected.

While the telecoms, cable and medical industries are similar in that they are all reliant on continually improving technologies and require huge amounts of capital, the most significant difference is in their maturity. All the industries are between 50 and 100 years old, but the medical industry is a mature industry, where any major upheavals are unlikely. The telecoms and cable industries, on the other hand, after a relatively long period of stability, now show signs of entering a cyclical period. Such periods are represented by high fixed costs but low marginal costs that leads to deflation; economies of scale that leads to expansion to gain market share; lags in capacity adjustments and in regulation and regularly occurring technology shocks. The telecoms and cable industries have shown all these signs over the last ten years and there are no indications that this will change in the future.

The above paragraphs have summarised the background to each of the industry segments that are represented by the companies under research. This background is important to consider as

attention is now turned to a discussion on the ways that financial issues affect corporate structure. In order to understand this relationship, interviews were held with members of major City of London financial institutions. With this insight, the leverage of the companies under research can be commented on further.

Since the early 1990s, corporate debt has taken a new significance for many companies. As stated earlier according to the Modigliani and Miller theory (1958) there is no optimal level of leverage, and changes in the level of leverage do not affect the cost of capital. However, if these assumptions are relaxed there are arguments for and against increases in leverage. This is due to companies adopting hurdle based analyses such as Economic Value Add (EVA) and Return on Invested Capital (ROIC) as corporate performance measures. EVA is a measure of a company's performance and is used to calculate the creation of shareholder wealth by calculating what profits remain in a company after the cost of a company's capital, both debt and equity, are deducted from operating profit. The EVA formula is:

Net Operating Profit after Taxes (NOPAT) – (Capital * Cost of Capital).

ROIC is a simpler measure of companies' performance and the equation is:

$$\text{ROIC} = \frac{\text{Net Income - Dividends}}{\text{Total Capital}}$$

However, the denominator in the equation is not simply the addition of all the capital of the company but rather the Weighted Average Cost of Capital (WACC). WACC is calculated by multiplying the cost of each capital component by its proportional weight and then summing. Thus the formula is as follows:

$$\text{WACC} = \frac{E}{V} * Re + \frac{D}{V} * Rd * (1 - Tc)$$

Where:
Re = cost of equity
R = cost of debt
E = market value of the firm's equity
D = market value of the firm's debt
V = E + D
E/V = percentage of financing that is equity

D/V = percentage of financing that is debt
Tc = corporate tax rate
(www.investopedia.com)

The significance of these measures is that in periods of low interest rates, such as has been experienced over the last decade, companies are encouraged to take on more debt if the cost of debt is below the cost of equity. Thus, for example, if the interest rate is 5% and the cost of equity is 10%, a company can take on more debt and reduce its WACC at the same time. The additional debt can then be used to increase sales and profit or buy back shares. Whichever course of action is taken will have the same effect - the cost of capital is reduced.
This corporate "financial engineering" has been assisted by another factor, the very strong economic growth that the West has experienced over the last dozen years. The result of this has been that companies have been generating large amounts of cash. Normally such cash would have been used in a number of ways: returned to shareholders in the form of dividends, used to buy back shares or used to make acquisitions. Paying dividends is not seen as a long-term method to enhance shareholder value and acquisitions often do not improve EPS. Share buybacks on the other hand are a quick method to improve shareholder value and if debt can be acquired at a rate below the cost of equity, companies are often encouraged to take on extra debt to "optimise" their valuations and balance sheets. The push to optimize balance sheets has been further encouraged by the huge amounts of private equity cash that has become available to the market. These funds have been used to buy companies, which then leverage their balance sheets to pay back the private equity funds soon after the acquisition. Any surplus cash generated by the companies is also returned to the new owners of the companies in the form of dividends. Many companies followed the example set by the private equity funds to raise their valuations but also to stay independent, rather than being purchased by the private equity funds.

An additional factor to consider is the part that the taxation system plays in corporate structures. The US tax system allows debt interest payments to be made before corporation tax is calculated, which implies that there is a tax advantage to increase the amount of debt on a balance sheet. which in turn suggests that a highly leveraged company will be more valuable than an all equity company. This does not take into account the fact that effective tax rates may be less than marginal tax rates due to companies' ability to take advantage of non debt related tax allowances. Empirically, Givoly *et al.* (1992) found a relationship between changes in leverage and changes in corporate tax rates, although Fama and French (1998) found no relationship between tax issues and debt financing.

In spite of the findings of Fama and French (1998) taxation does encourage leverage through the tax deductibility of interest payments. However, more importantly it can be used to incentivise management and discourage excessive expenditures of free cash flow. Also, at a certain point in the structure of companies, there is a view that leverage is a derivative as opposed to a

fundamental variable which reflects, rather than determines, the underlying risks and performance of a firm (Oxera, 2002)

From the above discussion the research objectives and information sources that are used to examine proposition P6 can be summarised as follows:

Table 11: Financial Propositions, Research Objectives and Information Sources.

Proposition	Research Objectives	Information Sources
P6. Financial issues influence the capital structure of corporations which in turn contributes to management's attitude to best corporate governance practices.	To determine if the capital structure of each company is in the interests of the corporate managers or shareholders with a view to understanding if the structure is in the best interests of either party. In particular, • Examine the ways in which equity financing drives the adoption of corporate governance policies in corporations. • Examine the ways in which debt financing drives the adoption of corporate governance policies in corporations. • Examine the ways tax regimes drive the adoption of corporate governance policies in corporations.	*Documentation, archival records, interviews:* The statutory financial accounts of each company filed with the SEC are examined to understand the effect these factors have on corporate governance. Interviews with City of London bankers will be conducted.

C4.3.4 Board Composition Drivers

Proposition 7:

Proposition P7 states that early stage companies will have steady growth as they strive to build market share and their reputation. At the same time there is a strong likelihood that there will be minimal corporate governance issues as managers' and owners' interests will be closely aligned. In the later stages of the early life cycle of companies, it is expected that companies will experience faster growth and an overall improvement in profits. Also, there will be greater governance issues as the alignment of interests of managers and owners dissipates. To research this proposition, the earnings of each company over the period under research were reviewed and then the results from this research of this proposition were used in the research of propositions P8 and P9.

Proposition P8:

Proposition P8 deals with the relationship between boards of directors and the CEOs they appoint. To study this relationship, a number of issues need to be reviewed. Firstly, over the period of research, what part did the CEO play in the success or failure of the company? Was the CEO in the position a sufficient period of time to be able to influence the results of the company? Was the CEO adequately trained for the job? Did the board appoint the right man for the job? The data necessary to answer these questions was primarily drawn from the analysis of documentation in the public domain.

Proposition P9:

The third proposition in this section (P9) deals more specifically with the part played by boards in the governance and success or failure of a company. Should the composition of boards remain static or should they change as the companies grow and evolve? Is board diversity important to the success or failure of companies? How independent should boards be? Did the boards of the companies under review make decisions that favoured either their own interests or the specific interests of individual shareholders instead of all shareholders and stake holders?

With every action and decision of directors now being increasingly scrutinized by shareholders, the task of attracting and retaining directors on boards is a challenge to all companies. Historically, board members were asked to join a board by CEOs and then the decision was "rubber stamped" at the company's next annual general meeting. Alternatively, directors tended to be appointed from those who held senior executive positions within the company. This meant that the composition of boards often remained the same for many years. However, shareholders are becoming increasingly vocal in the decision making process on the appointment of directors and changes in corporate governance regulations has meant that directors are now more likely to be, independent non-executive directors rather than executive directors.

The research objectives and relevant information sources that were used to research propositions P7, P8 and P9 were:

Table 12: Board Composition Propositions, Research Objectives and Information Sources.

Proposition	Research Objectives	Information Sources
P7(a). Companies in the early stages of their life cycle will experience steady growth as they strive to gain market share. Corporate governance issues will be at a minimum as management and company owners' interests are closely aligned. **P7(b).** Quoted companies will outperform companies whose boards have been largely selected by a CEO/founder and are therefore less diverse in experience. However, corporate governance issues will increase as management and company owners' interests diverge.	• To determine if corporate governance issues are more likely to occur in the early or later stages of a company's life cycle and the impact of these issues on the performance of these companies.	*Documentation, archival records:* The statutory financial accounts of each company filed with the SEC will be examined to determine its performance over the period under investigation.
P8. Boards of directors appoint CEOs with the expectation that they will grow the companies rapidly, increase profitability and promote best business practices.	• To establish if boards of directors appoint CEOs who have the ability to improve corporate performance and maintain best business practices.	*Documentation, archival records:* The statutory financial accounts of each company filed with the SEC will be examined to determine background and influences that the CEOs had in each company.
P9(a). The more static the composition of a board of directors the less growth a company will experience. However, corporate governance issues will decrease as management and company owners' interests are more aligned. **P9(b).** Companies whose boards of directors are comprised largely of executive directors will experience less growth than those companies whose boards are dominated by non-executive directors, but more corporate governance issues due to the lack of independent board directors.	• To investigate the composition of each board of directors to determine the effect on governance issues that the frequency that directors change has on these issues. • To investigate the composition of boards of directors and review the relationship between executive and non-executive directors.	*Documentation, archival records:* The statutory financial accounts of each company filed with the SEC will be examined to determine its performance over the period under investigation.

C4.3.5 Stock Ownership Drivers

Proposition P10:

In Section C4.3.4 the effect of board composition on the performance of companies was discussed. From this discussion, it is evident that in a number of the companies the ownership and management of the companies were closely linked. This proposition seeks to examine this

fact in more detail and determine the influences that corporate owners can have on corporate governance by examining the shareholders register of each company over time in relation to corporate performance. To summarise:

Table 13: Stock Ownership Propositions, Research Objectives and Information Sources.

Proposition	Research Objectives	Information Sources
P10. Corporate ownership, control, governance and corporate performance are interlinked. It is expected that blockholders will have a favourable impact on corporate governance and performance.	• to determine: if there is relationship between corporate ownership and control and whether or not this affects corporate governance. • to determine if the presence of blockholders affects the relationship between corporate ownership, control and corporate governance. • to determine if corporate governance affects the relationship between ownership, control and performance.	*Documentation & archival records:* The composition of the shareholders' register of each corporation will be examined against the performance of each company over time.

C4.3.6 Executive Remuneration Drivers

Propositions P11 and P12.

This section researches the influence that executive remuneration has on the corporate governance structure of companies. Both Propositions P10 and P11 were considered at the same time as all forms of executive remuneration are so intertwined that it would be difficult to consider each component separately. Propositions P10 and P11 and their respective research objectives are as follows.

Table 14: Executive Remuneration Propositions, Research Objectives and Information Sources.

Statement	Research Objectives	Information Sources
P11. There is a relationship between executives' salaries, corporate governance and corporate performance. Increasing the size of executives' salaried remuneration will improve corporate governance practices.	• to determine the relationship between executives' salaries, corporate governance and company performance.	*Documentation & archival records:* The statutory financial accounts of each company filed with the SEC will be examined along with court papers detailing information about executives' remuneration that was not declared in the annual audited financial statements.

Statement	Research Objectives	Information Sources
P12. There is a relationship between executives' non-salary compensation, corporate governance and corporate performance. It is expected that increasing the size of executives' non-salaried remuneration improves corporate governance practices.	• to determine the relationship between executives' non-salary compensation, corporate governance and company performance.	As above

C4.4 Interpreting Documents

Section C2.3.8 discussed the Lincoln and Guba (1985) and Guba and Lincoln (1994) criteria to be used to ensure the trustworthiness and authenticity of research data, while Section C4.2 stated that the much of the research would be based on documentation and archival records. This section discusses the approach taken to effectively interpret the records that were examined as part of the research detailed above.

Records take many forms from personal diaries, letters and photographs to public documents. Whatever documents are used, Scott (1990) has suggested four criteria for assessing the quality of documents. These are:

- Authenticity. Is the evidence genuine and of unquestionable origin?
- Credibility. Is the evidence free from error and distortion?
- Representativeness. Is the evidence typical of its kind and, if not, is the extent of its un-typicality known?
- Meaning. Is the evidence clear and comprehensible?

These criteria were used to gauge the quality of the documents used in this research.
The source of many of the documents used in this research was the US Federal government. In order to analyse and interpret the content of these documents, textual analysis using the hermeneutic approach was used. Scott (1990) states that "Textual analysis involves mediation between the frame of the reference of the author and those who produced the text. The aim of this dialogue is to move within the "hermeneutic circle" in which we comprehend a text by understanding the frame of reference from which it was produced, and appreciate that frame of reference by understanding the text". The aim of textual analysis is to interact with the data but at the same time keep some distance from it by understanding the author's point of view (Wiklund *et al.*, 2002). Textual analysis can be either quantitative of qualitative. The objective of the latter is to "analyse a small number of texts and documents ..... with the aim to understand the

participants categories and see how these are used in concrete activities like telling stories, assembling files or describing family life" (Silverman, 2005; p. 160)

As stated above, while much of the documentation reviewed is sourced by the US Federal government, it is recognised that these documents are classified as "secondary sources". These documents have been used due to the unavailability of primary sources (See Section A1.5). While it would be preferable to review primary sources, the use of secondary sources has the advantage that they should more easily meet Scott's (1990) four criteria for quality, although it is recognised that annual financial statements filed with the SEC have in the past been filed with the knowledge that they were incorrect.

The following section discusses how, at the conclusion of the data analysis, each of companies researched were rated in their attitude to corporate governance and entrepreneurship in order to arrive at conclusions from the research.

C4.5 Rating Companies' Attitudes to Corporate Governance and Entrepreneurship

C4.5.1 Corporate Governance Rating

In the last decade, there have been a number of matrices developed that purport to rate companies based on their attitude to their corporate governance, such as those developed by the Center for International Financial Analysis and Research (CIFAR), Standard & Poor's (S&P), the FTSE/ISS (FTSE) and Credit Lyonnais Securities Asia (CLSA). These matrices are a response to a call to restore the credibility of financial reporting and corporate disclosure. Some of the matrices take an objective approach, such as the FTSE Corporate Governance Index (2005). The Standard and Poors Corporate Governance Index (2003, p.8) takes a wider approach and recognises the "need to interpret individual structures through lens of overarching principles that should be relevant in a global context". All these matrices aim however, is to encourage corporations to improve the transparency of their actions which in turn will help investors to make informed decisions.

In order to produce a rating, the corporate governance criteria used by the FTSE Corporate Governance Index (2005) supplemented by the criteria used by the Credit Lyonnais Securities Asia (2007) (CLSA) Index, were used, as these were considered the most relevant indices available to rate individual companies. The former index, which describes itself as (page 6) ".....a corporate governance rating system that evaluates the strengths, deficiencies and overall quality of a company's corporate governance practices and board of directors", classifies companies' attitude to corporate governance using 61 corporate governance criteria across five broad themes while the CLSA Index classifies companies' attitude to corporate governance using

76 corporate governance criteria across seven broad themes. The corporate governance criteria were mapped to one (or multiple) of the six drivers described above. It must be stated that corporate governance criteria used in the index were only used in this research as a basis to rate each company and care was taken that double counting (i.e. measuring the same criteria twice under the same heading) did not take place. By using governance rating criteria from both indices, it is believed that a comprehensive rating system for this research was established.

C4.5.2 Entrepreneurship Rating

Following on from the rating of the companies under research traits to corporate governance and a review of each company's performance, the same research was undertaken to understand the influence entrepreneurship has had on each company's performance. This relationship was examined by rating the companies' traits to entrepreneurship.

Currently, the majority of the measures of entrepreneurship are based on individual level data and as such, centre around the self employment rate. This measure is most often used to compare entrepreneurship levels across countries, as the definition of self employment rates is very similar across many countries (Audretsch, 2002). However, the problem with using the self employment rate when reviewing entrepreneurship in individual companies is that it is not appropriate as self employment is not necessarily a measure of entrepreneurship. Consequently, other measures of entrepreneurship were sought.

Schumpeter's view of entrepreneurship or "creative destruction" (Section A1.1) involved the continual changes found in an economy, or more specifically the creation and demise of companies. Iverson *et al.* (2006) suggest measuring business entry and exit rates as an alternative method of measuring entrepreneurship. Gartner and Shane (1995) proposed measuring entrepreneurship by measuring the rate of change in the level of self employment or the rate companies enter new markets. However, these measures again are not appropriate methods for measuring entrepreneurship in individual companies. In 2007, the OECD published a paper titled "A Framework for Addressing and Measuring Entrepreneurship" which seemed to provide entrepreneurship measurement criteria, but in fact discussed the determinants of entrepreneurship within an economy. With no published individual entrepreneurship criteria available, this author has determined that criteria will have to be compiled from multiple sources. In order to do this, a literature review of methods to measure entrepreneurship was performed and a table of measurement criteria was compiled (Ahmed and Hoffman, 2007; Davis, 2007; Ireland *et al.*, 2007(a) and 2007(b); Iverson *et al.*, 2006). The criteria compiled, amongst other criteria, looks at the speed at which companies entered their chosen markets with innovative products (or processes), the number of products introduced into the marketplace and the entrepreneurial

leadership style of the CEO. It is important to state that long term wealth creation and the enduring quality of the products introduced were not considered as determinants of entrepreneurship. This is because in Chapter B2, where the aspects of entrepreneurship were defined, the terms "wealth creation" and "product longevity" did not appear in the definitions of entrepreneurship.

C4.5.3 Corporate Governance, Entrepreneurship and Performance

Once each company's attitude to corporate governance and entrepreneurship was researched and rated (Sections D1.2 to D1.8 and D2.1) the relationship between corporate governance, entrepreneurship and corporate performance relationship was examined. This examination is discussed in Section E.

C4.6 Conclusion

This chapter has dealt with sampling and data collection issues. The next part of this research, Part D, covers the actual research undertaken.

PART D: DATA ANALYSIS

As a result of the literature review (Part B), six major drivers on the operation of corporate governance within corporations were identified. These drivers are: legal, historical, financial, board composition, stock ownership and executive remuneration. Section A1.2 stated that the aim of this research is examine how these factors drive corporate governance, and then to determine what effect entrepreneurship has on corporate governance and ultimately, the performance of entrepreneurially led companies. If, as inferred by in the title of this thesis, that entrepreneurially led companies tend towards failure without strong corporate governance, this will have an effect on the way that all stakeholders of such companies will view these types of companies. However, if the reverse is found, there will be no need to view entrepreneurially led companies differently from any other company. All the companies selected for research were deemed to be led by entrepreneurs and faced with rapid technological changes within their own industry segments. However, the ultimate performance of each company was different in each case.

Part D consists of two chapters. Each chapter discusses one of the main issues of the research:

D1: Corporate Governance

D2: Entrepreneurship

Sections D1.2 to D1.7 discuss the research carried out on each one of the drivers of corporate governance described above in order to meet the objectives of the research described in Section C4.3. Section D1.8 describes the criteria used by this author to rate the companies according to their respective "strength" of corporate governance and then Table 15 rates each company. Section D1.9 summarises the findings of the research described in Sections D1.2 to D1.7.

Chapter D2 discusses the research carried out on entrepreneurship and in particular discusses the various methods currently used to rate companies' entrepreneurship. It then describes the method chosen by this author, which is followed by Table 16 which rates each company and finally summaries the research described in this chapter.

CHAPTER D1: CORPORATE GOVERNANCE

D1.1 Introduction

Each of the drivers of corporate governance discussed in Sections B1.4 to B1.7 and C4.2 are now researched to understand the influence they have on companies' attitude to corporate governance and ultimately corporate performance.

D1.2 Legal Drivers

Proposition P1:

To understand if there were any banking crises in the United States between 1997 and 2005, the years that this research covers, two charts are presented. Figure 7 shows, on a quarterly basis, the percentage change in the US money supply and the Federal Interest Rates for the period 1997 to 2005. The percentage changes in both sets of numbers are relatively small, although interest rates do show notable declines over the period. These economic indicators show the money supply being kept stable over the period, while the cost of money over the same period was falling. This indicates that credit should have been available to the corporate sector with little difficulty.

Figure 8 shows the dollar value of issues of equity and commercial paper underwritten for the period 1985 to 2005. Over the whole period, there was a rapid growth in the amount of commercial paper underwritten in the U.S. and a steady, if small increase, in the amount of equity underwritten over the same period. This again indicates, with the exception of the 2000-2001 period that the corporate sector was relatively liquid. Thus, for the period under discussion, it appears companies should have had little difficulty raising equity or debt financing at reasonable rates. These two factors indicate that the United States banking system did not suffer from a period of illiquidity between 1997 and 2005.

To determine if there was a significant increase in the number of corporate governance pronouncements produced between 1997 and 2005, the most prominent professional and quasi-governmental organisations were selected that have the responsibility for issuing pronouncements on financial accounting issues and/or corporate governance issues. By counting the number of pronouncements issued each year over the specified period, it is possible to see the trend in the number of pronouncements issued (see Figure 9). The pronouncements included in the sample are those issued by such organisations as the FASB or the IAS and are final pronouncements. "Exposure Drafts" and "Interpretations" have not been included in the numbers counted as they carry no requirement for compliance. Similarly, revisions of previously issued pronouncements have not been included. Finally, it should be noted that in the case of the SEC, it tends to issue few pronouncements, but these pronouncements tend to cover multiple areas of governance

Figure 7: Percentage Changes in Interest Rates/Money Supply: December 1997 to December 2005

Source: The Federal Reserve Board

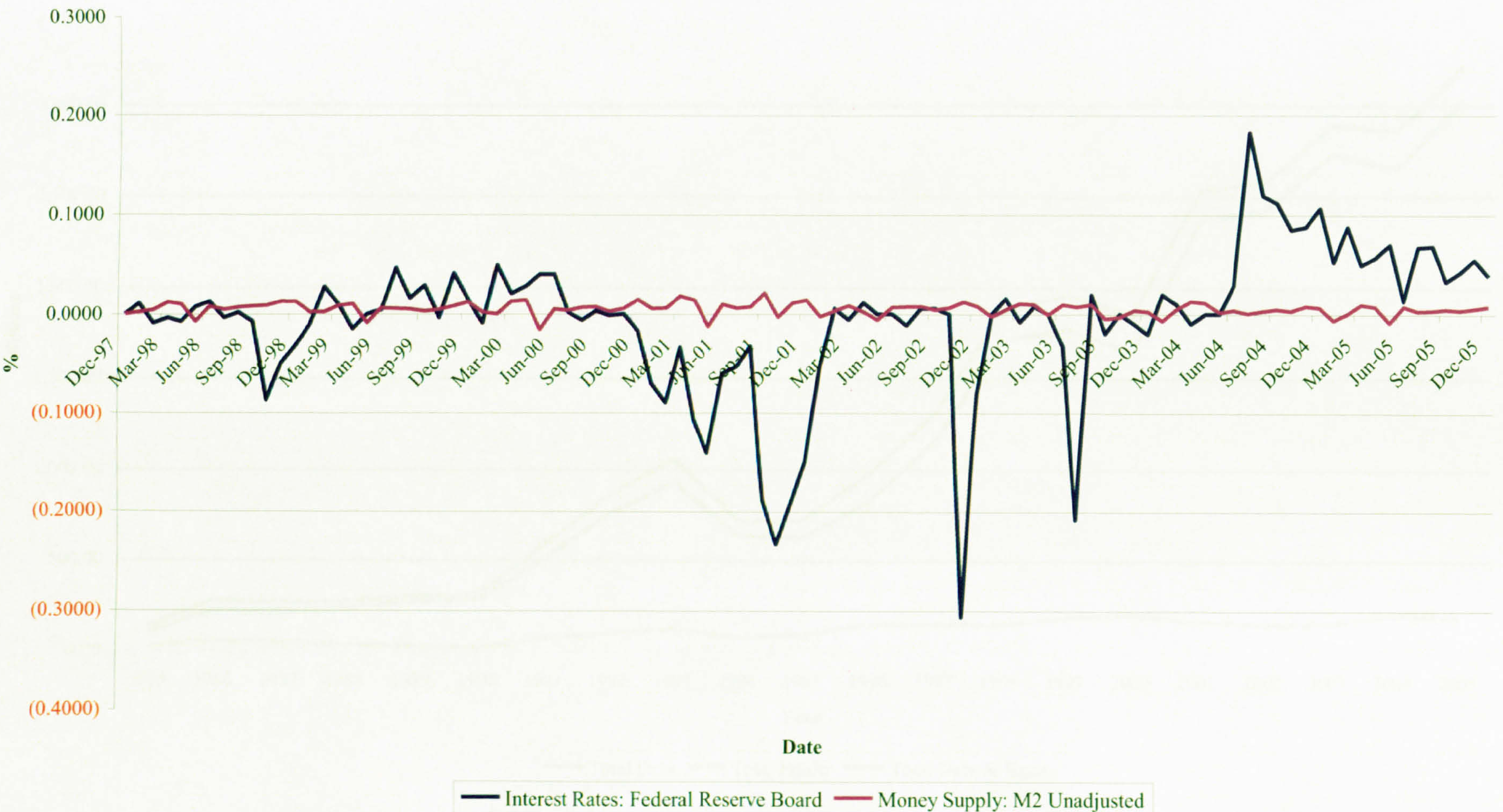


Figure 8: U.S. Corporate Underwriting Activity 1985 - 2005

Source: Securities Industries Website

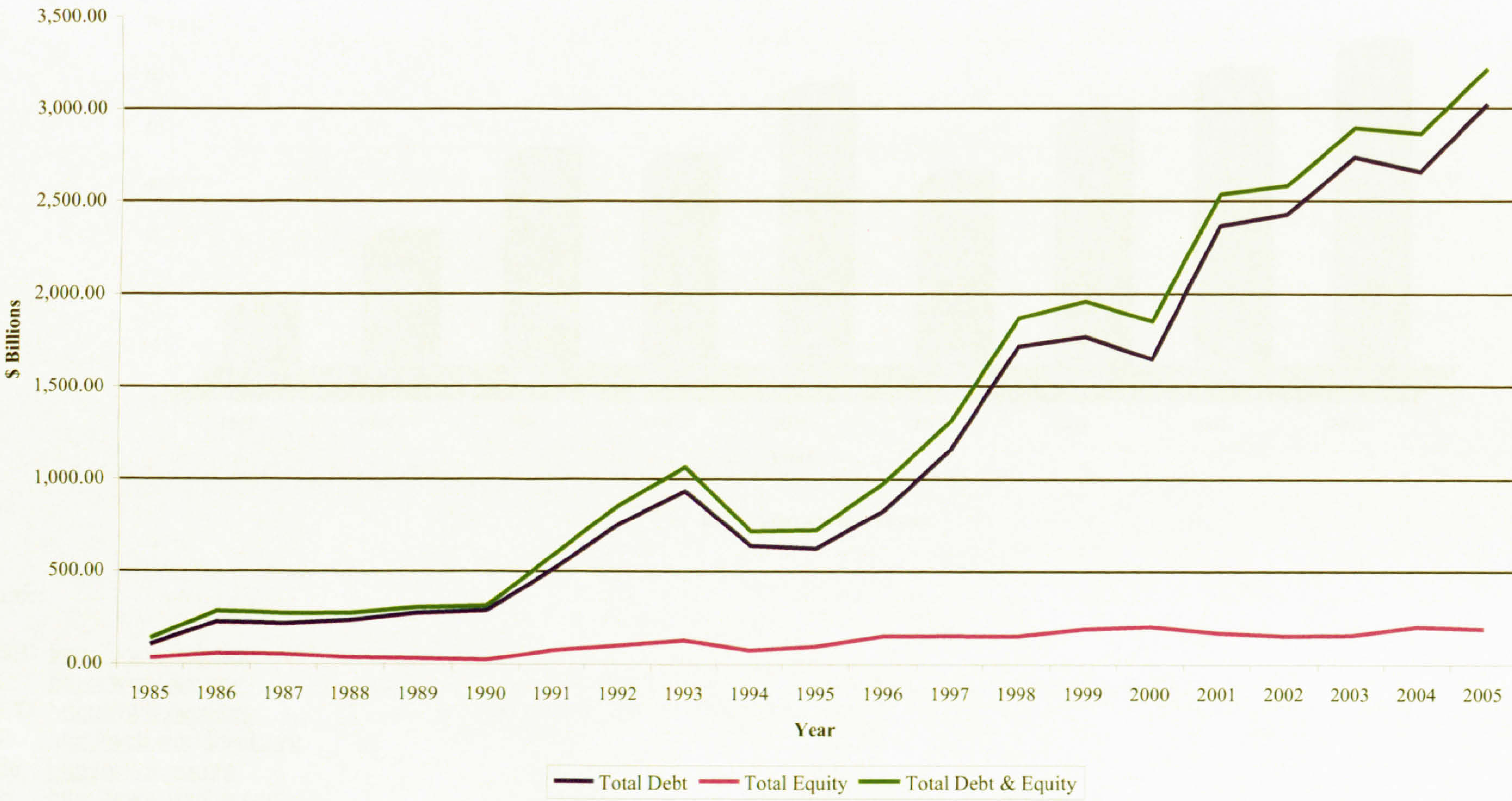
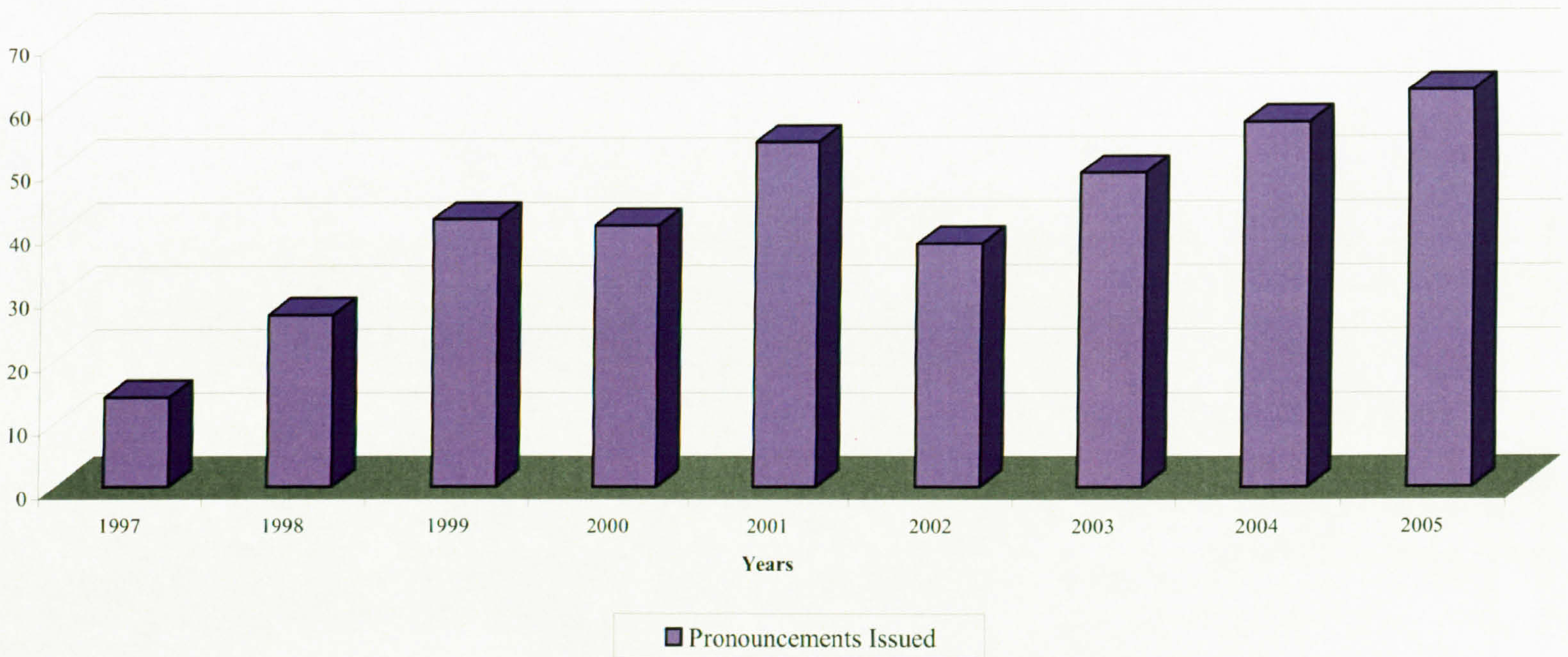


Figure 9: Number of Corporate Governance Pronouncement Issued: 1997-2005



Source:

FASB: http://www.fasb.org
SEC: http://www.sec.gov
OECD: http://www.oecd.org
IMF: http://web.worldbank.org
Basle: http://www.bis.org
IAS: http://www.iasplus.com

rather than being single issue documents.

Section C.4.1 hypothesised that corporate governance regulations are drafted in reaction to either poor banking operations or macro-economic events in the economy. As there are no indications of poor banking operations or macro-economic events that would have affected the liquidity of the markets it is not expected that a large number of corporate governance pronouncements would have been made. Indeed, this is the case. Throughout the period, there was steady flow of new governance laws and regulations that had an affect on corporate governance rather than any major upsurge.

In spite of this, important governance regulations were introduced in the period. For example the Sarbanes-Oxley Act in 2002. This piece of legislation is relatively short in length but was passed in response to specific corporate governance violations. In addition, it is one of the most wide ranging pieces of legislation on corporate governance and as such has a profound affect on the way that every company in the US does business. Furthermore, US Senator Snowe reported to the Senate Committee on Small Business and Entrepreneurship in May 2006 that the Sarbanes Oxley Act was directly responsible for a decrease in the US in the number of IPOs of companies with revenues less than $25 million which in turn could force firms to curtail their research, development, and job creation activities. Therefore, although there was relative stability in the banking sector during the period under research, the Enron scandal and the bursting of the internet bubble caused the US legislature to act with the passing of the Sarbanes-Oxley Act. Consequently, it must be concluded that economic events, in addition those hypothesised above, do in fact drive the workings of legal institutions, which in turn affect the corporate governance environment.

Proposition P2:

The above paragraphs have shown the importance of economic factors on the introduction of corporate governance regulations. The intention of Proposition P2 is to determine if the issuance of corporate governance regulations, irrespective of the reason for them, have an affect on the way companies govern themselves or whether these pronouncements are largely ignored until such time that they are enforced. As stated in Section C4.2.1, this will be done by reviewing the workings of board committees of each company as these committees are responsible for advising their full boards.

• *Guidant Corporation.* Guidant Corporation was, until September 1995, 80.25% owned by Eli Lilly and Company, which until 1953 had a member of the founding family on its board. Consequently, many of the corporate practices of Guidant were inherited from its former parent.

In 1996 the Company reported that it had four board committees: the audit committee, the compensation committee, the governance (nominating) committee and the compliance committee. Each committee consisted of three to five directors but in all cases, except the audit and compliance committees, there was at least one director who was a current or former executive director and therefore could not be classified as independent.

With regards to compensation each non-executive director received a grant of an option of 2,000 shares, a grant of restricted share options with a value of $30,000 and a fee of $2,000 for each committee or board meeting attended. Over the period under research the compensation of the non-executive directors steadily increased rising to an annual retainer of $36,000, with an option to purchase 10,000 shares

In 1997 the Finance Committee was added together with the Public Policy Committee, which also took over the responsibility of the Compliance Committee. In 1998, the two new committees established in 1997 were abolished and the Compliance Committee was reinstituted. In 2000, one of the executive directors of Guidant, who served on one of the board committees, retired as an executive director leaving only one executive director as a member of a committee.

On April 21 2006, Boston Scientific Corporation announced that it had acquired Guidant Corporation.

• *Waters Corporation.* In September 1995, Waters Corporation was floated on the New York Stock Exchange by its owners AEA Investors Inc. and Bain Capital Inc. In its annual filing to the SEC for the financial year ended 1996, Waters Corporation reported that three of its eight directors were also directors of AEA and Bain. In the same year the company reported that it had two board committees: the audit and compensation committees. The former committee consisted of three directors, one of whom was also an AEA director, while the latter committee consisted of only two members, both directors of the company's former owners. Executive directors received no additional compensation for serving on the Board or its committees, but non-executive directors received an annual retainer of $15,000 per year plus $750 for each Board meeting and committee meeting that they attend.

This situation remained unchanged, except for some increases in the annual retainer to non-executive directors, until 10th July 2001, when a Nominating Committee was formed comprising of three independent directors. In 2001 the Audit and Compensation Committees met twice while the Nominating Committee only met once. In 2002, there was a significant increase in the number of board meetings. In 2001, there were six such meetings, in 2002 this increased to

fifteen meetings. The number of committee meetings however, did not show a corresponding increase. In addition, the Nominating Committee's name was changed to the Nominating and Corporate Governance Committee, its membership was increased from four to five members and its remit was widened to include recommending governance improvements to the board.

In 2002, the Compensation Committee changed its name to the Compensation and Management Development Committee and was made up entirely of independent directors. In a further development, whereas the reports of the committees in the annual reports had only consisted of a few paragraphs, the 2003 reports covered over six pages. From 2003 to 2005. there were few changes in the board or the board committees although each year more emphasis was placed on corporate governance in line with the requirements of the Sarbanes Oxley Act of 2002.

• *Adelphia Communications Corporation*. For the fiscal years from 1995 to 1998, Adelphia Communications Corporation reported that the Company had Audit and Compensation Committees but no Nominating Committee. The Compensation Committee consisted of two non-executive directors, while the Audit Committee consisted of three members, one of whom was the son of the Company founder. Both committees met once a year. In 1998, the Company changed its year end from March to December.

In August 1999 a Nominating Committee was appointed consisting of four executive directors all members of the company's founding family. The following year, the composition of the Audit Committee was changed so that it comprised entirely of non-executive directors in accordance with NASD (National Association of Security Dealers) rules, although the composition of the Nominating Committee remained unchanged. The frequency of the meeting of all the Board committees also increased. The 2000 Annual Report stated that non-executive directors received payment of $1,000 for each committee meeting attended, plus the right to stock options under the 1998 and 1999 Stock Option Plans.

In 2001 and 2002, no annual filings were lodged with the SEC as the company was in a period of turmoil. In July 2002, the SEC brought charges against the Rigas family, who founded the company claiming they had "systematically and fraudulently excluded billions of dollars in liabilities from its consolidated financial statements by hiding them on the books of off-balance sheet affiliates. It also inflated earnings to meet Wall Street's expectations, falsified operations statistics, and concealed blatant self-dealing by the family that founded and controlled Adelphia, the Rigas family" (p. 1).

By the end of 2003, completely new management had been installed in Adelphia along with all the board committees. Each committee consisted solely of independent directors and the stated aim of the board was that the charter of each committee *was* "to meet or exceed applicable legal and stock exchange requirements, and to incorporate progressive corporate governance practices". This stated aim was repeated in the 2004 and 2005 annual accounts.

• *Global Crossings Limited.* Global Crossings started life much later than the other companies reviewed above. It was formed in 1997 but did not become a multi-billion dollar company until Robert Annunziata joined as CEO in February 1999. Mr. Annunziata resigned his position in March 2000, by which time the company had grown to a company of 14,000 employees. In the same month, the company's stock hit it's all time high of $61 dollars, however by the following month, it had fallen to $25 a share. With the internet bubble bursting, Global Crossing found itself in severe financial difficulty. In January 2002, the company filed for bankruptcy.

In 1999, the Company reported that the Board had four committees: the audit, compensation, nominating and executive committee. The nominating and executive committees both had representatives of a major shareholder as members while the chairman of the executive committee was also the executive chairman of the company. In 2001, two members of the Executive Committee were executive directors while all other members of the other committees were independent.

Following the Company's bankruptcy in 2002, a new board was constituted; the Nominating Committee was renamed to the Nominating and Corporate Governance Committee and a Government Security Committee was formed when the Singapore Technologies Telemedia Pte Ltd (a foreign owned entity) showed an interest in acquiring a majority stake in the Company. From 2002 onwards the Company disclosed that it was in compliance will all corporate governance regulations.

• *Qwest Corporation.* Qwest was founded in 1996 by Philip Anschutz, who also owned the Southern Pacific Railroad at the time. Mr Anschutz started the company by installing all digital, fibre optic lines with high speed data and T1 services along the railway lines that the company owned. The company grew rapidly taking over US West (a former "Baby Bell") in June 2000.

In its first set of accounts for 1997, the company reported that it had set up two board committees: audit and compensation committees. The founder of the company was the chairman of the Compensation Committee, while a non-independent director served on the Audit Committee. Non-executive directors were awarded a retainer of $24,000 (later increased to £30,000) a year to

serve on the board. In 1999, the board established an Executive Committee to act on behalf of the board when required. Two of the five members were not independent directors. In July 2000, an additional committee - a nominating committee - was formed. Three of the six members of this committee were not independent.

In January 2002, a Finance Committee was formed to evaluate the financial needs of the company. In spite of this action, the Company filed for bankruptcy the same year.

• *WorldCom.* In its annual report of 1995 WorldCom reported that it had established three board committees; an Audit Committee, a Compensation and Stock Option Committee and a Nominating Committee. All committee members were independent directors, although a number of the directors had close relationships with the founder of the Company. Committee members were paid $6,000 per year, plus an additional amount for the attendance of every meeting and a non-discretionary grant of options to purchase 3,000 shares of the Company's Common Stock. In 1996, the annual remuneration was raised to $22,500.

From 1996 onwards, the number of committees remained unchanged and the membership was relatively stable in spite of the very rapid growth of the company. In 1997, the grant of stock options was increased to 5,000 options, while in 1999 the annual remuneration paid to directors was increased to $35,000, part or all of which could be taken in shares.

With the rising importance of corporate governance in the business world today, companies are increasingly attempting to ensure that that they operate as "transparently" as possible. In other words, the decision making process must be seen to be open and fair and any decisions made must be seen to be made in the best interests of all shareholders. Ultimately, the success or failure of a company is the responsibility of its board of directors, who may or may not decide, to delegate some of its decision making process to committees of board members. It is the responsibility of these committees to spend more time, than the board as a whole, to investigate issues and advise the board of their recommendations for the board to act upon. Often these committees will consist of experts who have been especially hired for their expertise.

Research was carried out to see if companies proactively adopted governance regulations and if the proactive adoption of governance regulations contributed to the ultimate success or failure of companies that formed the basis of this research. The working of each company's board committees was investigated as a "barometer" of the company's commitment to the adoption of governance regulations. Thus, it is not the intention of this section to review individual corporate decisions but rather to make observations on and attempt to draw some conclusions as to how

boards of directors, through their committees, viewed corporate governance regulations, whether these regulations were beneficial to the companies or were companies effectively able to ignore the regulations and if so, what effect this had on the companies' entrepreneurial activities and success.

In summary, the importance of board committees in the success of a company cannot be underestimated, as much of the ground-work for the decisions made by full boards comes from committees. In spite of this, this research has shown that none of companies appear to have been proactive in creating new committees that might have improved the performance of the full board. Instead, committees tended to be formed only when required by regulatory bodies or when peer/public pressure appeared to dictate that such committees should be formed. If the workings of the board committees are taken as an example of companies' commitment to governance, the conclusion cannot be seen to be encouraging, as the companies in the sample did not show themselves to be proactive in terms of governance. If the sample is representative of US business as a whole, improvements in governance will continue to have to be mandated rather than voluntarily adopted. Therefore it must be concluded that, firstly the issuance of corporate governance guidelines tends to be more reactive than proactive and secondly, while companies do comply with their legal obligations as far as establishing governance practices is concerned, this does not necessarily mean that the governance practices established as a result of legal requirements in a company will necessarily have a positive or negative effect on their financial performance.

The following additional observations were also made during this research:

- In reviewing the statutory accounts of each company, where the business background of each director is detailed, it can be seen that many of the directors were experienced business leaders. The question as to whether the members of the boards of the companies were sufficiently experienced to run major companies is therefore not a central issue. However, an issue to be considered is whether or not the experience of the committee members was the right experience. The failing companies tended to appoint, on the whole, directors who were well known business persons, but did not necessarily have extensive industry experience or specific knowledge of the particular industries. Adelphia Communications Corporation is a prime example of this where the Nominating Committee in 1999 comprised entirely of Rigas family members who had spent most of their working life in the Adelphia group of companies. The successful companies, on the other hand, appointed directors who either had an intermit knowledge of their industries, or extensive experience across a number of industries

thus achieving a balance of experience in the committees. Therefore it appears that the failing companies largely failed to appoint committee members who had the right balance of intermit knowledge of their industries and also extensive business experience.

- On a similar theme, the relationship between board directors, shareholders and management plays a part in the success or failure of a company. At one extreme, the Adelphia Communications and WorldCom boards consisted largely of family members or friends of the company founder. This fact calls into question the independence of the board members of these companies and their ability to partake in a non-bias decision making process.

- All the companies researched remunerated their board members either in cash and or with stock options. The levels of remuneration paid to non-executive directors for their participation in board or committee work was not high in comparison to the earning capacity or even the personal wealth of any of the directors. On this basis alone, it is hard to envisage that the levels of pay they received would have affected any of the directors' decisions. However, as is discussed in Section D7 the levels of other forms of remuneration or benefits received by some directors were high and bore little relationship to their required responsibilities. This type of remuneration can be worth thousands of dollars and could affect the decision making process of boards and their committees and should be monitored closely and be reported by companies.

  A significant part of non-cash remuneration, is the availability of stock options to directors. Of all the companies researched, only Guidant and WorldCom granted non-executive directors share options or the right to take their remuneration in the form of company shares. While in terms of Agency Theory this is a classic method of aligning the interests of directors and the company, it raises the possibility of conflict of interests in the decision making process. It also raises a wider issue as to what is the optimum method to remunerate non-executive directors. In the main, non-executive directors of large corporations are wealthy in their own right. Therefore the remuneration levels offered by the companies researched are insufficient to encourage the directors into improper actions. On the other hand, the relatively low levels of remuneration offered to directors is unlikely to attract the calibre of person that a companies need to lead them. It would appear that more innovative methods of remuneration will be required in future to attract high calibre non-executive directors, which at the same time will have to be fully compliant with best governance practices.

- All the companies chosen for research were selected because they were constantly faced with rapid technological change in all aspects of their businesses. A consequence of this selection criterion is that the companies selected were often the forerunners of their industries, either in the products they produced or the business processes they used. As such, they had not been in existence as separate legal entities in their own right for a long time at the time the research was undertaken, with the exception of Guidant (1954) and Waters (1958), which have been in existence longer than the other companies. The fact that both these companies came out of older established businesses and "inherited" their governance policies and procedures will have helped to ensure that they did not have to institute such procedures from scratch.

The Sarbanes-Oxley Act of 2002, was an attempt to put in place corporate governance practices that would ensure companies in future would be run in accordance with best practices and by the best qualified individuals. However, it would appear that this still has not been achieved with the grand jury indictment being handed down by the US District Court of New York on June 18, 2008 to former Bear Stern mutual fund managers who were involved in the sub prime investments and much work is still required to implement corporate governance practices that will ensure governance practices are in place that will allow companies to be entrepreneurial but at the same time have good corporate governance practices in place.

D1.3 Historical Drivers

Proposition P3

Section C4.3.2 explained the current economic status quo of America in historical terms. To try and summarise the reasons why history took the twists and turns that that led to the present status quo is more complicated. However, Morck and Steir, (2005) have advanced a number of explanations. These explanations are not unique to America, but in applying their explanations to the American situation the following reasons for the uniqueness of the American economy emerges.

America was founded on a set of ideals that were unique at the time and unacceptable to many other countries' governments of the time. This is one reason why the Puritans left Europe to seek a new life in America. Many of those original ideals often referred to as the "Protestant Work Ethic" still exist in business to-day. Thus an ethic that was derived from religious belief has grown into a fundamental part of the American way of life. Growing from these ideals, American families built vast corporate enterprises. The difference between America and much of the rest of the world today is the comparatively short period of time that these families gained and have

relinquished their economic power to multi-shareholder control. While the reasons for this shift in economic power may have been more politically driven than driven by the families themselves, many of the corporations that these families created remain in existence today.

As discussed in Section D1.2 above, the legal framework of any country will affect how the economic life of the country will be organized. The United States inherited its Common Law framework from Britain, which is based very much on the separation of power between the judiciary and the legislature rather than the former being subordinate to the latter. In the case of the United States, this independence of the Courts has been a major contributor to the development and extension of a system where corporate ownership is diverse rather than narrow.

The Puritan work ethic mentioned above has undoubtedly contributed to the enormous wealth in the US and created some of the largest and most powerful corporate enterprises in history. At the same time however, Americans distrust of "big" government, large corporations and their love for the "underdog" has meant that checks and balances have been built into the political and economic institutions of the country. Part of these checks and balances is a belief in the need for strong governance in business and indeed in all walks of life. Thus in response to the statement P3, it can be concluded that history and culture have played a strong part in formulating Americans' attitude towards corporate governance and entrepreneurship.

Proposition P4 and P5:

Propositions P4 and P5 examine the questions whether or not the histories of each individual company and the attitudes of their CEOs have played any part in their own governance structures. In other words have the past actions of companies or their CEOs driven the governance structures that the companies have in place today?

- *Adelphia Communications Corporation.* The Adelphia Communications Corporation was formed by John J. Rigas in 1952. In many ways the Rigas family epitomises the typical American success story. The Rigas family were brought to America by Rigas' father from Greece. John J. Rigas started working before he was a teenager. After serving in the army in the Second World War, he returned home to Pennsylvania where he worked for Sylvania and in 1951 started his first business by buying and running the local cinema. From this modest start, he then entered the TV cable industry, first buying the local town's franchise and then expanding rapidly over the next half century until he controlled a multi-billion dollar business. Throughout his business career, John Rigas ensured that his businesses remained under family control and reflected his roots. He named his cable company "Adelphia", the Greek word for brothers (his

early business partner was his bother) and named a number of his subsidiaries after close family members.

In July 2002, the SEC in New York filed a compliant against the Adelphia Communications Corporation, certain members of the Rigas family and a number of other officers of the Corporation. The complaint claimed that the defendants had failed to disclose over $2.3 billion in bank debt by recording it in unconsolidated subsidiaries, misstated press releases and SEC filings and concealed self-dealing by the Rigas family. The last complaint involved one of the Rigas family's private entities acquiring $59 million of Adelphia securities using Adelphia's own cash resources, Adelphia spending over $26 million for timber rights on property purchased by the Rigases and spending a further $12.8 million for the construction of a golf course on land mostly owned by the Rigases.

• *Global Crossings Limited.* Global Crossing Ltd was started in 1997 by Gary Winnick and three associates through Pacific Capital Group, Winnick's own venture capital group. The son of Jewish Reform parents, Mr. Winnick grew up in Long Island, New York where his father owned a restaurant supply business. He started work as a bond salesman with Burnham and Co. before joining Michael Milken in 1978. Seven years later, he started out in business himself. He invested in a number of unrelated businesses, but by the 1990s was investing in the telecommunications industry and in 1997, while looking for investment opportunities, joined forces with the telecommunications industry to lay fibre optic cable across the Atlantic. In an interview with the Jewish Chronicle of Greater Los Angeles in October 1999, he cited his three rules for success: "Persistence will almost always win over calculation. There is no better asset than persistence. Passion always trumps expertise. Passion drives success. Speed rules. Entrepreneurs are addicted to speed and are fixated on winning."

Like many entrepreneurs of the 1990s, Gary Winnick was well known for his extravagant lifestyle. While there has never been any evidence of personal illegal dealings with corporate funds, he has spent large sums on himself and has given millions of dollars to many charities. Much of this expenditure was financed through the sale of Global Crossing stock.

• *Guidant Corporation/Waters Corporation.* The two oldest companies that are part of this study are Guidant Corporation and Waters Corporation. Both companies were originally subsidiaries of much larger corporations before being "spun out" into separate legal entities. Guidant was originally owned by Eli Lilly Corporation, a Fortune 500 Corporation, which was formed in 1876. Since its formation Eli Lilly has grown into a company with a turnover of $15.6 billion in 2006. In the same year Eli Lilly received two accolades. It was named among the top 500 best managed

companies in the United States by Barron's Magazine and one of the top 100 companies to work for by Fortune. At the same time however, it has also been accused of having a too political agenda which has included being involved with the Bush family and actively lobbying on Capital Hill to protect and promote its own interests.

Waters Corporation was purchased by the Millipore Corporation in 1980, but was spun off as an independent company in 1993. Although only founded in 1954, Millipore has grown rapidly and entered the Standard and Poors list of the top 500 companies in the United States in the mid 1990s. Unlike many other companies of its size Millipore has no record of being politically active or being accused of corporate governance improprieties.

The most serious accusation that can be levied at either Eli Lilly or Millipore, is that Eli Lilly was active in the political arena. However, neither company has had accusations raised against them with regards to corporate governance improprieties. This history of a lack of serious controversy appears to have served both Guidant and Waters Corporations in good stead.

The CEOs of Guidant Corporation and Waters Corporation have similar backgrounds to each other and at the same time very different backgrounds to the CEOs of the other companies under research. Mr. Berthiaume, the CEO of Waters Corp. spent most of his working life with Waters Corp. or its predecessors and has been President, CEO and Chairman of the Board since 1996. Similarly, Ronald Dollens, the CEO of Guidant Corp. has spent much of his working life with Guidant Corp. or its predecessors having joined the company when he was 25 years old. Both men are well regarded in their fields and serve on a number of boards of charitable institutions. However, what sets these two CEOs apart is the lack of news reports headlines about either of them. While their business activities are reported in the press, little news appears about either of them outside this arena.

• *Qwest Corporation.* Philip Anschutz, the founder of Qwest Corporation, is unique amongst the founders of the companies being researched. His grandfather emigrated from Russia and started the Farmers State Bank in Kansas. His father was a ranch owner who eventually went into the oil drilling business. Philip Anschutz followed his father into ranching and the oil business. In the 1970 he acquired over 9 million acres in the Western States with reserves of one billion barrels of oil. He sold a half interest in the oil reserves to Mobil Oil for $500 million in 1982.

In 1984, he entered the railroad business and ten years later he became a Director and Chairman of the Board of Qwest. In 1999, Forbes Magazine compared him to the tycoon J. P. Morgan for

his ability to be successful in a diverse number of industries. However, in the September 2002 issue of Fortune he was named the nation's "greediest executive".

• *WorldCom.* The former CEO of WorldCom is the best known CEO of all the CEOs under discussion. Bernie Ebbers was the son of a travelling salesman. He started his career operating motels in the State of Mississippi, but joined with other investors in 1983 in a company called Long Distance Discount Services Inc. Appointed CEO of the company in 1985, the company quickly grew, acquiring over sixty other telecommunications companies before the company went into bankruptcy in 2002. In early 1999, Bernie Ebbers' estimated worth was $1.4 billion. Apart from his shareholding in WorldCom Bernie Ebbers owned a number of unrelated investments primarily in real estate but he also owned a yacht building and repairing company in Georgia as well as a trucking company and hotels.

A major contributor to Mr. Ebber's downfall was that many of his personal assets were funded by bank loans. The collateral for these loans was in WorldCom stock. However, as the value of the stock fell he received an increasing number of margin calls that he could not meet. The Board of WorldCom, at Mr. Ebber's request, made him a series of loans to prevent him from selling his shares, but eventually he was unable to meet the repayment terms of these loans. For his part in the failure of WorldCom, Mr. Ebbers was sentenced to 25 years imprisonment in July 2005.

The concept of "American Exceptionalism" explained in Section C4.3.2 is one explanation for the dynamism of the American economy, and along with the American attitude towards achieving a balance between the benefits that large corporations bring to the economy and the need to control the potential abuses that these companies can inflict on individuals, the economy and the environment. An example of the dynamism of the American economy is seen in the period of the internet boom years of the late 1990s and the early years of the 21st Century. All the companies under research were major contributors to these boom years, as were the CEOs that led these companies. However, the difference between those companies that were a success and those that failed can be seen in a number of ways. While all the companies under research were in the high technology arena, those that continue to succeed had been in existence for more than a few years before being spun off from larger corporations into independent companies. This fact seems to have given them stability upon which to build. For example, experienced directors, policies and procedures were all in place that meant that the necessary "checks and balances" existed to prevent overt fraud. By comparison, those companies that failed were new companies that actually created new industries and did not have the necessary safeguards in place to prevent the businesses running out of control as they grew rapidly.

To create a new industry where one did not previously exist requires individuals with vision. Adelphia, Global Crossing, Qwest and WorldCom were all led by CEOs with the necessary vision to take their respective companies from start-ups companies to multi-billion dollar enterprises. The CEOs of Guidant and Waters took their companies from being subsidiaries of large corporations to multi-billion dollar corporations in their own right. Whereas the latter companies grew and continue to grow, the former companies grew rapidly and equally rapidly descended into bankruptcy. This author believes that the huge wealth that all the companies created is in no small part due to the American environment that fosters entrepreneurship. However, to some extent, the environment that created the entrepreneurial spirit also encouraged the individuals involved to feel the need to keep growing their companies, whatever the cost. Whether fraudulent activity was more a consequence of personal greed or a belief by the individuals that "the means justifies the end" is not the remit of this paper.

It is difficult to draw precise conclusions on the effect that history has on corporate governance. In the case of the American economy, this author believes that the uniqueness of American history plays a significant part in the country's overall attitude to governance. What this section of the research shows is that companies that are challenged with rapid technological change and led by entrepreneurial leaders do not necessarily fail. However, those companies that either start new industries or radically change the way existing business is transacted are more prone to fail because no one fully understands the new environment that these companies have created and how existing regulations should be applied to this new environment. Therefore strong corporate governance is required cannot be said to protect entrepreneurial companies against failure.

D1.4 Financial Drivers

Proposition P6:

The discussion in Section C4.2.3 is indicative of what is possible for companies to do to optimize their balance sheets and the dangers these actions hold for corporate governance. The question remains - have companies in the industry sectors under research been tempted to follow these practices? There is little evidence of this. In interviews with City managers this was confirmed and two main reasons were advanced. The first is that the companies, by definition, operated in such fast moving environments and not knowing when new investment opportunities would occur retained sufficient cash resources on their balance sheets to be able to take advantage of such opportunities at short notice. The second reason advanced is that, unlike utility companies where corporate results are largely predictable, companies would find it easier to affect the numerator of the ROIC equation rather than the denominator. Fast growth in a fast growing market sector does not require financial manipulation of the type discussed in Section C4.3.3. When companies do

raise debt, it is more than likely that the request will come from fund managers than the corporate managers as has been recently evidenced the financial press (Citywire, 2006).

If the evidence so far shows that the manipulation of debt levels is unlikely to occur, does the statement hold true in all cases? In response to this question, one City manager responded "there are unlimited possibilities for management to manipulate or enhance profit of a company for the benefit of shareholders or themselves". A possible recent example of management benefiting themselves at the expense of the company as a whole, is the as yet unproven accusation against Apple that management benefited from the backdating of stock options (Sunday Times, 2007). A more serious example is the accusation that management mismanage the potential of their companies by their own fear and inertia. Companies are currently generating huge sums of cash, as discussed above, and in normal circumstances should be using this cash for new investment purposes. Instead of making new investments management is using the excess cash flows to make share buy backs. While this will keep corporate profits high and enhance shareholder value in the short term the lack of investment now will mean that in the long term, profits will fall and companies' performance will deteriorate.

Several other reasons have been advanced for this underinvestment in revenue producing assets. Firstly, companies may not need to invest as much as they have in the past. Instead of investing in physical plant and machinery they can "outsource" their investments to India and China where costs are lower, thereby lessening their own risks against long or short-term fluctuations in the economy. An alternative explanation is that companies have set the hurdle rates for new investment projects too high. In the era of Sarbanes-Oxley and the "Credit Crunch", corporate executives are not being encouraged to take risks because in the event of investment decisions being wrong, for whatever reason, there is always the ever present risk of these decisions being scrutinized by the regulatory authorities. A third reason for underinvestment concerns private equity firms. These firms have been major players in the corporate acquisition market. However, where companies usually acquire assets for a long term return, private equity firms make acquisitions with a short term return in mind. Faced with the ever present challenge to deliver good returns on investments, corporate managers have found one quick answer to be share buy backs.

While corporate managers increasingly face the accusation of mismanagement and self profiting, there is little concrete evidence in the companies under investigation that the financing of these companies was structured in a way to cause corporate governance concerns. The fact that companies over extended themselves for what are now regarded as financially dubious investments, and financial institutions showed a willingness to lend money for these investments,

is another issue. If the issue of management malfeasance and financial leverage is considered a real issue then a clear case for its existence must first be made. Bad financial decisions by management do not in themselves mean there are corporate governance issues.

Returning to the original proposition (P6) it is evident that there is a clear relationship between financial issues and the capital structure of corporations. This relationship will drive management's attitude to corporate governance because of such items as debt covenants. However, it cannot be shown that corporate capital structures encourage managements to embrace or flout best corporate governance practices. On the issue of the influence of taxation on corporate governance, this author was unable determine the influence due to the fact that such research requires "real time" research and interaction with the relevant decision makers. This was not possible as this research was not longitudinal in nature and will thus have to be left to a time when such research is possible.

D1.5 Board Composition Drivers

Proposition 7:

Figure 10 shows the Earnings per Share (EPS) of the six companies under research for the period from 1990 to 2005, recognising the fact that a number of the companies had not yet been formed by 1990. The figure appears to only partially confirm the proposition P7. In the early stages of each of the companies' existence, the majority of the companies showed low EPS. However, by 1999 when the internet bubble started to burst there were dramatic declines in the EPS of Adelphia, Global and Qwest. The numbers for WorldCom do not appear to be so dramatic, but this is due to the fact for a number of years they were unable to prepare accurate accounts. The EPS of Guidant and Waters on the other hand continued to improve throughout the period. It is also at this time that the former companies experienced issues with corporate governance. Consequently, from the above review it would appear that in the case of the selected companies the first statement is not entirely confirmed. While Guidant's and Waters' results are in line with the statement, the remaining companies' results are not.

The discrepancy in the companies' results described above can be very much drawn along two lines: industry and the age of the business. In the former case, Guidant and Waters were part of long established industries that had clear guidelines of operation (see Section D1.3). This fact coupled with the fact that both companies had been in existence for a number of decades at the time of this study, appears to have given them stability in their market places. The remaining four companies on the other hand, were members of new, or revitalised industries, where the guidelines of operation were evolving as the companies grew. Consequently, it would appear that it is possible for those companies faced with rapid technological change and led by entrepreneurs

are able to grow quickly, but, those companies that also are evolving in new industries face unique challenges which they are not always able to surmount.

Proposition P8:

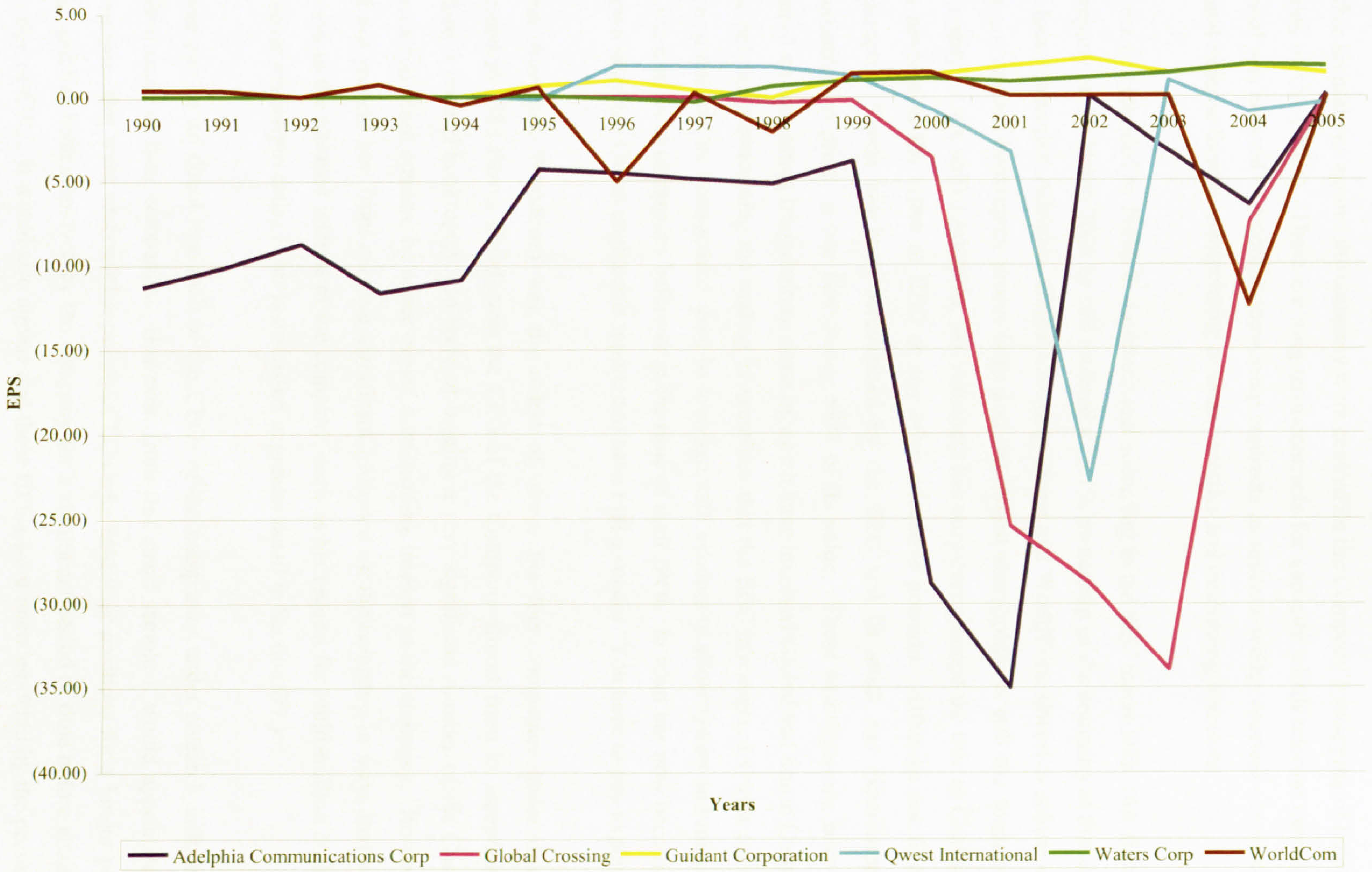
The three decades starting in 1980 have been a period in business that has been characterised by intense interest in individual business leaders who have appeared to transform their companies largely by their own force of character. For example, Mr Steve Jobs has been credited with turning around the fortunes of the Apple Corporation largely due to his understanding of the personal electronics marketplace and his ability in recognising the importance of developing products that are both functional and elegant in design.

In reviewing the roles of board appointed CEOs of the companies under research, a number of factors differentiate the companies. Guidant and Waters are different from the remaining companies in two ways. Firstly, from 1996 to 2005 both companies retained the same CEOs throughout the period, although the CEO of Guidant resigned in 2005. Adelphia's, Global Crossing's, Qwest's and WorldCom's history of appointing and retaining CEOs is more varied. Adelphia had two CEOs during the period while Global Crossing had a different CEO every year for a number of years. However, the more important differentiating feature of the companies is the part played by their founding families. In the case of Guidant and Waters there were no such families at the start of the period under review, as both companies were subsidiaries of larger corporations and as such there were no majority shareholdings controlled by families.

With respect to Adelphia, Global Crossing, Qwest and WorldCom, these companies were controlled or dominated by individuals or families and therefore the distinction between executive and non-executive roles in the companies were, at best, blurred. Adelphia was founded and controlled by the Rigas family. John Rigas, who founded the company, was Chairman, President and CEO while his sons Michael, Timothy and John were respectively: EVP of Operations, CFO and Treasurer and EVP of Strategic Planning. In addition to controlling the top positions in the company, the family owned the majority of the share capital. In order to retain this ownership, the family resorted to fraudulent measures. In a Complaint filed with the United States New York District Court dated July 24th, 2002, the SEC accused the Rigas family of extensive fraudulent stock transactions. As a result of these and other charges, John Rigas was convicted in the summer of 2004 and on June 20th, 2005, was sentenced to 15 years in federal prison.

Global Crossing was similarly founded and controlled by one man – Gary Winnick. Mr. Winnick retained control of the company from its foundation until it went bankrupt and was sold to

Figure 10: Earnings per Share (EPS)



Singapore Technologies Telemedia Pte Ltd (STT). While there were accusations of malfeasance by executives, no charges of improper share dealings were ever made against Mr. Winnick. Rather accusations against the company were centred on the Company's swapping of Indefeasible Rights of Use (IRUs). These are long term contracts for capacity which telecom carriers swap. Global was accused of recording new swap contracts as revenue while reporting old contracts as capital expense thereby manipulating company metrics and misleading investors.

Qwest was founded by Philip F. Anschutz and according to the SEC report DEF 14A filed by the Company on 30 March 2006 he still retained a 16.1% ownership of the company at that date. Of the four companies, Adelphia, Global Crossing, Qwest and WorldCom, Qwest is unique in that it has not entered bankruptcy proceedings and the largest shareholder is still the founder of the Company. Also, unlike Adelphia, Mr. Anschutz has only ever retained the title of Chairman and has never held the office of CEO or any other executive position. Although not forced into bankruptcy, Qwest has been investigated by the SEC and its stock has experienced huge fluctuations in price, at one time losing 98% of its value. These investigations have largely centred on accounting irregularities, some of which have involved Global and Enron Corporation. The only area concerning the trading of securities that the SEC investigated Qwest for was the accusations that its management used its leverage with vendors to allow Qwest and management to invest in these companies before or at the time of their IPOs. In what has now become a well known saying, a Qwest engineer is reported to have told a vendor "You have to pay to play".

After Adelphia, WorldCom was the oldest of above the four companies under discussion. Formed in 1983 Bernie Ebbers was the CEO of the Company almost from its inception to just before it entered bankruptcy. In spite of owning a very significant number of the Company's shares and share options, he never owned a controlling interest in the company. However, this did not prevent him from exerting significant influence on the company in ways that were not always in the ultimate interest of the company, such as his request for multi-million dollar loans to cover his margin calls. (This is discussed in greater detail in Section D7.)

There can be no doubt that each of the CEOs of the companies under research influenced the performance of their companies. However, from this small sample it would appear that those companies that were successful appointed CEOs who held their positions for a longer period of time and had been employed by the company for a significant period of time before attaining the position of CEO. It would also appear that these CEOs were unencumbered by the presence of a founding family or individual who retained a significant share holding in the company and were therefore able to affect the direction of the company. While it may be possible to arrive at some conclusions as to why CEOs and companies are likely to be successful, it is more difficult to

reach conclusions as to why CEOs and their companies may fail. However, this sample indicates that CEOs with too much authority or influence are detrimental to the health of companies and the lack of strong corporate governance will inevitably lead to failure. In the case of the failed companies under research, the CEOs actions may be partially explained by the fact that these companies were operating in a new economic environment (as discussed above) under which CEOs had not previously operated and therefore previously accepted methods of operation were not applicable. While this explanation may be an acceptable explanation for some of the CEO,s actions, this still cannot be used as an excuse for fraudulent activities.

The latter part of proposition P8 raises the question as to whether the CEOs were adequately trained and whether the board appointed the right men for the jobs. The fact that the majority of the companies under research were entrepreneurial by nature to a certain extent invalidates these questions as these companies were started and largely owned by the entrepreneurs not by trained managers. The more relevant question is – should entrepreneurs acknowledge their own strengths and weaknesses and know when to employ professional managers in their place? The fact that none of the companies under research that were started and managed during the period succeeded, would indicate that there is a time and place for entrepreneurs and professional managers in the life of a company and the skill of an entrepreneur must be to know when to hand over the running of his company to third parties.

Proposition P9:

With every action and decision of directors now being increasingly scrutinized by shareholders, the task of attracting and retaining directors on boards is a challenge to all companies. Historically, board members were asked to join a board by CEOs and then the decision was "rubber stamped" at the company's next annual general meeting. Alternatively, directors tended to be appointed who held senior executive positions within the company. This meant that the composition of boards often remained the same for many years. However, shareholders are becoming increasingly vocal in the decision making process on the appointment of directors, and changes in corporate governance regulations has meant that directors are now more likely to be independent non-executive directors rather than executive directors.

The composition of the boards of the companies under review, represents the full spectrum of the type of boards that companies can have. Guidant and Waters had consistency in their boards in that Guidant had only sixteen different individuals serving as board members at some time in the period from 1996 to 2005 inclusive. Waters, over the same period, only had ten different individuals serving as board members. This relative stability of the Guidant and Waters' boards is to a certain extent mirrored in the board composition of Adelphia. While the Rigas family

controlled the company the board's composition was stable. Similarly the board's composition after its bankruptcy was stable. However, the one question that differentiates the boards of Guidant and Waters and Adelphia concerns the independence of the Adelphia board while the company was controlled by the Rigases.

The boards of Global Crossing, Qwest and WorldCom have a different history from those companies above. Global Crossing had over 70 board directors from 1996 to 2005 and Qwest and WorldCom had 28 and 32 respectively. In the case of WorldCom it appears that many directors changed as the company acquired other companies and grew very rapidly. Whatever the reasons for companies having a rapid turnover of directors, the question is raised as to how this lack of consistency affects decision making within a company. The consistency experienced in the tenure of the CEO and directors of Guidant and Waters appears to have been beneficial to both companies. Such consistency allows directors to obtain in depth knowledge of the company, develop strategies and execute those strategies. The frequent changing of board members on the other hand, means that there is a danger that strategies developed by one set of directors will not be given sufficient time to be executed before it is changed by another set of directors.

In addition to the consistency of board members, there is the issue of the actual composition of boards. Historically, companies appeared to prefer to appoint executive directors who had served many years with the company and to a certain extent, the appointment to the board was viewed as a reward for long service to a company. Today, boards are encouraged to appoint non-executive directors as their diverse experience is seen as preferential to in depth company experience. Both the boards of Guidant and Waters originally had strong representation of their previous owners before they were floated off as independent companies. In the case of Guidant ex-employees of Eli Lilly served on its board throughout the period and on Waters' board, representatives of both AEA Investors LLC and Bain Capital LLC., again the owners of the company before its flotation, remained on the board up to and including 2005. Apart from the concern about the lack of diverse experience, the main concern of this situation is that as long as the former owners of the companies retained some ownership in the companies, these directors may be unduly influenced by the wishes of these owners rather than the wishes of the remaining shareholders.

The composition of the board of Adelphia has been discussed above. Similarly the fact that the ownership of Global Crossing and Qwest were largely in the hands of two families meant that the boards were similarly controlled by those families. The situation in WorldCom is different in that the ownership of the company was not in the hands of an individual or a family. However, as discussed above, the influence of one of the original owners of the company was so great that the board often appeared to act at his behest rather than in the interest of the majority of shareholders.

One of the propositions (P9a) driving this section of this research paper was that those companies whose composition tended to be static over time were less likely to be successful over the long run. This research indicates the opposite to be true. Boards that have consistency in their membership have shown steady growth and increasing shareholder value. Possible reasons for this have been discussed above.

A second hypothesis (P9b) made was that those boards largely comprising of executive directors were also less likely to be successful. The results of this research are mixed so it is difficult to come to firm conclusions. Certainly the case of Adelphia, where executive directors dominated the board, supports this hypothesis. But in the case of Guidant and Waters, where many of the directors were employees of the companies that originally owned these two companies were on the board indicates the opposite to be true. However, one of the reasons for the success of Guidant and Waters may not be so much due to whether or not executive directors were on the board but more due to the fact that the directors/board members were not significant shareholders in the companies. If this is the reason, then there are significant corporate governance implications which are not adequately addressed in current legislation.

This section has looked at the part played by boards of directors in the success of the companies under research. Boards of directors are crucial to the success or failure of any company. However, boards in certain circumstances with certain traits have shown themselves to be more successful at running companies than other boards. Stable boards of older companies in more stable industries that appoint well qualified independent CEOs will tend to be more successful than boards of companies in fast moving, new industries where directors are significant shareholders. However, as indicated above there is no reason why these latter companies should not be as successful as the former type of company if there are strong corporate governance measures in place.

D1.6 Stock Ownership Drivers

Proposition P10:

Research has shown that block holding shareholders have the incentive and ability to influence boards of directors to act in the best interest of shareholders (Dalton *et al.*, 2003). However, there is also the danger that such shareholders will place their own interests ahead of all other shareholders, encouraging, for example, companies into unnecessary mergers, acquisitions or divestures (Demsetz and Lehn, 1985). In the 1980s, the phenomenon of "greenmail" occurred where individuals such as Boone T. Pickens were accused of blackmailing companies into certain courses of action because they owned significant stakes in those companies.

In Section D1.5 the effect of board composition on the performance of companies was discussed. From this discussion it was evident that in a number of the companies the ownership and management of the companies were closely linked. In the case of Adelphia, Global Crossing and Qwest the founders of these companies met the conditions of the term "blockholder equity holders" as described by Wright and Ferris (1996). This section will research further the importance of blockholders and in general the part played by all shareholders in the running and control of companies.

Of all the companies under research, Adelphia is an excellent and rare example of a company where a small number of shareholders used fraudulent practices to enrich themselves at the expense of the majority of shareholders. While the same charge can be levelled at a number of the shareholders of WorldCom the scale of the fraud that occurred at Adelphia is unique. It is important to point out that the fraud was carried out by the founders, directors and majority shareholders of the Company who were all the same people. While this concentration of power in the hands of such a small number of people is rare, the example of Adelphia shows that fraud on this scale can occur. The case of Adelphia is discussed in more detail below.

In July 2002 the US Department of Justice issued a complaint against John J. Rigas, Timothy J. Rigas, Michael J. Rigas, James R. Brown and Michael C. Mulcahey for Conspiracy to Commit Securities Fraud, Wire Fraud and Bank Fraud. The complaint was issued as a result of a Department of Justice investigation, following the discovery of certain accounting irregularities in the Company earlier in the year. The complaint is sixty-eight pages long and covers in detail the fraudulent acts that the defendants were accused of. These range from schemes to defraud financial institutions to the use of three company owned aircraft for private use without reimbursing the company. This section of the paper, however, will only look at those acts that were supposedly committed by the Rigases as a result of them being shareholders of the company and in particular their share dealings that enabled them to maintain control over the company.

To better understand the case against the Rigas, it is necessary to review the Rigas' family's control of Adelphia and the extent of the assets owned by the family. The Rigas family exercised complete control over Adelphia in a number of ways. The share structure of the company was organized so that the family controlled the majority of the shareholder votes. For example, in December 2001 although the family only owned about 15% of the Class A shares of the Company, they owned 100% of the Class B shares. The significance of this is that, while Class A shares carried one vote per share, the Class B shares carried 10 votes per share. In addition, under the Certificate of Incorporation, Class A shares only had the right to elect one of Adelphia's nine board directors whereas the owners of Class B shares had the right to elect eight of the board

directors. Up to May 2002, the Rigas family exercised this right by electing five members of the Rigas family, including the son-in-law of John Rigas, to the board. Also, as discussed in Section D1.5, the members of the immediate family occupied the top executive positions in the company.

Below is an extract from Adelphia's Form 10-K/A filed with the SEC on June 29, 1999. It clearly shows the extent of the Rigas family control over Adelphia through direct share ownership and through various investment trusts controlled by the Rigas family.

Name	Shares of Class A Common Stock	Percent of Class A Common Stock	Shares of Class B Common Stock	Percent of Class B Common Stock
John J. Rigas			5,883,004	54.3%
Michael J. Rigas			1,915,970	17.7%
Timothy J. Rigas			1,915,970	17.7%
James P. Rigas			1,151,634	10.6%
Daniel R. Milliard			1,000	
Perry S. Patterson			1,250	
Pete J. Metros			100	
Dennis P. Coyle			1,000	
All executive officers and directors as a group (eight persons)			10,572,731	97.6%
Ellen K. Rigas			261,762	2.4%
Doris Holdings, L.P.	2,398,151	4.8%		
Highland Holdings II	4,000,000	7.9%		
Highland Communications, LLC	8,556,268	17.0%		
Highland Preferred Communications, L.L.C	9,433,962	15.8%		
Highland Holdings				

The holders of Class B common stock are deemed to be beneficial owners of an equal number of shares of Class A common stock because Class B common stock is convertible into Class A common stock on a one-to-one basis. In addition, the following persons own or have the power to direct the voting of shares of Class A common stock in the following amounts: John J. Rigas, 431,800 shares - 71,700 shares directly and 360,100 shares through Doris Holdings, L.P. ("Doris"); Michael J. Rigas, 193,500 shares - 200 shares directly and 193,300 shares through Doris; Timothy J. Rigas, 193,500 shares - 200 shares directly and 193,300 shares through Doris; James P. Rigas, 193,300 shares through Doris. John J. Rigas shares voting power with his spouse with respect to 106,300 of such shares held through Doris. Each of John J. Rigas, Michael J. Rigas, Timothy J. Rigas and James P. Rigas also shares voting and dispositive power with respect to the 17,990,230 shares of Class A common beneficially owned by Highland Holdings and subsidiaries ("Highland"), the 4,000,000 shares of Class A common held by Highland Holdings II ("Highland II") and the other 1,458,151 shares of Class A common held by Doris.
http://sec.edgar-online.com/1999/06/29/07/0000796486-99-000026/Section8.asp

In addition to controlling the Adelphia company the Rigas family controlled two other groups of assets. These have been collectively termed the Rigas Family Entities or "RFEs" and fall into two categories: the Cable RFEs and the Non-Cable RFEs. The former category consisted of

certain cable television companies that were managed by Adelphia in return for a management fee of 5% of the companies' revenues. The latter category consisted of a furniture and interior design company, a car dealership and a number of limited liability partnerships whose sole purpose was to hold securities. Although these entities were solely owned by the Rigas family, they were managed by Adelphia employees and their funds were regularly co-mingled with those of Adelphia.

The fundamental cause for the bankruptcy of Adelphia was its rapid expansion through leveraged acquisitions. In 1999, the number of the company's cable subscribers increased from approximately 2.2 million to approximately 5.0 million. The company achieved this growth through the acquisition of three competitors: Century Communications Corporation (Century), Frontier Vision Holdings, L.P. (Frontier) and Harron Communications Corporation (Harron). The total acquisition price for these was approximately $9.859 billion. This consideration was paid for through a combination of cash, debt and the issuance of Class A common stock. In 1999 Adelphia's total reported liabilities increased from $3.53 billion to $ 9.29 billion and in 2000 it increased to $12.6 billion.

A part of the purchase price for the acquisition of Century, Frontier and Harron was in the form of Class A common stock. With each issuance of additional Class A stock, the control of Adelphia by the Rigas' was threatened. In order to prevent any dilution of control, from 1998 to 2002 with each issuance of Class A common stock, a "Rigas Direct Placement" was conducted. This entailed the issuance of Class B common stock directly to the Rigas family. As the Class B common stock carried the majority of the voting rights in the Company the control of the Company was retained by the family.

With respect to the Rigas Direct Placement, a typical disclosure that Adelphia made in its audited financial statements and annual report for one of these transactions was as follows: "On January 21, 2000, Adelphia closed the previously direct placement of 5,901,522 shares of Adelphia Class B common stock with Highland, L. P., a limited partnership owned by the Rigas family. Adelphia used a portion of the proceeds of approximately $375,000 from this direct placement to repay borrowings under revolving credit facilities of its subsidiaries, which may be re-borrowed and used for general corporate purposes".

At the time of these placements, what many investors failed to ask was how Highland L. P. and the Rigas family paid for these large placements of Class B shares. The answer was that the family pledged approximately 23,200,000 shares of Adelphia stock as collateral for loans, and used the proceeds of such loans to pay for the securities. As is normal in these cases, the terms of

the loans required the Rigas family to pay interest and margin calls. In the event that the market price of Adelphia fell and the family could not make the margin calls, they would have to sell the stock to raise the cash to reduce the balance on the loans. In July 2000 this began to occur. Between this month and May 2002 the price of the stock fell from approximately $40.00 a share to approximately $6.00 per share. In the same period the Bank of America, Goldman Sachs, Saloman Smith Barney and Deutsche Bank made margin calls on Rigas family owned entities of over $252.2 million. In order to avoid selling their Adelphia stock the family wire transferred the cash to the above banks from the bank accounts of the Company.

As well as using the financial resources of Adelphia to pay off their personal loans, the Rigas' failed to reimburse the Company, thereby substantially increasing the liabilities of the Company under its own borrowing arrangements. In addition, neither non-family members of the board were informed about the use of these corporate funds nor was the public as a whole informed. As the financial health of the family was so intertwined with that of the Company the public should have been informed of the true nature of these transactions. Indeed, in a meeting with Moody's in May 2002, Timothy Rigas made statements that left the impression that the margin calls had been paid in full and the liabilities of the Company had not been increased.

The extent of the alleged fraud by the Rigas family is an example of the potential power available to shareholders to default companies that ultimately lead to their failure. The circumstances of this situation are unique in that the controlling shareholders of the Company were also the major executive officers of the Company. However, the alleged fraud did occur and the family was able to perpetrate it even when the investment community raised concerns about the financial health of the Company (Higgins, 2002). Is this type of fraud unique to companies facing rapid technological changes? Fraud is a potential feature in all companies and industries but many of the major frauds have been committed in such companies. The exact reason for this requires further research but an important reason may be that in any industry facing rapid change it is hard for the commentators and regulators of the industry to understand the implications of the changes occurring in the industry at any time. However, this should not be seen as an excuse not to attempt to enforce accepted corporate governance standards in those industries that are changing faster than the majority of industry.

If the extent of the relationship between share ownership and the day to day control of the company was unusual in Adelphia, it is important to ask if it was also unique. In the sample of companies selected, it was not. In Guidant, Waters and WorldCom there were no dominant or majority shareholders. However, the founders of Global Crossing and Qwest maintained large equity stakes in these companies but they were not majority share holdings. In addition, there is

no material evidence that these owners perpetrated this kind of fraud anywhere close to the extent of the Rigas family. Apart from the large shareholdings retained by a number of the founding families, there were no other organizations that consistently retained significant shareholdings in these companies. In reviewing the 10-K reports of each of these companies however, two shareholders names do appear regularly in a number of the companies reports: FMR Corporation and the Slim family.

FMR Corporation, otherwise known as Fidelity and Management Corporation, had shareholdings at one time or another in Guidant, Qwest, Waters and WorldCom. This fact should not be unexpected as the company is a "global financial giant". Started in the 1930s, it had by the 1990s grown to the largest mutual fund company in the world and the top provider of individual retirement plans in the United States. The Company had more than 15 million customers, more than $765.2 billion in assets under management, and more than 280 funds under its administration. It would have been unusual for an investment company of this size not to have been invested in one of the fastest growing sectors of the economy.

The Slim family is headed by Carlos Slim Helu who, according to Forbes Magazine, is the third richest man in the world with a fortune estimated at $49 billion. The Slim family are major investors in the telecoms industry in Mexico and throughout South America, but have also made substantial investments in the US telecoms market. In both Global Crossing and MCI (formerly WorldCom) he has had shareholdings of 11% and 13% respectively. His shareholding in MCI made him at one time the largest shareholder in the Company. On April 25th, 2005, the Wall Street Journal announced that he had sold his stake to Verizon Communications. It is interesting to note that both these investments were made in 2003, a couple of years after the telecoms crash.

In spite on their substantial holdings in the above companies, there is no evidence that either FMR or the Slim family played any active part in the management of the companies. Instead the shares were purchased solely for investment purposes. This is clear evidence therefore that, just because companies and families make substantial investments, it should not be assumed to be a foregone conclusion that these investments are made with fraudulent intentions in mind.

If FMR and the Slim family did not exercise any material influence on the running of the companies that they invested in this does not mean that shareholders will always be silent about the way the companies they invest in are managed. In March 2007, Nelson Peltz announced that he had purchased a 3% stake in confectionary and drinks company Cadbury Schweppes. Mr. Peltz, whose fortune was built on the back of the junk bond market of the 1980s, has a reputation of being an "activist investor" – a person who builds up a stake in a company and is unafraid to

actively engage with the company's management. Within days of his acquiring the stake, Mr. Peltz was asking the Cadbury's management to spin off or sell its American drinks operation. This is in fact what Cadburys later announced it intended to do. However, it appears that Cadburys had been planning to do this for some time.

Activist investors are not limited to individuals or families. Recently, private equity firms, venture capitalist companies and pension funds have started to make their presence felt on the world stock markets. With their access to large amounts of funding they are able to acquire significant stakeholdings in companies and, similar to large individual investors, this gives them access to companies' management and they therefore have the opportunity to "advise" these managements as they see fit.

A number of examples of private equity funds and pension funds "suggesting" changes in the way companies operate, occurred in the latter part of 2006 and early part of 2007. On December 15th 2006, the Daily Telegraph newspaper column "Citywire" reported that Richard Buxton, Head of UK Equities at Schroders, was calling for certain companies to take on more debt in order to invest in their businesses and boost revenues. He is quoted as citing Reuters as a good example of a company that had cut costs heavily in recent years and then borrowed to invest in the launching of new services.

In February 2007 it was reported that that the Local Authority Pension Fund Forum, a group of UK public sector pension funds with over £70 billion of assets under their management was pressing BP to improve its safety record after an explosion at one of its refineries in Texas City, Texas had killed 15 workers. It threatened to attempt to freeze any payout to the retiring CEO Lord Browne stating that BP "must make improvements to remuneration policy, due diligence processes and internal monitoring to avoid further damaging safety failures" (Hotton, 2007).

In March 2007, Barclays Bank of the UK announced that it had entered negotiations to acquire the Dutch Bank ABN Amro. Such a merger would create one of the largest financial institutions in the world. ABN Amro had been under pressure from its shareholders to improve its performance, be sold or be broken up for a number of years. These calls were led by The Children's Investment Trust, a hedge fund owning approximately 1% of the bank, and it is thought that these calls are one reason why the bank entered into merger negotiations.

This section has looked at the important part that shareholders can play in the exercising of control, corporate governance and ultimately the success or failure of a company. The section has primarily dealt with the role of blockholders, but examples of even relatively small stockholders

influencing management decisions have been shown to exist. The companies that have been researched have all been led by entrepreneurial individuals which is one reason why at certain times in their histories the companies have all been successful. However, for companies to remain successful over a relatively long period of time requires more than entrepreneurial leadership. It requires a leadership structure that is able to foster entrepreneurship as well as stability.

While this research has shown that shareholders who are not part of management can influence management decisions, this is not a common occurrence unless the shareholders have real concerns over the direction of the company. It is in those situations where shareholders are management and concerns over the performance of the company are expressed, that a real problem exists. If management owns a majority of a company, an argument could be put forward that the shareholders/management have a right to run a company as they see fit. However, this is only the case if the management own 100% of the company. This is rarely the case, so the investments of minority shareholders have equal importance as the interests of the majority of the shareholders. In addition, in those cases where there are no minority shareholders the interests of other stake holders require consideration. These stakeholders range from employees, customers, suppliers and even the central government, which may be losing tax revenue because companies are not run at their maximum efficiency.

The issue of the rights and roles of shareholders is central to any economy, but in most cases equilibrium is reached. In those cases where equilibrium is not reached and fraud occurs, there is a clear lack of corporate governance or a lack of the enforcement of governance regulations by shareholders and their representatives, the board of directors. This research has indicated that strong corporate governance is needed to prevent majority shareholders, who are also management, from participating in fraud that ultimately benefits themselves at the expense of the minority shareholders.

D1.7 Executive Remuneration Drivers

Propositions P11 and P12.

One of the most striking aspects of the companies under research is the size of executives' remuneration packages. The overall average salary of the CEO of the six companies in 1997 was $592K, rising to $854K in 2000 and then rising again to $1,069K in 2004. However, the most significant numbers are to be found in the awarding of stock options. Because options are not necessarily awarded in every company on an annual basis, but only when considered necessary by Compensation Committees, it is hard to trend this part of corporate compensation packages. However, an indication of the value of stock options can be seen in the following examples.

Between 1997 and 2004 the CEOs of Qwest International were awarded over 37 million stock options and the next four highest paid executives received just under 22 million stock options. An indication of the potential value of these options is as follows. In June 28, 2001 the share price of Qwest was $31.87. The exercise price of the shares granted to the CEO in 2001 was $16.81. If the CEO had been permitted to exercise all 7.25 million options granted to him in 2001 he would have made a gross profit of $109,185,000. However, it must be stressed that this is a theoretical argument, as a year later the Qwest stock price was $2.81, meaning that the exercise price was "under water". In other words, the stock price was less that the exercise price.

Another potential profitable form of remuneration for senior executives is the Long Term Incentive Plans. For example, in 1996 the CEO of Qwest International was granted 300,000 growth shares under the Growth Share Plan with a five year performance cycle commencing on January 1, 1997. In 2001 the Company paid out to the CEO and his family $24,374,091. This amount represented the amount paid to the CEO for the remaining portion of his growth shares that vested in 2001.

Even when executives lose their jobs they can profit handsomely from this occurrence. Again, this example is drawn from the annual financial statements of the company filed with the SEC. In 2002, the CEO of Qwest was paid $12,233,288 as a severance payment, although this payment was later challenged in the Court of Chancery in the State of Delaware on January 23rd 2003, as being an improper payment.

Similar examples of corporate largeness can be found in the other companies in the sample of companies under research. In Global Crossing Ltd, the salaries paid to the CEO and the other four most highly compensated executive officers are not beyond those expected in a company of this size. However between 1997 and 2004, the CEOs in office between these two dates received bonuses totalling in excess of $27.8 million. The largest single bonus of $10 million was paid in 1999 to the new incoming CEO as a signing bonus with an additional $1 million being paid as an annual bonus.

In 2002 and 2001 respectively, the then CEO of Global also received "Other Annual Compensation" of $14,834,381 and $6,910,168. The major component of both these payments was loan forgiveness in the amounts of $10 million and $5 million respectively. With respect to stock options, the CEO in 2003 received 325,000 options at an option price of $10.16. As at the 10th of December 2003, the closing price of the shares was $35 per share giving, a value to these options of $9,311,250 and a potential profit of over $6 million.

When comparing executives' remuneration in the selected companies, there is a distinct difference in the levels of total remuneration paid by the successful companies and the less successful companies. Between 1997 and 2004 the salary of the CEO of Guidant and Waters averaged $550K compared to an average salary of $1,047K found in the failing companies. Turning to bonus payments and stock option awards, Guidant and Waters paid or awarded their CEOs on average $563K in bonuses and 153,834 options respectively between 1997 and 2004 while the failing companies paid or awarded their CEOs on average $3,262K in bonuses and 2,770,127 options respectively during the same period. These differences in the sizes of the average compensation packages of the two sets of companies are clear. Later in this paper, reasons for these differences are advanced.

The data shown above has largely been gathered from the annual accounts of each company that is on public record. It must be assumed, therefore, that the remuneration paid to the executives was awarded in accordance with the bye-laws of each company and in accordance with federal and state laws as well in compliance with the appropriate governing bodies such as the SEC where appropriate. However, as a result of government and shareholder actions, further information has come to light that shows that audited financial accounts do not always contain all the information that shareholders should be in possession of when evaluating the performance of their shareholdings. Two examples of companies where investigators found additional information that was not disclosed to shareholders are Adelphia Communications Corporation and WorldCom Inc. Described below is the part that executive remuneration, or the founders interpretation of "executive remuneration" played in the ultimate bankruptcy of each company.

Adelphia Communications Corp. is the fifth largest cable network company in the USA. It was founded in 1952 by John Rigas, but was not incorporated under the Adelphia name until 1972. By 1998 it had passed the two million customer mark, entered the telecommunications sector and started to grow rapidly. However in 2002, following accusations of financial wrong doing by the founding family, the company entered bankruptcy proceedings.

Throughout its existence, until its bankruptcy, the Rigas family controlled the voting stock of Adelphia. In spite of the Company's size, the family did not receive excessive amounts of remuneration in the form of salary and bonuses. However, because of their controlling interest in the Company, the family was able remunerate itself in less conventional ways. A number of these ways were listed by the SEC (2002) in its bankruptcy petition. In their complaint, the SEC charged that Adelphia, at the direction of the Rigas family "(1) fraudently excluded billions of dollars in liabilities from its consolidated financial statements by hiding them in off balance sheet affiliate; (2) falsified operations statistics and inflated Adelphia's earnings to meet Wall Street's

expectations and (3) concealed rampant self dealing by the Rigas family, including the undisclosed use of corporate funds for Rigas family stock purchases and the acquisition of luxury condominiums in New York and elsewhere".

In the first charge above, one example of the fraud was that the Company understated its consolidated liabilities by up to $2.3 billion. This was done by the Company excluding from its balance sheet credit facilities of which it was a co-borrower with various privately owned Rigas entities. Under the terms of these agreements, each borrower could borrow up to the entire amount of the available credit, but each borrower was also jointly and severally liable for the entire amount of the debt.

In the second charge, Adelphia was accused of misrepresenting "its performance in three areas that are important in the metrics financial analysts use to evaluate cable companies: (a) the number of its basic subscribers, (b) the percentage of its cable plant "rebuild," or upgrade, and (c) its earnings, including its net income and quarterly EBITDA." Many of these misrepresentations were clearly fraudulent and perpetrated on the instructions of the Rigas family. For example, accounting personnel were instructed to record fictitious management fees due from Rigas private entities to Adelphia. In another instance agreements were entered into with suppliers to record as income fake marketing and support payments.

The final charge stems from a number of transactions that the Rigas family initiated and profited from at the expense of the Adelphia shareholders. For example, between October 1999 and February 2001, a private entity of the Rigas' borrowed $59 million from Adelphia to purchase Adelphia stock. Although the purchase was disclosed to shareholders, the disclosure failed to mention the source of the funds, stating instead that the funds came from the private financial resources of the family.

A further example of corporate funds being used by the Rigas family for their own benefit occurred in February 2000, when the Rigases purchased 3,655 acres of land in Pennsylvania for just under $500,000 while the timber on the land was purchased by Adelphia for $26.5 million. The purchase agreements stated that the ownership of the timber would revert to the owner of the land at the earlier of twenty years or if the Rigases percentage of stock owned in Adelphia fell below 50%. Neither the transaction nor the terms of the transaction were disclosed to the public.

Finally, the Company spent over $12.8 million on the construction of a golf course on land owned by the Rigases. This fact was never disclosed to the shareholders of Adelphia. In total, it is

estimated that the Rigases enriched themselves by at least $300 million at the expense of the Adelphia shareholders (Rashkover, 2002).

While the Rigas family enriched themselves in less conventional ways, the founder of WorldCom Inc. found more conventional ways to enrich himself. WorldCom was originally incorporated as the Long Distance Discount Services, Inc. on October 12th 1983, at a meeting in Hattisburg, Mississippi. At the first meeting of the company Bernie Ebbers, the future CEO, was allotted 145 shares out of the 1,000 shares of issued capital giving him 14.5% ownership in the company. From this inauspicious start, the company grew rapidly largely through "opportunistic and rapid acquisitions of other companies", which totalled over 60 in 15 years. The fact that the company grew rapidly and kept changing its strategic directions made it hard for investors to benchmark the performance of the company. This fact may have contributed to the rapid growth of the company's stock price, which in turn allowed it to use stock rather than cash as its principal currency in its acquisition spree. By June 30th 1999, the stock price had reached $96.766 and Forbes estimated Mr Ebbers to be worth $1.7 billion. However, by June 24th 2002, WorldCom stock was worth less than $1 and on July 21st 2002, the Company filed for bankruptcy. At that time it was the largest bankruptcy in the world.

The initial causes of WorldCom's downfall can in all probability, be blamed on two factors: the general decline in the telecommunications sector share price in early 2000 and the failure of the proposed WorldCom-Sprint merger that was opposed by both the US Department of Justice and the European Union. Following these two events, the fortunes of WorldCom declined rapidly. The slowing of revenue growth, the burden of debt (by mid 2001 it had reached over $30 billion), the discovery of accounting irregularities and the personal financial difficulties of Mr. Ebbers all contributed to the collapse of WorldCom.

The exact part played by executive remuneration in the decline of WorldCom is difficult to pinpoint. However, two factors need to be assessed: the size of the directors and executives remuneration packages and how these packages were awarded. In the case of non-directors, from 1998 to 2002, directors were paid $35,000 per annum plus $1,000 per meeting and expenses. From May 1999, directors were allowed to receive their fees in WorldCom stock in addition to their annual grant of options. None of these payments would appear too out of line with good corporate governance practice. However, this is not the case with the payments made to executive directors.

The First Interim Report of Dick Thornburgh, the Bankruptcy Court Examiner, published in November 2002 stated that "a culture of greed may be said to have permeated top management at

WorldCom" and "the compensation and benefits received by members of WorldCom's top management were extremely generous" (pp. 67). Between 1999 and 2001, Mr. Ebbers received more than $77 million in total compensation, $56.6 million of which was in the form of stock options. When Mr. Ebbers resigned from WorldCom in 2002, he was awarded a severance package of $1.5 million per year for life, life time medical and life insurance, life time use of the corporate jet and the conversion of loans from the company into 5 year non-callable term notes.

It is the loans from the company that caused the greatest concern for the Bankruptcy Examiner. It appears that as Mr. Ebbers' remuneration packages grew and in the 1990s he used part of these proceeds to purchase non-related WorldCom assets. In particular, he invested in land, cattle, timber and a boat building business. However, Mr. Ebbers required extensive loan facilities to complete these purchases and rather than exercise his stock options to raise the necessary cash he pledged his WorldCom shares as collateral. While the share price of these shares grew, the banks were happy to accept the shares as collateral. However, once the share price began to fall the banks began to make margin calls on these loans. Rather than raise the necessary cash to meet these calls Mr Ebbers approached the Compensation Committee for loans. The Committee agreed to these loans as Mr Ebbers argued that if he, as the CEO, was forced to sell his shares, this would unsettle the market. The Compensation Committee agreed to Mr Ebber's request. In 2000, these loans amounted to $76,844,000 but by 2002 had risen to $400,603,860.

WorldCom's financial largesse extended beyond Mr. Ebbers. In May 2000, as WorldCom's stock price began to fall and the company was under pressure to improve its results, the Company authorised a retention bonus program for 400 of its executives. The cost of this program was over $400 million in cash and stock options and was calculated to equal three times the previous year's total compensation of each executive. Included in the program were Mr. Ebbers, who was eligible to receive $30 million, and Mr. Sullivan, the CFO. Both executives chose to forego the stock option part of their bonuses and take the whole bonus in cash.

A further example of the Company's generosity, was in its dealings with Mr. Kellet, the Compensation Committee's chairman and a close friend of Mr. Ebbers. In 2001, Mr. Ebbers granted a "dry lease" over the company's corporate jet to Mr. Kellet. These terms were later examined by Mr. Breedan, the Corporate Monitor, who concluded that the terms were well below those that would be expected in a true arm's length transaction and could represent a significant implicit payment to Mr. Kellet from Mr. Ebbers. Mr. Brendan also noted that Mr. Kellet failed to excuse himself in the decisions of the Compensation Committee that directly affected Mr. Ebbers.

The details of Mr. Ebber's compensation package and those of his fellow executive directors have been briefly described above, but have been documented in far greater detail by the Bankruptcy Court Examiner. While it is important to understand the magnitude and extent of the financial rewards of the executives it is far more important to understand how the granting of these awards came about. For this, the composition and workings of the Compensation Committee must be understood.

From 1998 to 2002, the Compensation Committee consisted of Mr. Kellett (Chairman) and Messrs. Bobbitt, Macklin and Tucker. The 2002 proxy statement of the Company shows the beneficial stock ownership of the first three directors as follows: 1,169,881, 433,749 and 224,387; while the stock ownership of Mr. Tucker is not recorded. Stiles A. Kellett, Jr. joined LDDS in August 1989 when it acquired Advantage Companies Inc. and Max E. Bobbitt, Gordon S. Macklin and Lawrence C. Tucker joined the Company when MCI was acquired in 1998.

The proxy statements for the annual general meetings of WorldCom stated that the Compensation Committee was responsible for designing a compensation policy that would attract, motivate, reward and retain executives who had the necessary skills required to promote the Company's short and long term financial performance and growth. The Compensation Policy also stated that the financial rewards of the executives must be aligned with the financial interest of the shareholders. However, the proxy statements of 2001 and 2002 also stated that the recommendation of the CEO "is of paramount importance in setting base salaries of other key executives".

Compensation packages at WorldCom were comprised of three elements: annual salary, cash bonus awards and stock options. Bonuses were based on the Company's performance compared to the industry as a whole and the judgement of the Compensation Committee and Mr. Ebbers. Stock options were used as a long-term incentive and were considered by the Committee as the most efficient way of tying an executive's compensation to the long term share price of the Company.

In spite of the outwardly standard role of the Compensation Committee in determining executives' benefit packages, the Bankruptcy Court Examiner (Thornburgh, 2002) in his First Interim Report stated that he believed that Mr. Ebbers had significant influence in determining senior executives' salaries and questioned whether the large range in salaries for positions of the same level was an indication of Mr. Ebbers' influence. The range in cash bonuses is even more significant. Thornburgh (2002) states that in 1999 the median performance bonus for WorldCom executives was $120,000 while the average bonus was $574,923.

In the Second Interim Report of Bankruptcy Court Examiner (Thornburgh, 2003), the Examiner goes into a lot more detail about executives' compensation packages. In particular the Report goes into some detail about "the remarkable concentration of power and authority in one man, Mr. Ebbers, that colored almost every aspect of compensation decision-making at the Company" (pp.149). The Examiner highlighted the following facts:

- In theory the Compensation Committee determined the remuneration package of the senior executives, but in practice Mr. Ebbers had substantial discretion to determine this group of executives pay other than himself.
- Immediately below the senior executives was a group of 30 to 40 executives at the Vice-President level known as the "Restricted Group" who reported directly to Mr Ebbers or to another executive who in turn reported to Mr. Ebbers. Again, in theory the Compensation Committee was supposed to be responsible for determining their remuneration packages. However, in practice the Compensation Committee abdicated complete authority to Mr. Ebbers who made all the compensation decisions even in the absence of any written policies or procedures.
- At the time of the publication of the Examiner's Second Interim Report, the Examiner reported that he was still in the process of evaluating "whether (a) the Company used compensation as a means of ensuring employee loyalty to keep Executives and (b) whether Company employees received excess compensation for participating in, or failing to disclose, fraudulent activity or other misconduct..." (pp. 150).
- For all remaining employees except sales employees, the Human Resources Department was supposed to issue written guidelines on compensation, which in turn, was supposed to be monitored by the Compensation Committee. However, in practice it has been determined that Mr. Ebbers had complete control over the guidelines and had the authority to change the compensation of this group of employees.

In reviewing the workings of the Compensation Committee and the part that the various components of WorldCom's compensation packages played in the running of the Company certain facts stand out:

- The unique role that Mr. Ebbers appears to have played in deciding the compensation packages of all levels of employees.
- With regard to the compensation of the Senior Executives, salary appears to have played a relatively small part of executives' compensation. For example, Mr. Ebber's salary rose from $935,000 to $1,557,700 between 1997 and 2004.

- Although the Compensation Committee was supposed to recommend the salary packages of senior executives to the Company's management, it appears that Mr. Ebbers made recommendations to the Committee which simply "rubber stamped" these recommendations.
- There appears to have been confusion in the awarding of executive performance bonuses. In 2001 two members of the Compensation Committee remember awarding Mr. Sullivan a $2 million performance bonus but the official Committee Meeting Minutes mention nothing of this award. It is unknown whether Mr. Ebbers denied Mr. Sullivan his bonus because the Committee denied Mr. Ebbers his bonus but this is believed to be the case.
- Although the Compensation Committee had explicit authority over the allocation of stock options the Committee deferred entirely to Mr. Ebbers. It appears that the Committee granted annual stock options to Mr. Ebbers and then approved the stock options to other executives as suggested by Mr. Ebbers.
- In addition, to being the final arbiter of the granting of stock options Mr. Ebbers appears to have had significant influence over when these options were exercised. He was known to receive a daily list of employees who exercised their options (Jeter, 2003) and sold their stock and would call the employees to inquire about their sales. This "subtle" pressure was applied to all levels of employees from board members downwards.
- The compensation packages of the "Restricted Group" of executives were decided entirely by Mr. Ebbers. The name of this group comes from the fact that Mr. Ebbers was the only person in the company who had access to this group's compensation on a regular basis. Neither the Compensation Committee nor the Human Resource Department had the same level of access as Mr. Ebbers.
- Mr. Ebbers exercised much less control over the normal compensation packages of lower level employees. However, even at these levels, senior management had the practice of making "out of policy" awards. Such awards were permitted within Human Resource Department guidelines, but out-of-guideline awards were regularly made with the approval of Mr. Ebbers and Mr. Sullivan. The Bankruptcy Examiner has highlighted a number of dubious payments to Mr Sullivan's subordinates who were in a position to be aware of, or even participate in, the accounting fraud that ultimately brought about the downfall of WorldCom. In fact a number of these employees subsequently pleaded guilty to criminal fraud charges.
- In May 2000, WorldCom paid 558 of its executives a total of $240 million in retention bonuses, in response the middle management's concern at the number of employees that were leaving the Company to pursue careers at start up internet companies. By any

standards these awards were generous. Employees were awarded a multiplier of their annual compensation, for example, senior vice-presidents received between 3 and 3.5 times their annual compensation if they stayed with the company for two years. As with most compensation matters, the execution of the plan was handled by Mr. Ebbers. Despite objections from the Company's Legal Department, these bonuses were paid up front, without the employees concerned having to sign contracts, and were subject to change by Mr. Ebbers.

Included in this retention program were payments of $10 million to both Mr. Sullivan and Mr. Ebbers. The payment to Mr Sullivan was made by the Compensation Committee as they felt he was an able CFO, who at that time had strained relations with Mr. Ebbers and therefore might leave the Company.

The award to Mr. Ebbers, on the other hand, was simply made as it was felt politically inappropriate to award Mr. Sullivan a bonus without awarding Mr. Ebbers. It is interesting to note that both Mr. Sullivan and Mr. Ebbers requested that their bonuses be paid in cash rather than a combination of cash and stock options that was the norm for this plan.

From the above analysis of the compensation schemes that operated in Qwest, Adelphia Communications Corporation and WorldCom Inc., it appears that all the companies operated very generous executive compensation programs. When comparing these schemes with those found in Guidant Corporation and Waters Corporation, it is very apparent that the less successful companies were overly generous. Some observations about and the reasons for this generosity and the consequences of it are discussed below.

The most noticeable factor about all these companies, is the relatively short time that they were in existence. The companies came into existence in the following years: Adelphia – 1972, Global Crossing – 1999, Guidant – 1994, Qwest – 1996, Waters – 1958 (but became independent in 1994) and WorldCom – 1983. It would be expected that, due to the short period of their successful existence that the management teams of all the companies would be relatively stable. However, this is not the case. Only Guidant and Waters have had stable management teams. In both cases the CEOs have been the CEOs of their respective companies since 1994. Contrast this with Global Crossing that has had four CEOs since 1997.

The result of Guidant and Waters having stable management teams is that the total remuneration paid to the two teams was generous, but not significantly out of line with companies in their peer

group. For example, in 1997 the top 500 US CEOs made on average $6.3 million each (Conyon and Murphy, 2000) while in the same year the CEOs of Guidant and Waters made considerably less. The fact that the two teams have been stable has meant that sign on bonuses and severance packages have not been necessary. However, the real question is why have the less successful companies felt it necessary to make such high payments to their executives and what has been the effect of these payments on the company?

The answer to the first question may lie in the nature of the businesses of these companies. While the whole group of companies are classified as "high technology" companies, the less successful companies belong to a subset of companies referred to by Ittner *et al.* (2003) as "new economy" companies. This title encompasses companies involved in the computer, software, internet telecommunications and networking industries. Murphy (2003) has described these companies as younger, rapidly growing companies that invest more intensely in research and development than older established companies. With any company on the cutting edge of technology, the talent and experience to run such companies is in short supply. Consequently, those executives with the necessary experience and talent will be in short supply, thus raising the remuneration levels that they can demand. Conversely, in a time of high demand, these executives are conscious of their value on the market and the fact that the market conditions that make them so valuable will not necessarily last and if it does last other executives will quickly gain the experience needed to supplant them.

Three additional reasons may further explain the high cost of executives in new economy companies. Firstly, in an industry where there is no historical precedence it is very difficult to determine what is equitable or the norm. With no benchmarks, companies have to rely on their best judgements and reward executives what they believe is fair. This reason derives from the Standard Optimal Contracting Theory, which states that boards behave in the best interests of a company's shareholders and will consequently set compensation levels of its executives at those levels that will encourage the maximization of a company's value. Secondly, any new market segment is by definition a risk. Companies that enter new markets are entrepreneurial by definition and it is not always easy to find executives with the experience and risk taking abilities to run such companies. Therefore, a well paid executive with the experience to run a new type of company will demand a premium remuneration package to take into account the added and unknown risk. Finally, many investors and executives had such faith in the new economy companies that they saw no limits to these companies' growth. Consequently, any remuneration paid to executives to achieve this growth would be relatively small in comparison to the rewards that would be "reaped" by the shareholders. Only later when shareholders lost billions of dollars

of their capital did it appear that these rewards were excessive. Few complaints were heard from shareholders when their stock was growing in multiples.

Whether or not there are valid reasons for companies to pay executives large remuneration packages, the question of the part of compensation committees in the awarding of these packages must be raised. Numerous studies have been carried out on the composition of such committees and how this has affected the pay awards made by them. Most studies have been made using information from large established companies. The results have been mixed (Dailey *et al.*, 1998; Conyon and Peck, 1998 and Anderson and Bizjak, 2003) so no definitive conclusions can be reached. Some research is now being carried out on smaller entrepreneurial companies but it is too early to reach any firm conclusions. It appears that little or no research has been carried out specifically on companies on the forefront of technology that have grown quickly, with the exception of the those companies that have faced the scrutiny of Bankruptcy Examiners!

It is almost impossible to determine the part played by the payment of large remuneration packages to executives in the demise of any company. The culture of greed would have to be examined. However, such a study belongs more in the realms of human psychology than business studies. The question is not "Does greed exist?" in the corporate world but does greed contribute to the failure of companies? The simple answer to this is, in all probability, no, unless the greed is of such a scale that the executives pay themselves so much that the company's creditors cannot be paid due to the lack of funds. Therefore the real question is: "do executives make decisions that result in self enrichment at the expense of shareholders?" This again is hard to answer, because the review of a decision after it has been made can never be made objectively as the reviewer will always have more knowledge of the situation after the event than the decision maker had at the time of the decision. However, the size of rewards now available to executives is so huge that this author believes as much transparency as possible is required in the area of executive remuneration. While corporations must be guaranteed privacy to make decisions, shareholders must be aware how much their executives are being paid and shareholders, in the form of advisory bodies, should perhaps have the right to sit on corporate boards to monitor the performance of their executives.

This section has reviewed the part that executive remuneration plays in the performance of companies and the influence corporate governance structures have on remuneration and therefore performance. In the former instance, evidence from the companies under research has shown that there is little relationship between executive compensation and corporate performance. In the latter instance the research has also shown that there is little relationship between executive compensation and corporate governance. The fact that companies were able to ignore corporate

governance regulations with regards to remuneration shows that the regulations in force during the period under review, or at the least the enforcement of the regulations, were not sufficiently strict. While the levels of remunerations paid to executives were not a direct cause of the failure of any of the companies reviewed, the poor enforcement of the regulations did indicate that there were inherent problems in some of these companies.

D1.8 Corporate Governance Ratings

Sections D2 to D7 explored the factors that drive corporate governance and what effect these factors have had on the performance of each of the companies under research. This section, using the criteria developed in Section C4.5, summarises and rates each of these companies on their compliance with generally accepted good corporate governance practices with the purpose of establishing the relationship between corporate governance and corporate performance.

Table 16 summarises the answers to the criteria used to rate each of the companies' corporate governance practices. Under each major heading, multiple questions were asked or statements were made about corporate governance. The answers to each question or statement indicated whether or not that company had procedures in place that meant that they applied with good corporate governance practices. The ratings were based on the research described in Sections D2 to D7 and what is considered good corporate governance practices as described in Appendix 6. The rating scheme rates each company with a score between 1 and 5, where a high score is depicted by a 5 and a low score is depicted by a 1. A high score means that the company had those procedures in place to ensure that they complied with good corporate practices, while a low score meant that their corporate governance procedures were lacking. While the ratings are based on the objective interpretation of data as far as possible, it must be recognised that the subjectivity of the author has influenced the final rating scores.

D1.9 Summary

Chapter D1 studied the relationship between corporate governance and corporate performance in an attempt to understand those factors that affect corporate governance and to understand whether these same factors either help or hinder corporate performance in the corporate environment. In a literature search, six factors were found to drive corporate governance in companies. Each factor was reviewed in depth to determine the implications each could have on corporate governance in general. For each factor, research was then carried out to determine how each factor affected the governance in the companies under research and ultimately the performance of each company.

The first factor reviewed was the influence that laws and legal institutions have on corporate governance. By their very definition, any law enacted to regulate an economy will have a major

impact on corporate governance. However, laws are usually passed in reaction to some occurrence and therefore are not proactive in their nature. This author was therefore more interested in determining if companies were "early adopters" of governance regulations and if these regulations were strictly enforced or whether the companies were more reactive in nature. From reviewing the workings of board committees of each company, it was concluded that the companies under research tended to be more reactive in their adoption of governance pronouncements rather than proactive. While none of the ratings of the companies are low, indicating that there was, in general, good compliance with the governance regulations, the quality of that compliance was not always exemplary. The best example of this is the cases of Adelphia and WorldCom, where all the required board committees were in place but the influence of executive directors was more prevalent than the influence of the non-executive directors.

Whether or not this fact affected the operating results of the companies is almost impossible to determine. It is also impossible to quantify if the passing of laws will, by themselves, enhance the profitability of companies. In reality, it is unlikely that laws can enhance company profitability.

Table 15: Rating of Companies by Corporate Governance Traits.

Drivers	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
Legal To investigate if good corporate governance procedures have been adopted effectively and in a timely manner in the companies under investigation.	3.75	4.66	4.83	4.33	4.75	4.25
Historical To investigate if historical drivers have proactively affected the corporate governance practices of the companies.	4.00	5.00	5.00	5.00	5.00	3.00
Financial To determine if the capital structure of each company is in the interests of the corporate managers or shareholders with a view to understanding if the structure is in the best interests of either party. (A high rating indicates the capital structure of the company favours the shareholders.)	2.50	3.75	4.87	3.75	4.87	3.50
Board Composition To investigate the composition of each board of directors to determine the effect on governance.	3.67	3.83	4.78	4.67	4.67	3.94
Stock Ownership To determine if the corporate ownership structure affects corporate performance.	3.60	3.80	4.20	4.40	4.20	3.60
Executive Remuneration To determine the relationship between executives' total compensation, company performance and corporate governance.	3.67	4.11	5.00	4.55	5.00	2.78
TOTAL	3.53	4.19	4.78	4.45	4.75	3.51

Indeed the object of legislation is not to enhance corporate profitability, rather it is enacted to prevent fraud and protect stakeholders. So, while it is unlikely that governance legislation can improve corporate profitability per se, the proactive adoption of legislation and the embracing of new governance recommendations can prevent companies from making bad corporate decisions and encourage them to act with corporate responsibility which will increase their chances of making decisions that will increase their profitability which in turn will attract favourable reactions from both customers and the financial markets.

The next statement to be examined was whether the history and culture of a country or an economy will drive the establishment of corporate governance structures, which in turn will affect corporate profitability. Examining the drivers of history and culture on the corporate governance in each company was the most difficult aspect of this research due to the absence of real measurable criteria available. However, in the case of American history and culture, a conclusion was reached that "American Exceptionalism" has played a significant part in Americans' attitude to business and governance. Attention was then turned to the subject of whether or not companies facing rapid technological change attract entrepreneurial leaders and if these leaders' actions are affected by their historical and cultural backgrounds. In this aspect the majority of the companies achieved a high rating, as it was concluded that such companies undoubtedly attract entrepreneurial leaders. However, it could not be determined if the actions of these leaders were influenced by their backgrounds. On one level their drive to succeed must, in part, be attributable to their backgrounds. The question as to why, in a number of cases, these same leaders appear to have acted fraudulently or at the very least at the limits of their fiduciary duties can be answered in one of two ways. On the one hand their drive to succeed, which is a "very American trait", simply went too far. On the other hand, these leaders were fully cognisant of their actions and knowingly exceeded the bounds of good business practice. In either case good corporate governance should have stopped the CEOs from exceeding their authority. Therefore, undoubtedly the enforcement of governance practices failed which in this case is the responsibility of the board of directors. No matter how strong regulations are in theory, if they are not enforced properly the passing of additional laws will not help the situation.

The third factor that drives corporate governance that was researched was the sources of corporate finance and taxation. The leveraging of companies' balance sheets is a topic that is presently very much in the forefront of boards' minds. Investors, until recently, pushed their boards to leverage their company balance sheets as a way to improve company results. In Section D1.4 the research was directed to question whether or not management may have leveraged their companies in their own best interests rather than those of the companies. It was concluded that, while there was no evidence of this practice, the possibility of it occurring could not be

discounted. It was considered unlikely to occur mainly because this type of manipulation was too difficult to transact in fast moving, high visibility industry sectors. In spite of this, when rating the companies, the largest spread of scores was found to occur in this area. This was because, while financial manipulation is considered hard to implement, financial irregularities did occur in all the companies except in Guidant and Waters and in some cases where it occurred the amounts involved ran into billions of dollars. Could good corporate governance have prevented these irregularities? This author believes the costs and effort to "police" all such practices on an ongoing basis is often too onerous. However, there is no reason why good corporate practices should not be effective in the prevention of the worst of such practices and therefore companies should ensure that they meet and where practical exceed good corporate governance practices.

The final three factors that were found to drive corporate governance and corporate performance that were examined were board composition, stock ownership and executive remuneration. The relationship of these three factors with governance and corporate performance was determined to be easier to track than the first three factors that were considered. Research has shown that all three factors can play a positive but also a negative part in how seriously corporate governance is taken in corporations, which in turn affects corporate performance.

Board composition is one of the most researched aspects of corporate governance and its influence on corporate governance is so prevalent because the board is responsible for corporate governance in companies. While none of the companies researched received a perfect rating, the successful companies received the highest ratings while the least successful companies received relatively poor ratings. In this situation, the role of the executive directors has to be examined and again their influence is found to be excessive. This indicates more than anything else the importance of the role of non-executive directors on boards and the need for shareholders not to let executive directors dominate boards.

Stock ownership and board composition are related in so far as both deal with the influence of the shareholders on the corporate governance of a company. Whereas board composition was concerned with the direct influence shareholders can have on a company because of their membership to the board of a company, stock ownership looks at this influence but in a less direct way. The presence of non-executive directors on a board should ensure that the rights of all shareholders are protected equally, but this is not always the case if certain shareholders have undue influence. Similarly, it is important that directors should have an interest in a company as this binds their personal interests to those of the company. In the companies under research, the influence of shareholders covered the full spectrum from Adelphia where shareholders exerted their influence to the detriment of the company, to Guidant where the shareholders appear to have

had a positive influence on the company. Similarly where executive directors held stock, this fact appears to have strengthened a company, except in the notable case described above. Therefore as discussed in Section D1.5, because shareholders can have a significant influence on the corporate governance of a company and its performance, it is important that the corporate governance in companies should be robust to ensure that all shareholders work for the interest of the company rather than themselves.

Executive remuneration is the most "public" face of corporate governance and the one influence that is seen to be most open to abuse. This is not surprising in light of the millions of dollars paid out to executives by companies that ultimately failed, leaving many shareholders' retirement plans and savings in ruins. In this respect, the companies researched showed some of the best and worst behaviours. Guidant and Waters had good corporate practices in force that meant executives appear to have been well paid, but in turn these executives led profitable companies and increased shareholder wealth without any controversy. The remaining companies did not have such strong corporate governance practices in force, leading the executives to demand and receive huge remuneration packages that, in a number of cases, led shareholders to lose confidence in the companies that in turn, led to their demise. Therefore from the rating of the companies under research, it appears that there is a clear relationship between weak corporate governance surrounding executive remuneration and the failure of companies and conversely those companies with good corporate governance practices surrounding executive remuneration have a greater chance of success.

CHAPTER D2: ENTREPRENEURSHIP

Chapter D1 looked at the relationship between corporate governance and corporate performance. Chapter D2 looks at entrepreneurship and corporate performance. The Chapter (Section D2.1) rates each company under research according to their "level" of entrepreneurship. This was done with reference to the three drivers of entrepreneurship described in Chapter B2 (entrepreneurship in general, corporate entrepreneurship and entrepreneurial leadership). Section D2.2 discusses the relationship between corporate entrepreneurship and corporate performance as a result of the research undertaken and attempts to arrive at conclusions based on this research. From these conclusions each company is classified according to Miller's (1983) Typology of Firms. This classification is used in Part E where the discussion on the relationship between corporate governance, entrepreneurship and corporate performance is concluded.

D2.1 Entrepreneurship Research

D2.1.1 Entrepreneurship and Corporate Performance

As stated in Section C1.5 the approach of the research into entrepreneurship is directed towards understanding the relationship between entrepreneurship and corporate performance by classifying each company by the entrepreneurial traits it displayed. To do this, as a first step, the relationship between these two concepts was examined by rating each company's entrepreneurship. How this was done is explained in Section D2.1.2. Following this section Table 16 shows how each company is classified by its entrepreneurial traits.

D2.1.2 Entrepreneurship Metrics

Section C4.5.2 discussed the absence of existing recognised criteria to measure entrepreneurship in individual companies and discussed the formulation of criteria that could be used using a number of different sources. Using these formulated criteria the process described in Section D1.8 was replicated, namely, under each of the major headings in Table 16 multiple questions were asked or statements were made about entrepreneurship. The answers to each question or statement indicated whether or not that company had the processes in place that meant that they were entrepreneurial in nature. The ratings were based on the research conducted at the same time as the research into corporate governance described in Sections D2 to D7 was conducted. The rating scheme rates each company with a score between 1 and 5 where a high score is depicted by a 5 and a low rating is depicted by a 1. A high score means that the company had those processes in place that were conducive to the company being entrepreneurial in nature, while a low score meant that the necessary processes for entrepreneurship were lacking. Again, while the ratings are based on the objective interpretation of data as far as possible, it must be recognised that the subjectivity of the author will have influenced the final rating scores.

Table 16: Rating of Companies by Entrepreneurship Traits

Drivers	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
Entrepreneurship Determine the part entrepreneurship plays in companies' ability to grow and does entrepreneurship impact on corporations' performance.	4.28	3.42	4.14	3.42	4.14	4.00
Corporate Entrepreneurship Consider the part played by corporate entrepreneurship in the companies' continued ability to perform and grow.	3.45	2.82	3.18	2.59	3.18	3.50
Entrepreneurial Leadership Consider the importance of entrepreneurial leadership in the corporate entrepreneurial process of each company.	4.00	3.75	2.50	3.50	2.50	3.50
TOTAL	3.91	3.33	3.27	3.17	3.27	3.66

D2.2 Miller's Typology of Firms

Having rated the entrepreneurship of each company, in Table 16, Miller's Typology of Firms, which was described in Section B2.5 and Appendix 2, is used to classify each of the companies according to the entrepreneurial traits summarised in the above table. The consequences of this classification are discussed in Section D2.3.

Table 17: Classification of Companies by Entrepreneurship Traits using Miller's Typology of Firms

Typology of Firm	"Simple" Firms	Organic Firms	Planning Firms
Adelphia	X		
Global Crossing		X	
Guidant			X
Qwest		X	
Waters			X
WorldCom	X		

D2.3 Summary of Research on Entrepreneurship

Three aspects of entrepreneurship are rated: entrepreneurship, corporate entrepreneurship and entrepreneurial leadership. Entrepreneurship was concerned with looking at each company's general outlook on entrepreneurship, corporate entrepreneurship asked more detailed questions in an attempt to understand how deep any entrepreneurship traits ran in a company (i.e. was entrepreneurship part of the very fabric of a company or did a company merely pay lip service to the concept?); while entrepreneurial leadership looked at the CEO of each company and asked if he or she was a driving force behind any entrepreneurship displayed by the company.

In rating each company's general attitude to entrepreneurship, a spread of scores was achieved. While all the companies displayed degrees of entrepreneurship, the range in scores varied and produced results that might be considered unusual. However it must be restated that

entrepreneurship was rated based on the definitions in Chapter B2, rather than on "wealth creation" or "product longevity", as was explained in Section C4.5.2.

Of all the measurements of a company's overall attitude to entrepreneurship, the part entrepreneurship plays as part of its corporate "DNA" is the most important. While a CEO or a board of directors can profess to be entrepreneurial, unless the entrepreneurial drive permeates throughout all levels of a company, that company can never sustain that drive over a long period. If, on the other hand the entrepreneurial drive exists as part of a corporate "DNA", the potential for long term growth in the company and the shareholders' wealth is much enhanced. However, even the presence of corporate entrepreneurship in a company is not an absolute guarantee that the company will be a long term success. This can be seen in the ratings of the companies under research. Guidant and Waters were entrepreneurial and therefore developed new products over a long period, but in a gradual process rather than in the manner that Schumpeter envisaged. Qwest was essentially a "replicator" rather than entrepreneurial but may have enjoyed more long term success if market conditions had been different. The company for a time experienced growth, medium term wealth creation and some residual wealth creation for its shareholders. Global Crossing was entrepreneurial in that it developed a global IP-based network designed for the convergence of voice, video and data but it has never expanded from this core product. Adelphia and WorldCom on the other hand should be considered more entrepreneurial than the companies discussed above. They were at the forefront of their respective industries and for a time experienced rapid growth, but more importantly were "drivers of new businesses which achieved through internal innovation, joint ventures or acquisitions; strategic renewal; product, process, and administrative innovations; diversification; and processes through which individuals' ideas were transformed into collective actions through the management of uncertainties (see page 38)". The fact that neither of these companies achieved long term success should not lessen these achievements.

The final rating of the companies is based on the entrepreneurial traits of the CEOs. These ratings produce some of the most interesting results of the study. Those companies that ultimately failed had the more entrepreneurial leaders but again whether or not they were able to institutionalise entrepreneurship in their companies is impossible to determine due to the rapid change in market conditions at the time. Guidant and Waters on the other hand had entrepreneurship more ingrained into the corporate psyche, rather than relying solely on the dynamism of the CEO to drive their growth, which enabled the companies to be entrepreneurial over a longer period.

With regards to the typology of each company, Adelphia and WorldCom have been classified as "Simple Firms". The traits of these companies are that they are usually smaller in size, have little structure, corporate strategy tends to be intuitive rather than analytical, but most important of all, power is centralized. While the first two traits do not describe these two companies, it is the last trait that is the most significant, as both companies were clearly dominated and controlled by their founders. This also tended to mean that the corporate strategies were more intuitive than analytical. Global Crossing and Qwest have been classified as "Organic" companies. These companies tended to have a less centralised decision making structure but also operated in an environment that was distinguished by being dynamic and where customer requirements could change rapidly. Finally, Guidant and Waters have been classified as "Planning Firms" whose main characteristic is that planning and control is run along more formal lines and while there is clearly a dominant CEO his authority is kept in check by the board of directors.

The implications of rating each company and classifying them by their entrepreneurial traits is discussed in Part E.

PART E: CONCLUSION

This part comprises one chapter that provides a summary and discussion of this thesis. An overview of the study together with the research aim of the study is presented in Section E1. The results of the study are then debated in relation to the literature (Section E1.2) before proceeding to discuss the contributions of the research to management (Section E1.3). Finally, future avenues of research are presented in Section E1.4.

CHAPTER E1: CONCLUSIONS AND DISCUSSION

E1.1 Introduction

This study is concerned with questioning the influence of entrepreneurship on the relationship between corporate governance and corporate performance. In order to study this question, the literature on the subjects of corporate governance (Section B1) and entrepreneurship (Section B2) were reviewed separately followed by the literature on the relationship between these two subjects (Section B2.6). In spite of extensive literature on corporate governance and entrepreneurship there appeared to be little research on the relationship between these two concepts. Consequently the stated aim of this thesis is (See Section A1.2) to examine "The influence of entrepreneurship on the relationship between corporate governance and corporate performance."

In order to address the above aim, the starting point of this thesis was to understand the main drivers on corporate governance (Nayak *et al.*, 2007; Fligstein and Choo, 2005; Larcker *et al.*, 2005; Bellalah, 2004) and the components of entrepreneurship. Taking each of the corporate governance drivers in turn, research was carried out to examine how each affects corporate performance (see Section B1). Next, the same approach was applied to entrepreneurship in that the main components of entrepreneurship were examined to understand their roles in corporate performance (see Section B2). The above relationships were examined, so that in Section E1.3 conclusions could be drawn on the relationship between corporate governance, entrepreneurship and corporate performance.

Research was conducted through an interpretivist empirical study of large high technology companies in the United States that faced rapid technological change. Consequently, this study was exploratory/gauging in nature (Section C1.3) and offers intial and new insights into the corporate governance/entrepreneurship/corporate performance relationship which will give subsequent authors a platform on which to build their research and businessmen a better understanding of these relationships, so that pre-emptive actions can be taken to prevent corporate governance/entrepreneurship issues occurring.

E1.2 Findings

This section considers each of the propositions specified in Chapter C1. The section starts with a table showing the propositions that were derived from the literature review of corporate governance, the development of the propositions, the aim of the propositions and a commentary on the results of the research into each of the companies researched (Table 18). The results of the research in relation to each of these propositions are then discussed in more detail. The section

then discusses the proposition concerning entrepreneurship and finally discusses corporate governance, entrepreneurship and corporate performance.

E1.2.1 Corporate Governance

Propositions P1 and P2:

P1. National institutions impose corporate governance regulations with the intention of promoting economic stability and growth within economies. These laws are passed in response to macro economic influences (e.g. the lack of or presence of banking crises and asset price stability/volatility).

P2. Good corporate governance in companies is driven by the corporate governance practices enacted by national governments.

These propositions looked at those aspects of the law that have an affect on corporate governance that in turn affect corporate performance. The literature review (Section B1.4.1) showed that much of the current literature was concerned with the views of researchers about how the legal framework of countries affects two groups of stakeholders: shareholders and creditors, how these two groups can affect the running of corporations (La Porta *et al.*, 1998) and how the rights of these two groups drives the financial and ownership structure of companies (Bebchuk, 1994; Harris and Ravi, 1988). In formulating these propositions however, the issue was raised as to what drives the formulating of legal frameworks and it was hypothesized that it was driven by the stability/instability of the economic environment. Having stated this proposition (P1) it was further proposed (P2) that good corporate governance in companies was the result of a country's legal framework (Section C1.4.2).

Section C1.4.1 showed that corporate governance issues usually arise in times of economic crisis (Jones and Pollitt, 2003) and it is at these times that governments act by issuing new regulations in order to return the markets and the economy to stability. In the 20th Century, the clearest example of this was the Great Depression of the 1930s. In the decade from 1995, such intervention occurred again in response to the Enron and similar scandals as well as to the bursting of the internet bubble. Therefore proposition P1, as shown in Table 18, is largely confirmed. However what is also of significance, is that government intervention is occurring more frequently and earlier in any economic downturn, as world governments attempt to maintain economic stability in the increasingly global economy. While such action can be commended, the danger is that this governmental invention will be heavy handed and will detrimentally affect the workings of the free market economies.

Table 18: Summary of Research Aims, Propositions and Findings.

Aim	P#	Proposition	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
To investigate if good corporate governance procedures have been adopted effectively and in a timely manner in the companies under investigation.	P1	National institutions impose corporate governance regulations with the intention of promoting economic stability and growth within economies. These laws are passed in response to macro economic influences (e.g. the lack of or presence of banking crises and asset price stability/volatility).	Proposition P1 is a general proposition that is directed at understanding the driving forces behind the enactment of corporate governance regulations in an economy and the part these forces play in the corporate governance in companies. This research showed that national institutions pass laws and make pronouncements on corporate governance based on the desire to promote economic stability. Therefore, for example, the presence of asset price instability and other issues will in general lead to the passing of new corporate governance regulations.					
P1: the intent is to understand the legal driving forces behind the enactment of good corporate governance practices. P2: the intent is to understand if companies implement good corporate governance practices by examining the workings of board committees.	P2	Corporate governance in companies is driven by the corporate governance practices enacted by national institutions.	Board committees were established by all companies in accordance with the regulations as shown by Table 15 but:					
			Board committees were controlled by the Rigas family, contrary to best corporate governance practice. Board committee members were moderately paid.	Board committees were dominated by the company's chairman and a major shareholder.	Board committees tended to comprise of non-executive directors who were moderately paid and acted independently.	The dominance of board committees varied between executive and non-executive directors. Committee members tended to be well paid.	Board committees tended to comprise of non-executive directors who were moderately paid and acted independently.	Majority of committee members were non executive directors but were closely associated with the founder of the company. Board committee members were moderately paid.
		Summary	Research showed that companies tend to apply to the letter of the law but not always to the spirit of the law with regards to the enactment of corporate governance regulations.					

Proposition P2 was an attempt to determine how effective the governance laws are in "encouraging" companies to actually improve their internal corporate governance procedures so that their transparency is improved. The literature showed that corporate governance is dependent on the quality of regulatory governance (Arnone *et al.*, 2007; Podpiera, 2006; Das *et al.*, 2004). It is therefore expected that if national governance laws are respected companies will in all probability adopt similar stringent internal corporate governance regulations. This proposition was tested by examining the workings of board committees in relation to best business practices. Section C4.3.1 stated that boards' attitudes to corporate governance can be gauged by how seriously they take the composition and recommendations of the each of the committees (Spira and Bender, 2004; Greenbury, 1995; Cadbury, 1992). The research (Section D1.2) showed that companies will respond to the "letter" of the law to a high standard. This is borne out by the fact each company appointed board committees as summarised in Table 18. This indicates that these companies, on the surface, took the role of board committees seriously. However, as Table 18 above again indicates, the companies did not give board committees the independence that they were due and which would greatly have enhanced their contribution to the companies' transparency. For example, both the boards of directors of Adelphia's and WorldCom's attitude to their board committees, was that these committees were in existence simply to "rubber stamp" management's proposals rather than to act as a focal point for discussion and debate that the full board could objectively use. Therefore companies' attitudes to best corporate practice, on the surface appear to be good, but this research indicates more measures are required to ensure more than superficial compliance.

Propositions P3, P4 and P5:

P3. The history of a country influences the corporate governance structures adopted by companies.

P4. The history of a company influences the corporate governance structures adopted by that company.

P5. The background of business leaders influences companies' attitude to corporate governance.

Propositions P3, P4 and P5 were directed at understanding how and why history drives corporate governance in companies (Section C1.4.2) and what the result is of this influence. This influence was researched from three perspectives: the history of the United States, the history of the companies themselves and finally the background of the CEOs. Therefore it was hypothesised that countries' cultures, in their broadest context, individual corporate cultures and the background of the CEOs, were significant influences on a company's approach to corporate governance.

The literature showed that the history of an economy has an influence on investors' rights, which in turn has an influence on corporate governance (Doidge *et al.*, 2007 La Porta *et al.*, 1998) (Section B1.4.2). This was borne out by the research, which showed that the two traits upon which the US was founded, a spirit of individualism and the Puritan work ethic, are still important. These two traits were evident in the CEOs of all the companies researched. It must therefore be concluded that these original ideals of the Founding Fathers of the US are still relevant today and continue to have a strong influence on how business in the US is conducted.

Looking at the part played by the histories of each of the companies researched and the backgrounds of the CEOs on the corporate governance adopted by each company, this author found it is more difficult to evaluate the effect of each corporate history than the effect of the CEO. This is because, as Table 18 shows, the histories of these companies are very closely aligned to the founders and CEO. Therefore gauging effect of corporate history from that of the founder or CEO was difficult. Also, whereas CEOs can make decisions, the results of which are measurable relatively quickly, the effect of corporate histories is more intangible and not necessarily immediately measurable. In addition, the majority of the companies researched did not have long corporate histories as they were formed as a result of relatively recent events in the high technology area (see Appendix 7). However, this research showed that in general, those companies with comparatively longer histories and particularly those spun out from larger corporations (Guidant and Waters) tended to be more successful (see Table 18 above). One explanation for this is that when these companies were spun off from their parent companies, they took with them their former parent companies attitude to corporate governance. Guidant Corporation, for example, was originally part of the Eli Lilly Corporation that has always prided itself on its good corporate governance practices.

The part played by the CEOs of each corporation on the corporate governance adopted by each company and their performance, was dramatic. As can be seen from Table 18, the majority of the companies examined the CEOs started their companies and stayed with them, in some official capacity, for the duration of their existence. These CEOs appear to have been very strong or dominant characters with the result that best corporate practice was not always followed, largely with disastrous effects. This is particularly the case with Bernie Ebbers and the Rigas family in WorldCom and Adelphia respectively. Again those CEOs with experience of larger companies and who rose through the ranks of their companies, appear to have been more diligent in adopting best corporate practices (Guidant and Waters) than those CEOs who formed their own companies. Whether this was a result of personal traits of the CEOs or because these practices were part of the "DNA" of their companies, is difficult to assess. However, even a relatively long life span of a company does not necessarily guarantee success. Adelphia was formed and grown by John

Table 18 (continued): Summary of Research Aims, Propositions and Findings.

Aim	P#	Proposition	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
To investigate if historical drivers have proactively affected the corporate governance practices of the companies.	P3	The history of a country affects the corporate governance structures adopted by companies.	This research showed the important part that the history of the United States has played in formulating the outlook of Americans themselves in their attitudes to business and corporate governance.					
	P4	The history of a company affects the corporate governance structures adopted by that company.	This company was founded and controlled by the Rigas family from its inception to its demise. During its existence the company did not prioritise good corporate governance which could or would have been self perpetuating.	This company was founded and controlled by Gary Winnick from it's inception to its demise. During the company's short existence it did not appear to prioritize the formulation of good corporate governance practices.	This company was spun out from a major NYSE corporation with well regarded CG practices that were adopted by Guidant as an independent company.	This company was founded and controlled by the founder from its inception to its demise. During the company's short existence it did not appear to prioritize the formulation of good corporate governance practices.	This company was spun out from a major NYSE corporation with well regarded CG practices that were adopted by Waters as an independent company.	This company was founded and dominated by Bernie Ebbers from its inception to its demise. During this time the company did not prioritise good CG which could or would have been self perpetuating.
	P5	The background of business leaders influences companies' attitude to corporate governance.	The founder of the company was an entrepreneur rather than a professional manager who had little training in best CG practices and little regard for them.	The founder of the company was an entrepreneur and a businessman. This latter fact may have assisted the company from engaging in poor CG practices but at the same time the company did not engage in best business practices.	The CEO of Guidant rose through the ranks of the company and was therefore fully conversant with best CG practices.	The founder of the company was an entrepreneur rather than a professional manager who had little training in best CG practices. In 2002 Fortune named him the nation's "greediest executive".	The CEO of Waters rose through the ranks of the company and was therefore fully conversant with best CG practices.	Mr Ebbers was primarily an entrepreneur who allowed serious lapses in best CG practices to occur within the company.
		Summary	Historical precedence plays an important part in companies' attitudes to corporate governance, the most important of which is the CEOs' attitude to corporate governance either positively or negatively.					

Rigas over a period of 50 years (Section D1.6) but it ultimately failed due to the latter's fraudulent actions.

In summary, when evaluating the drivers of each company's attitude to corporate governance, history was a major influence. This largely bears out the results of the literature review which indicated the importance of history on companies' attitude to corporate governance (Teranishi, 2006; John and Kedia, 2002; Coffee, 2001; and La Porta *et al.*, 1998). The only exceptions were Adelphia and WorldCom, where these drivers were not so material largely due to the dominance of the CEO. However, the issue of the dominance of CEOs appears not only in answering proposition 5, but is a recurring theme that is addressed again in later paragraphs.

Proposition P6:

P6. Financial issues influence the capital structure of corporations, which in turn contributes to management's attitude to best corporate governance practices.

The literature review showed the huge influence that financial issues can have on the corporate governance in a company in two ways. Firstly, the source of financing of a company will bring different stakeholders into a company with different rights and goals. Consequently, as stated by Williamson (2007) debt and equity should not merely be viewed as alternative financial instruments but also as alternative modes of governance. The other main financial driver is the tax regime under which a company operates.

In developing the financial propositions, particular attention was paid to the financing of companies. It was shown that two views have dominated the discussion on the optimal capital structure of companies, those of Modigliani and Miller (1958) and Jensen and Meckling (1976). However Berger *et al.* (1997) showed that managers may not optimise the capital structure of their companies, while Frank and Goyal (2003) summarised these reasons into five theories and Schoubben and Van Hulle (2004) listed the firm characteristics that ultimately drive corporate leverage.

While looking at the leverage of each company, this research concentrated largely on looking at debt leverage and the possibility of financial engineering with the resultant effect on corporate governance. These elements are related so that the manipulation of the former element will affect the latter with the corresponding effect on corporate governance and corporate performance. The research showed (Table 18) that there was no uniform leverage in the group of companies researched and indeed the range of leverage was considerable which was contrary to the findings of Ju *et al.*, (2005) and Bradley *et al.*, (1984) but supports the findings of Modigliani and Miller

(1958). Research also showed that while manipulation was possible, and did in fact occur in Adelphia (Table 18), it was not the norm. Once again it was those companies that had been in existence longer (Guidant and Waters) and were not dominated by a founding CEO that were better able to resist the temptation of financial manipulation of their capital structure and therefore not breach good corporate governance practices. However, the research also showed that in spite of debt covenants, annual statutory audits and the ever present threat of IRS audits, financial manipulation and fraud did occur. A reason for this was that one of the characteristics of the time under research was that it appears that it was unique in that the "normal" rules of debt leverage appeared to have been "suspended" for a certain period of time. Normally corporate valuations are based on sound financial principals such as EPS and earnings/interest. However, in the period under review, corporate valuations and corporate debt were more driven by sentiment, founders' unwillingness to dilute their shareholdings and bankers willingness to lend excessive amounts rather than sound business principles. This may well explain the extraordinary debt leverages of many of the companies during this time and the subsequent lapses in corporate governance.

Propositions 7, 8 and 9:

P7(a). Companies in the early stages of their life cycle will experience steady growth as they strive to gain market share. Corporate governance issues will be at a minimum as management and company owners' interests are closely aligned.

P7(b). Quoted companies will outperform companies whose boards have been largely selected by a CEO/founder and are therefore less diverse in experience. However, corporate governance issues will increase as management and company owners' interests diverge.

P8. Boards of directors appoint CEOs with the expectation that they will grow the companies rapidly, increase profitability and promote best business practices.

P9(a). The more static the composition of a board of directors the less growth a company will experience. However, corporate governance issues will decrease as management and company owners' interests are more aligned.

P9(b). Companies whose boards of directors are comprised largely of executive directors will experience less growth than those companies whose boards are dominated by non-executive directors, but more corporate governance issues due to the lack of independent board directors.

The literature review highlighted the importance of boards of directors (Adjaoud *et al.*, 2007; Yermack, 1996), their varying roles (Williamson, 2007; Hillman and Dalziel, 2003; Lehn *et al.*, 2003; Baysinger and Butler, 1985) the changing nature of the responsibilities of boards of directors and the increasing importance they are playing in ensuring that there is transparency in

Table 18 (continued): Summary of Research Aims, Propositions and Findings.

Aim	P#	Proposition	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
To determine if the capital structure of each company is in the interests of the corporate managers or shareholders.	P6	Financial issues influence the capital structure of corporations which in turn contributes to management's attitude to best corporate governance practices.	Research into P6 was primarily directed at understanding the relationship between debt leverage and corporate governance issues. Did high ratios of debt leverage have adverse effects on the corporate governance of the selected companies?					
			Leverage ranged from 71% to 208%.	Leverage ranged from 35% to 308%.	Leverage ranged from 7% to 54%.	Leverage ranged from 50% to 77%.	Leverage ranged from 0% to 83%.	Leverage ranged from 26% to -9%.
Summary			This research showed that the capital structure of the companies did not result in any significant corporate governance issues.					
To investigate the composition of each board of directors to determine the effect on governance	P7(a)	Companies in the early stages of their life cycle will experience steady growth as they strive to gain market share. Corporate governance issues will be at a minimum as management and company owners' interests are closely aligned.	In the early days of each of the companies EPS did not fluctuate materially and there were no signs of corporate governance issues. As time progressed and the companies' results deteriorated corporate governance issues began to appear.					
	P7(b)	Quoted companies will outperform companies whose boards have been largely selected by a CEO/founder and are therefore less diverse in experience. However, corporate governance issues will increase as management and company owners' interests diverge.	Adelphia board consisted largely of executive directors and was always under the control of the Rigas family.	Global's board consisted both of executive and non-executive directors but was predominantly under the control of founder.	The majority of Guidant's board of directors were non-executive directors.	Qwest's board consisted both of executive and non-executive directors but was predominantly under the control of founder.	The majority of Water's board of directors were non-executive directors.	WorldCom's board consisted both of executive and non-executive directors but was predominantly under the control of the CEO.
Summary			Proposition 7(a) is largely confirmed. Proposition 7(b) is also confirmed in that it was those companies whose boards were not dominated by their CEOs/founders had less corporate governance issues and performed better than those whose boards were dominated by their founders/CEOs.					

Table 18 (continued): Summary of Research Aims, Propositions and Findings.

Aim	P#	Proposition	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
As above	P8	Boards of directors appoint CEOs with the expectation that they will grow the companies rapidly, increase profitability and promote best business practices.	In all cases the boards of directors appointed entrepreneurial CEOs who grew their companies rapidly. However, with the exception of Guidant and Waters the CEOs failed to maintain or increase profitability and failed to promote best business practices.					
		Summary	The first part of proposition 8 was shown to be correct in that the CEOs grew their companies. However the majority of the CEOs failed in their fiduciary duties to protect the shareholders' assets in the long term.					
As above	P9(a)	The more static the composition of a board of directors the less growth a company will experience. However, corporate governance issues will decrease as management and company owners' interests are more aligned.	Adelphia board of directors remained relatively stable but was under the control of the Rigas family.	Global's board of directors suffered from constant turnover resulting in a complete absence of continuity.	Guidant CEO and board of directors remained stable throughout the period.	The membership of Qwest's board of directors fluctuated both in numbers and membership over the period under research.	Waters CEO and board of directors remained stable throughout the period.	The membership of WorldCom's board of directors fluctuated both in numbers and membership over the period under research.
	P9(b)	Companies whose boards of directors are comprised largely of executive directors will experience less growth than those companies whose boards are dominated by non-executive directors, but more corporate governance issues due to the lack of independent board directors.	Adelphia board consisted largely of executive directors and was always under the control of the Rigas family.	Global's board consisted both of executive and non-executive directors but was predominantly under the control of founder.	The majority of Guidant's board of directors were non-executive directors.	Qwest's board consisted both of executive and non-executive directors but was predominantly under the control of founder.	The majority of Water's board of directors were non-executive directors.	WorldCom's board consisted both of executive and non-executive directors but was predominantly under the control of the CEO.
		Summary	Proposition 9(a) was shown to be incorrect with the exception of Adelphia which due to extraordinary actions of the founder maintained a static board of directors. Proposition 9(b) was shown to be correct.					

the decision making process inside boardrooms. Compiling the research propositions relating to board composition produced five propositions. These propositions were interested in understanding the relationship between board composition and corporate governance by looking three things: how, during the life cycle of a company, board composition can affect corporate governance and performance, the importance of appointing the correct CEO for a company and the importance of achieving the right diversity and balance in a board over time.

As shown in Table 18, in the early stages of the companies' existence, boards appear to have managed their companies well. However, as the companies grew in size and complexity, corporate governance issues increased and corporate performance decreased. These facts indicate that boards are ill-equipped to guide corporations as they grow rapidly and especially if the companies are in the forefront of new industries. The very fact that companies are in the vanguard of a new industry means that there may be no rules of best practice for the new environment so the habit of hiring a board of seasoned professionals as directors may not be the best thing for a company. Instead increased diversity in a board may be a preference. For example, the hiring of industry visionaries, academics and those with specific "new industry" experience along with businessmen may make a more dynamic board. This is in line with the findings of Uzun *et al.*, (2004); Rosenstein and Wyatt (1990); Zahra and Pearce (1989) and Bayesinger and Butler (1985) who showed the advantages of a diverse board. However, the role of boards has now become so wide, all-encompassing and increasingly technical, that even if its members are not from diverse backgrounds they increasingly require the assistance of technical experts in many fields. This, along with the increasing penalties being levied on directors for malfeasance, is making it increasingly hard to find directors willing to serve on boards.

The appointment of the correct CEO to a company is probably the most important decision that a board can make. This sample of companies was unique in that the majority of the CEOs of the companies were also the founders and in some cases, the chairmen of the companies. A possible reason for the corporate governance issues in the selected companies is that in each company many of the top roles in the companies were held by one individual. Whether this is true or not, this research supports the findings of the Higgs Report (2003) which strongly advocated the separation of the roles of Chairman and CEO for all companies.

Board diversity has been discussed to a certain extent in the above paragraphs. However, the third proposition regarding board composition looked at board diversity in more detail. While in all large companies directors are required to stand for election at regular intervals this research showed that those companies that showed consistency in the their board membership were more likely to prosper. This does not mean that directors should be entrenched in their positions, as in

the case of Adelphia, but at the same time companies should not have a practice of frequently changing the composition of their boards. Companies are complex organizations and as such directors, like all employees, need time to understand the organization before effective contributions can be made.

The turnover in the number of board members was not specifically addressed by the literature review. To the best knowledge of this author this is the first study that has raised this issue, so this element of board composition provides a future area for research.

Proposition (9b) specifically addressed the issue of the role of non-executive directors. As shown in Table 18 while executive directors bring intimate knowledge of their companies to the boardroom non-executive directors bring independence to the boardroom which is vital to ensuring best business practices which ensures long term success.

Proposition 10:

P10. Corporate ownership, control, and corporate performance are interlinked. It is expected that blockholders will have a favourable impact on corporate governance and performance.

Following on from the research into board composition, the part played by shareholders in the adoption of corporate governance practices and corporate performance was reviewed. The literature review identified the importance of equity shareholdings with regard to corporate governance (Jensen and Meckling, 1976) and the issue of board members (Zahra and Pearce, 1989) and institutions as shareholders (Zahra *et al.*, 2000). The review indicated the importance of blockholders and the potential for problems to arise if this small minority of shareholders have an undue influence and run companies for their own benefit and to the detriment of the majority of shareholders (Lemmon and Lins, 2003; Dalton *et al.*, 2003). This is particularly the case where major shareholders are also members of the management team. However, it was found that blockholders can have a positive effect on corporate governance and corporate performance (Maury and Pajuste (2005); Holderness (2003); Claessens *et al.*, (2002) and Huddart (1993)) although other authors (Shleifer and Vishney (1997); McConnell and Servaes (1990) and Stulz (1988)) have disputed some of these findings. Therefore this author was presented with conflicting evidence on the advantages and disadvantages of blockholders.

This research concentrated on management who were also shareholders. In Table 18 the effect of management blockholders on corporate governance is shown. Those companies that had blockholding shareholders that were also members of management suffered from poor corporate

Table 18 (continued): Summary of Research Aims, Propositions and Findings.

Aim	P#	Proposition	Adelphia	Global Crossing	Guidant	Qwest	Waters	WorldCom
To determine if the corporate ownership structure affects corporate performance.	P10	Corporate ownership, control, and corporate performance are interlinked. It is expected that blockholders will have a favourable impact on corporate governance and performance.	This section identified the role of blockholders (Wright and Ferris, 1996) as a key area of research in this study. Blockholders were found to be key in the ownership of all the companies except for Guidant and Waters.					
			Adelphia was controlled 100% by the Rigas family by giving certain classes of shares more voting rights than other classes of shares.	Global Crossing was a publically quoted company with the founder maintaining a blockholding.	Guidant was a publically quoted company with no blockholders present on the shareholder register	Qwest was a publically quoted company with the founder maintaining a blockholding.	Waters was a publically quoted company with not blockholders present on the shareholder register.	WorldCom was a publically quoted company with no blockholders present on the shareholder register.
		Summary	Where management were also blockholders corporate governance issues arose to the detriment of company performance.					
To determine the relationship between executives' total compensation, company performance and corporate governance.	P11 P12	There is a relationship between executives' salaries and corporate governance. Increasing the size of executives' salaried remuneration will improve corporate governance practices. There is a relationship between executives' non-salary compensation and corporate governance. Increasing the size of executives' non-salaried remuneration will improve corporate governance practices.	The executives of Adelphia, Global Crossing, Qwest and WorldCom all received significant cash and non cash remuneration. The executives of Guidant and Waters received cash and non-cash remuneration more in line with industry standards.					
			In 2002 the SEC accused the Rigas family of "*rampant self dealing ... including the undisclosed use of corporate funds for Rigas family stock purchases and the acquisition of luxury condominiums in New York and elsewhere*".	The founder of Global received significant remuneration from the company but this fact was never challenged by the SEC or the shareholders.	Guidant executives' remuneration was considered on a par with industry standards.	In 2002 Fortune named the founder of Qwest "*the nation's greediest executive*".	Guidant executives' remuneration was considered on a par with industry standards.	The Bankruptcy Examiner in 2003 remarked on the "*the remarkable concentration of power and authority in one man, Mr Ebbers, that colored almost every aspect of compensation decision-making at the company*"
		Summary	Excessive remuneration packages in a number of the companies researched appear to have had serious corporate governance consequences.					

governance and poor corporate performance (Adelphia, Global and Qwest). Such shareholders did not seem to appreciate the conflict of interest presented by their situations and consequently took advantage of their privileged positions. Companies with non-management blockholders did not suffer to the same extent. Both these findings seem to contradict the findings of Singh and Davidson (2003) but to a certain extent support the findings of Chen and Yur-Austin (2007). The conclusion is arrived at therefore, that where necessary corporate governance regulations must be stringently enforced and boards of directors must carry out their fiduciary responsibilities correctly to ensure that there is no lapse in best business practices.

Proposition 11 and 12:

P11. There is a relationship between executives' salaries and corporate governance. Increasing the size of executives' salaried remuneration will improve corporate governance.

P12. There is a relationship between executives' non-salary compensation, corporate governance. Increasing the size of executives' non-salaried remuneration will improve corporate governance practices.

The alignment of the interests of management and shareholders is central to effective corporate governance (Bruce *et al.*, 2005). Caulkin (2007) and Business Week (2001) have pointed out the extent of the increases in executive remuneration in the last decade while Section B1.7.1 discussed the best and most equitable ways to ensure that there is an effective alignment between these two factors (Gomez-Mejia and Wiseman, 1997; Brickley *et al.*, 1988; Barkema and Gomez-Mejia, 1998 and Daily *et al.*, 1998). In Section C1.4.6 it was proposed to research the part played by salary and non-salary remuneration in this relationship.

Executive remuneration is one of the most emotive aspects of business today. In boom times, executives justify their remuneration packages by comparing them with the overall wealth they have created for their shareholders. However, when economic downturns occur these once justifiable remuneration packages suddenly seem obscene. Recent huge write-offs by banks such as Morgan Stanley, JP Morgan Chase, Lehman Brothers and Goldman Sachs, have called into question the propriety of the size of such remuneration packages. Similarly, when firms go bankrupt in normal business cycles the same question must be asked. The remuneration paid to the CEOs and directors of Adelphia, Global, Qwest and WorldCom, now seems unjustifiable in light of their demise. However, the question this research has addressed is more concerned with whether: did the prospect of large remuneration packages drive the executives to take shortcuts in the enforcement of corporate governance measures with the resultant effect on corporate performance?

This research has shown that the above question is almost impossible to answer. Critics will infer that greed led CEOs to make reckless decisions, while the opposite view is that bold business decisions were made and those decision makers deserved to be remunerated. However, as Table 18 shows the evidence indicates that excessive remuneration did play a part in the poor corporate governance in a number of companies. In Adelphia and WorldCom in particular, such huge remuneration packages were paid to executives that these packages in themselves were detrimental to good corporate governance practices. The same accusation could be made against Qwest and to a lesser extent Global Crossing. Consequently, it is again in those companies that were led by dominant CEOs or Chairmen which experienced less than best governance practices while those companies (Guidant and Waters) that had a history of good corporate governance practices did not deviate from these practices. Therefore while Tosi *et al.*, (1998) and Jensen and Murphy, (1990) found little relationship between CEO's remuneration and corporate performance this research has shown that excessive remuneration packages detrimentally affect both corporate governance and corporate performance.

E1.2.2 Entrepreneurship

The proposition covering entrepreneurship stated "Entrepreneurship will influence how effectively corporate governance is operated within companies". The literature review found an abundance of research on entrepreneurship, but much of this research appeared to be at the macro level. This research was more concerned with entrepreneurship at the company level and understanding how engrained it was in each company. This was achieved by rating entrepreneurship in each company based on a series of questions compiled by this author.

The rating of each company produced interesting results in that, from a performance perspective, the most successful companies were not considered the most entrepreneurial. It was those companies that were most "disruptive" in their industry segments that were the most entrepreneurial and therefore, it was in these companies that corporate governance issues were of major importance. On the other hand, those companies that were entrepreneurial but less disruptive, seemed to have less corporate governance issues. The relationship between corporate governance, entrepreneurship and corporate performance is discussed in the following section in more detail.

E1.2.3 Corporate Governance, Entrepreneurship and Corporate Performance

The aim of this research was to examine: "The influence of entrepreneurship on the relationship between corporate governance and corporate performance." This research has shown that entrepreneurship is important to the success of a company, but strong corporate governance is even more important for the long term success of entrepreneurial companies as it is these

companies that are more prone to lapses in best business practices, largely due to the very nature of entrepreneurship. Table 17 classifies each of the companies researched according to Miller's (1989) Typology of Firms. Table 19 restates each proposition and states whether each company was compliant with the best business practices associated with each proposition. The results show a pattern. "Planning" companies were found to be corporate governance compliant. This is due to the nature of these companies. As shown in Appendix 2 "Planning" firms exhibit the traits of more established firms in that they tend to be run through elaborate control and planning systems and have a powerful cadre of experienced managers. If companies can operate successfully with these types of control, thereby ensuring corporate governance compliance, and be entrepreneurial at the same time, this author believes it is these types of companies that will exhibit superior long term performance.

The four companies that have been classified as unsuccessful have also been classified, using Miller's typology, as "Simple/Entrepreneurial" firms or "Organic/Adaptive" firms. This research has shown that the reasons for each company's failure were largely the result of the characteristics of each of the typological classifications. "Simple" firms tend to be dominated by the owner/founder. This trait can clearly be seen in Adelphia and WorldCom, where the actions of the founders were largely responsible for their failures. Both companies were entrepreneurial but they also both failed because they did not adhere to best corporate business practices.

Global Crossing and Qwest have been classified as "Organic" Firms which tend to operate in dynamic environments. While both firms were not dominated by their founders to such an extent as Adelphia and WorldCom, they still both failed due to corporate governance failings and their failure to fully understand their chosen market segments. Adherence to correct corporate governance procedures, as well as being entrepreneurial, would undoubtedly have made success for both of these companies a more likely outcome.

In conclusion therefore, this research has shown the profound influence that entrepreneurship can have on the corporate governance/corporate performance relationship. Long established entrepreneurial companies with an acceptance of good corporate governance practices, will tend to be successful. Those companies that place entrepreneurship ahead of good corporate governance, will tend not to be successful. While the latter companies can grow very rapidly, rapid growth cannot replace or be a substitute for good corporate governance. Growth may hide corporate governance issues for a time, but ultimately these issues need to be addressed before they threaten the existence of companies. Therefore, while entrepreneurship drives corporate performance, without good corporate governance this performance is unsustainable. The

Table 19: Summary of Companies' Corporate Governance Compliance

P#	Proposition	Adelphia *(Simple)*	Global Crossing *(Organic)*	Guidant *(Planning)*	Qwest *(Organic)*	Waters *(Planning)*	WorldCom *(Simple)*
P1	National institutions impose corporate governance regulations with the intention of promoting economic stability and growth within economies. These laws are passed in response to macro economic influences (e.g. the lack of or presence of banking crises and asset price stability/volatility).	N/A	N/A	N/A	N/A	N/A	N/A
P2	Good corporate governance in companies is driven by the corporate governance practices enacted by national institutions.	Non-CG Compliant	Non-CG Compliant	CG Compliant	Partial CG Compliant	CG Compliant	Non-CG Compliant
P3	The history of a country affects the corporate governance structures adopted by companies.	N/A	N/A	N/A	N/A	N/A	N/A
P4	The history of a company affects the corporate governance structures adopted by that company.	Non-CG Compliant	Non-CG Compliant	CG Compliant	Partial CG Compliant	CG Compliant	Non-CG Compliant
P5	The background of business leaders influences companies' attitude to corporate governance.	Non-CG Compliant	Non-CG Compliant	CG Compliant	Partial CG Compliant	CG Compliant	Non-CG Compliant
P6	Financial issues influence the capital structure of corporations which in turn contributes to management's attitude to best corporate governance practices.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant
P7(a)	Companies in the early stages of their life cycle will experience steady growth as they strive to gain market share. Corporate governance issues will be at a minimum as management and company owners' interests are closely aligned.	CG Compliant	CG Compliant	CG Compliant	CG Compliant	CG Compliant	CG Compliant
P7(b)	Quoted companies will outperform companies whose boards have been largely selected by a CEO/founder and are therefore less diverse in experience. However, corporate governance issues will increase as management and company owners' interests diverge.	Non-CG Compliant	Non-CG Compliant	CG Compliant	Non-CG Compliant	CG Compliant	Non-CG Compliant

Table 19: Summary of Companies' Corporate Governance Compliance

P#	Proposition	Adelphia *(Simple)*	Global Crossing *(Organic)*	Guidant *(Planning)*	Qwest *(Organic)*	Waters *(Planning)*	WorldCom *(Simple)*
P8	Boards of directors appoint CEOs with the expectation that they will grow the companies rapidly, increase profitability and promote best business practices.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant
P9(a)	The more static the composition of a board of directors the less growth a company will experience. However, corporate governance issues will decrease as management and company owners' interests are more aligned.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant
P9(b)	Companies whose boards of directors are comprised largely of executive directors will experience less growth than those companies whose boards are dominated by non-executive directors, but more corporate governance issues due to the lack of independent board directors.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant
P10	Corporate ownership, control, and corporate performance are interlinked. It is expected that blockholders will have a favourable impact on corporate governance and performance.	Non-CG Compliant	Non-CG Compliant	N/A	CG Compliant	N/A	N/A
P11	There is a relationship between executives' salaries and corporate governance. Increasing the size of executives' salaried remuneration will improve corporate governance practices.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant
P12	There is a relationship between executives' non-salary compensation and corporate governance. Increasing the size of executives' non-salaried remuneration will improve corporate governance practices.	Non-CG Compliant	Non-CG Compliant	CG Compliant	CG Compliant	CG Compliant	Non-CG Compliant

relationship between corporate governance, entrepreneurship and corporate performance was highlighted in President Obama's inaugural speech on January 20th 2009, when he commented: "Nor is the question before us whether the market is a force for good or ill. Its power to generate wealth and expand freedom is unmatched, but this crisis has reminded us that without a watchful eye, the market can spin out of control - and that a nation cannot prosper long when it favors only the prosperous".

E1.3 Contributions of the Research

This research explored the influence of entrepreneurship on the relationship between corporate governance and corporate performance. The research was exploratory in nature and therefore did not set out to test hypothesises, but instead examined a number of propositions. Nevertheless, the research is regarded to have made an original contribution to the body of literature on both corporate governance and entrepreneurship. This section discusses the theoretical and managerial contributions of this research.

E1.3.1 Theoretical Contributions

- This study has contributed to existing knowledge by highlighting the importance of the relationship between corporate governance and entrepreneurship and corporate performance. Traditionally governance and entrepreneurship have not been considered together except in rare cases (Williamson, 2007). This study has reinforced the writings of authors such as Williamson (2007) that governance need not conflict with entrepreneurship but can by promoting best practices in business in fact enhance entrepreneurship. This was shown to be the case both in Guidant and Waters, where the right balance between governance and entrepreneurship was reached. The issue that remains is how to formalise this relationship so that the success achieved by Guidant and Waters can be replicated in other companies both in the high technology arena and other industry segments.

- Much of the research into corporate governance to date has looked at the components of this topic in isolation. For example, La Porta *et al.* (2000, 1998, 1997) examined the differences between legal systems that operate in individual countries and the implications of these differences on the amount of protection offered to stakeholders, management and employees. With regards to executive remuneration, much research has been done on remuneration's influence on executive behaviour (for example, Jensen and Murphy, 1990 and Tosi *et al.*, 1998).

  However, the current literature has seldom examined all the drivers of corporate governance together. This study has shown the importance of examining all the drivers of

governance together rather than separately. Indeed, the partial examination of issues under consideration provides an incomplete understanding of issues and at times leads to misleading conclusions being reached because the results of the interaction between all the issues is ignored. Authors are therefore urged to adopt a more holistic approach when examining corporate governance.

- Agency Theory has been shown to be the cornerstone of corporate governance. Historically, the theory has been primarily concerned with the relationship between shareholders and management. However, the last twenty years has seen an upsurge in the role of entrepreneurs many of whom are now blockholders and who are therefore shareholders, directors and management. Dahya *et al.*, (1998) have already stated that where blockholders are management, such managements often have a disproportionate influence in the company to their shareholding. Holderness (2003) has shown this can be beneficial for all shareholders, but this research has shown that the opposite can also be true. Therefore with increasing numbers of individuals becoming blockholders, this research has highlighted the need for the research into Agency Theory to be expanded to take into account the changing nature and dynamics of the relationship between principals and agents, especially where these two parties are the same people.

- This research has highlighted the relative ineffectiveness of shareholders, and in particular, institutional shareholders in the exercise of their right to control the actions of management. Too often institutional shareholders appear too willing to approve the actions of management without questioning the rationale for these actions. While shareholder inactivity is the right of any shareholder, institutional shareholders are now the largest owners of corporate stock and therefore by this fact have more of an obligation to monitor and question the actions of management, especially in the current era of corporate responsibility. How institutional shareholders can best exercise their rights and responsibilities in a rapidly changing business environment requires consensus between the business community, government and corporate stakeholders in general because if a consensus is not reached amicably a consensus will be forced on all parties if and when the next economic disaster occurs. Agreement in such circumstances is likely to be driven more by political or economic expediency that is unlikely to be in the best interests of all stakeholders.

- In addition to the presence of blockholders and individual shareholders on corporations' share registers, this research has also shown that in the shareholder-corporate relationship, there is a third party that potentially has an even greater influence on corporations than

either of the aforementioned parties. This is the role of central governments. On the strength of this finding, this author suggests that further examination of the role of governments in corporate governance be undertaken. While this subject was discussed in the context of the legal drivers on governance, the role of governments in the corporate environment has now grown to such an extent that the expanding role of governments in corporations requires better understanding. A recent example of this is the US government's role in the BP oil spill in the Gulf of Mexico. Commentators are saying that if the US government can effectively take over the insurance giant AIG and the auto company General Motors to prevent their insolvency it would be quite possible for the government to take over the US assets of BP. This type of governmental intervention is far more extreme than the government's current role as a stakeholder and therefore raises new complex issues, the ramifications of which have not been considered both from a theoretical or practical perspective.

- In 1992, the Cadbury Report made a number of recommendations concerning the function and role of boards of directors. Principal among these recommendations was that executive directors' contracts should not exceed three years without shareholder approval. With regard to non-executive directors "the majority should be independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgement". With regards to the latter recommendation, many boards are now dominated by non-executive directors. However this research has shown that, while the importance of non-executive directors is recognised, the importance of consistency and stability of boards is being compromised. Executive directors who work honestly in the best interests of companies have much to offer companies because of their inherent knowledge of their companies and industries. While executive directors should never consider their positions as a right rather than a privilege, a re-examination of the role of executive directors is required. Indeed the present structure of single tier boards found in US and UK boards requires a re-examination to determine whether they are still "fit for purpose" in the current economic climate.

- On July 16th 2009, the Walker Review was published on the state of corporate governance, particularly in the UK banking industry. In this report, five recommendations were made on the role of non-executive directors (NEDs) mainly dealing with the need for NEDs to be more committed to their roles and recognising that companies need to give their NEDs more and better training.

As discussed above, this research recommends a re-evaluation of the role of executive directors, but at the same time confirms the concerns raised by the Walker Report that the role of the NED to be made more effective in order to prevent the potential abuses by management that were highlighted in this research. While the importance of non executive directors cannot be doubted, they now wield unprecedented authority in corporations while at the same time having little financial commitment to these companies. Therefore this authority needs to be better understood in relation to the authority exercised by executive directors and how this authority impacts the interests of all stakeholders in corporations.

E1.3.2 Managerial Contributions

This research has examined the relationship of two components of business today. At the start of this thesis (Section A1.1) it was stated that the relationship between corporate governance and entrepreneurship was often considered adversarial. However, this research has shown this is not necessarily the case which has important managerial implications, as discussed below.

- The fact that corporate governance affects so many areas of management means that management can no longer assume that corporate governance is solely about addressing the rights of shareholders and management, but is concerned with ensuring the rights of all stakeholders. Corporate governance involves many complex issues and management must take action to understand all these issues in their entirety rather than each issue in isolation. For example, in the cases of Adelphia and WorldCom, poor governance at management level ultimately resulted in the demise of these companies and many thousands of people, both employees and shareholders, losing their jobs and life savings.

  To prevent this kind of disaster, management must be proactive in their approach to corporate governance and one way to do this is for corporate governance to be adequately represented at board level in a position, such as the Chief Governance Officer (CGO) or the Chief Compliance Officer (CCO). While exercising good governance to further a board's fiduciary duty remains the responsibility of every director and member of executive management, the CGO should be a dedicated executive who can facilitate an organization's governance best practices. Creating the CGO position demonstrates an organization's commitment to excellence in governance, although no board can abdicate or delegate its oversight responsibility to any individual. At present, CGOs are primarily found in large corporations or public health organizations. However, in the former case the CEO or a member of the in-house legal team often acts as the CGO. In the latter case, the CGO is often more

concerned with ethical issues rather than governance issues. In both cases this does not give the CGO the independence that is required to properly fulfil his role.

The CGO role is further complicated by the fact that the "constituency" of the role can be misunderstood. While shareholders, especially institutional shareholders, may believe that the CGO is their representative on a board the CGO is not solely the investor relations' officer - other key constituents are the company's employees, customers and the regulators, which means that the CGO should, for example, interact with the governmental agencies on a regular basis more frequently than ever before.

Examples of the role and sphere of influence of the CGO are as follows:

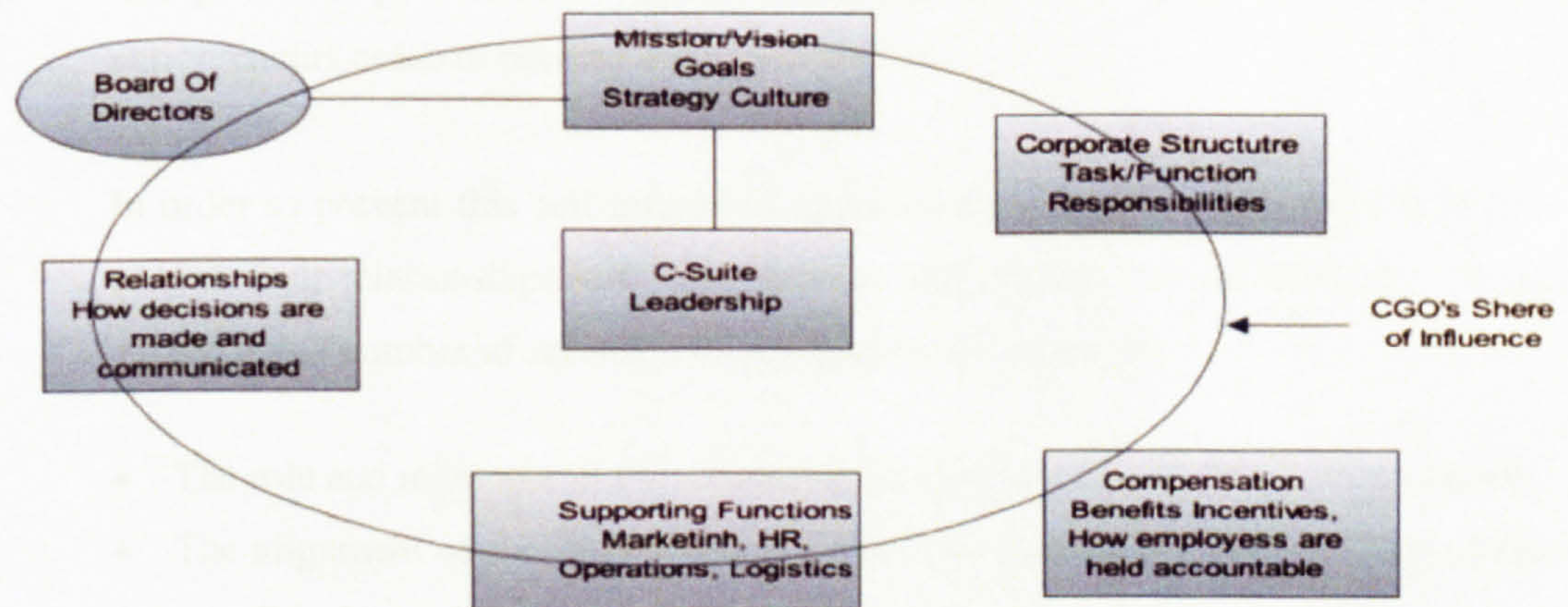
- It must report directly to the CEO and the Board and set the Board agenda on governance matters.
- The position must not be an adjunct to an existing officer' role, for example that of Chief Counsel or Chief Financial Officer.
- The corporate code of ethics and all matters of ethics and integrity are a core part of the CGO's role.
- The CGO must have or develop a reputation of uncompromising integrity.
- The CGO must be an advocate of all the stakeholders of a company. This means that he should be equally interested in the governance in his company as the entrepreneurship in the company and ensure that they are not in conflict.
- The CGO must institute reporting mechanisms within the company for the reporting of compliance issues for investigation and resolution, including confidentiality measures for reporting employees and reporting of violations to outside authorities as appropriate or required.

This author recommends that all public companies should be required to appoint the position of CGO to their boards and this position should be held by a non executive director. Private companies should be encouraged to appoint similar positions to their boards as an indication of their intent to have proactive corporate governance.

- Sections of this research have been concerned with blockholders – their role in a corporation, their rights, and their responsibilities. Historically, the term blockholder has referred to institutional shareholders, which has led some to suggest that that these shareholders will attempt them to persuade corporations to follow courses of action favourable to themselves largely for tax reasons (Brealey *et al.*, 2006 and Black, 1976).

This research has shown that blockholders are no longer solely institutional shareholders, but are often individuals or families. The result of this can be profound

Figure 11: The Sphere of Influence of a CGO.



Source:http://www.corporate-eye.com/blog/2008/08/wanted-a-chief-governance-officerwith-teeth/

on corporations, as in the case of Adelphia and WorldCom, or it can be benign as in the case of the Slim family's investment in WorldCom and MCI. Whatever the implications of individual blockholders on the performance of corporations, the presence of such blockholders on corporate shareholder registers has practical implications as such shareholders are often the most entrepreneurial members of boards and executive management teams. Therefore the issue of the alignment of shareholder and management interests is not so much how to align these parties' interests, but is how to prevent the alignment of these interests being so close that the interests of other shareholders are ignored. Practical solutions to this issue could include excluding blockholders from holding management positions, legislating to ensure non executive directors are in the majority on boards or requiring blockholders to place their investment in companies in trusts while they are members of management teams.

- Remuneration plays a number of roles within corporations. It acts as a reward mechanism for all participants of corporations; it is used as a measure of success and it is used to align the interests of shareholders and management. This research has shown that, that the potential and actual scale of executive remuneration has grown so much that rather than acting as an incentive for fiscal and corporate responsibility, some executives only appear to be interested in increasing the size of their remuneration

packages without regard to the long term health of their companies. Thus the assumption by Bruce *et al.,* (2005) that executive pay can prevent self interest opportunitism by executives may be fundamentally incorrect. In other words, where it is assumed that entrepreneurs go into business for creative or financial reasons, there may be a point where the rewards of entrepreneurship become more important than entrepreneurship itself. This research therefore raises the question – at what point do entrepreneurs cease to become entrepreneurs?

In order to prevent this self interested opportunitism, boards of directors will have to rethink their relationships with management with regards to executive pay. It would appear that a number of actions will be required, for example:

- The role and influence of the remuneration committee needs to be strengthened.
- The alignment of the interests of directors and management must be strengthened, possibly by requiring both parties to actually own shares, rather than just share options.
- The size and method of paying executive bonuses must be reconsidered. Bonuses should be based on long term results rather than short term results and the payment of such bonuses should be made over longer periods.
- This research has highlighted the often detrimental role that corporate founders play in the long term health of their corporations. While founders can have the vision to guide their companies from small entrepreneurial entities to multi-billion dollar corporations, there is also the possibility that they are not the correct people to assume this role. In addition, in the longer term founders' interests often appear to carry more weight in management decisions than their shareholdings would warrant. The "containment" of this influence poses the same questions that arose when the role of blockholders was considered above and therefore the same recommendations apply.
- Much of the literature surrounding entrepreneurship has been concerned with defining it and measuring it on the national level. Apart from the research of Ireland *et al.* (2006), this research has highlighted the absence of any real methods of measuring entrepreneurship within individual companies. Consequently, while the benefits of entrepreneurship are understood, how to encourage it in individual companies cannot be fully appreciated until measurement criteria are developed and tested.

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E1.4 Further Areas for Research

Both corporate governance and entrepreneurship are two subjects of business management that are never far from the public's eye, as has been shown in the recent credit crisis. Indeed, such crises only highlight the importance of corporate governance and entrepreneurship and the need for continued research into their relationship. Although, this research has made a number of contributions (Section E1.3), this author believes that there are additional opportunities for research. A number of these opportunities were initially identified in the earlier section on the limitations of this research (Section A1.5). Below is a list of areas for research that this author has identified:

- This research has looked at corporate governance and corporate performance from a historical perspective. The next stage of research in this topic would be a longitudinal study where the author would be able to study on a real time basis how corporations facing rapid technological change and are led by entrepreneurial leaders perform over a period of time. A key element of this research would be to determine if the ever evolving regulatory framework of corporate governance has a stronger influence on corporate performance today than it appears to have had on the companies studied in the late 1990s and the very early years of 21st Century.

- The Credit Crisis of 2008/2009 has shown how quickly the economic environment around the world can change. Such crises are no longer country specific but move from one country to another before governments can act to stem them. While this research has been carried out on United States based high technology companies, additional research should be carried out in other countries, cultures and industries to see if comparable results are obtained.

- Section D1.4 highlighted the fact that the influence of taxation on corporate governance was not possible to research because such research requires a longitudinal study. The influence of taxation on corporate governance however, is an important issue and needs to be addressed.

- Board composition (Hillman and Dalziel, 2003; Lehn *et al.*, 2003; Jensen, 1993 and Baysinger and Butler (1985) is a topic that has been studied in depth. Although the importance of it in new, smaller companies is well understood, the importance of board composition in new large corporations is less well understood. In particular, further research into directors' length of tenure would provide valuable insight to the contribution that directors can make to the success of a company.

- The role and need for entrepreneurs in economies is well understood. However, this research has indicated that entrepreneurs are not good at running companies in the long run. Research is needed to understand the optimal time for entrepreneurs to relinquish control of their companies and hand this control over to professional managers.

- The remuneration of executives in rapidly growing, large companies and its relationship with corporate governance and performance, is an area requiring additional research. Historically companies have grown at a steady rate, but the rapid growth of high technology companies into large organizations in a relatively short time frame is a new phenomenon. Therefore the impact of this phenomenon on executive remuneration, and vice versa, requires more investigation.

- In depth interviews with the participants of the companies would assist this research. In this research many of the decision makers were unavailable for interviews due to the fact that they were no longer connected with these companies or were serving jail sentences for actions connected to their companies. Any future research should include these in depth interviews.

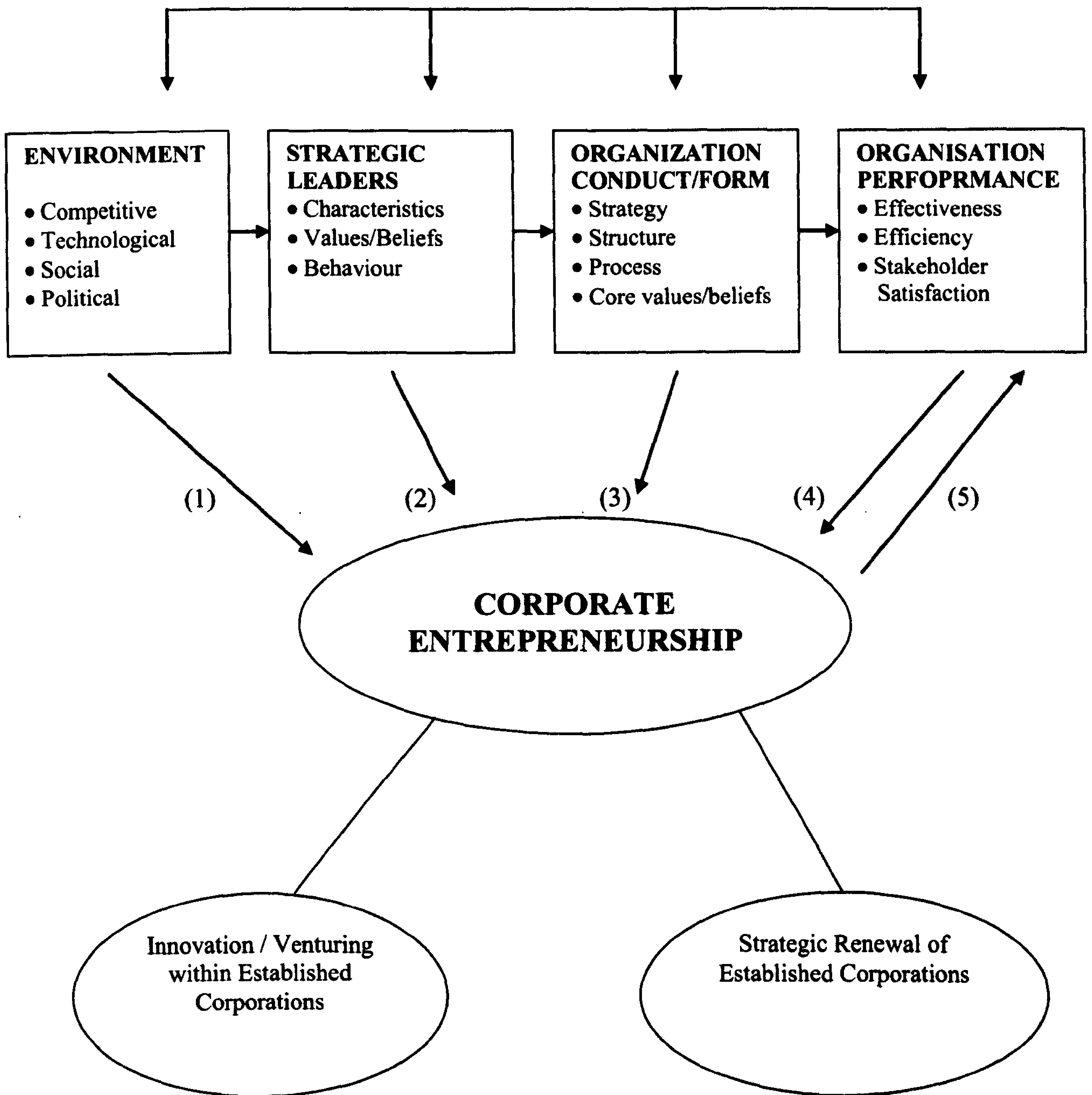
- This research has highlighted the fact that the measurement of entrepreneurship in individual companies appears to be in its infancy. While some research on this issue has been performed, most notably by Ireland *et al.* (2007) much work is still required both from the theoretical and practical perspective. In particular, current research has concentrated on the results of entrepreneurship rather than the process of entrepreneurship. Studying the process of entrepreneurship as it occurs in companies would give a better understanding of the subject matter.

- This research has primarily concentrated on examining the actions of management. With regards to corporate entrepreneurship more research is required into corporate entrepreneurship and middle management. Unless corporate entrepreneurship is understood and adopted by middle management, it will be extremely difficult for companies to be able to claim that they are entrepreneurial. However, at present little research appears to have been undertaken into this relationship.

E1.5 Conclusion

The final part of this thesis provided an overview of the research study, together with a discussion of the research aim and objectives (Section E1.1). Following this, the empirical results were debated in relation to the literature, which showed that this was a worthwhile study that has provided new insights into the corporate governance/entrepreneurship/corporate performance relationship (Sections E1.2.) The contribution of this research to management was then discussed, primarily to aid management in understanding their contribution to these relationships (Section E1.3) and finally future opportunities for further research were suggested (Section E1.4).

Appendix 1: Fitting Corporate Entrepreneurship Into Strategic Management



Fitting Corporate Entrepreneurship Into Strategic Management

(Guth & Ginsberg, 1990)

The authors identified four groups of influences on corporate entrepreneurship and listed prior research findings under each influence:

(1) *Environmental influences on corporate entrepreneurship.*

- Environmental changes such as deregulation can result in firms having to re-alignment themselves in their market.
- The more dynamic an environment, the more firms will be entrepreneurial.
- The structure within an industry will affect the innovative opportunities available.

(2) *Strategic leaders will influence corporate entrepreneurship*

- The management style of top managers will affect the success of new ventures.
- The effectiveness of middle management at building alliances with their peers and upper levels of management will affect the success of implementation of their entrepreneurial ideas.
- Innovative banks are managed by more highly educated teams that are also more diverse in their functional backgrounds.

(3) *Organisational performance influences corporate entrepreneurship*

- More radical and frequent product and process innovations are made by successful firms rather than unsuccessful firms.
- Firms that have experienced long downturns and changes in management are more innovative once there have been changes in top management.

(4) *Organization form/conduct influences corporate entrepreneurship*

- Firms that grow through acquisitions rather than through internal innovations have lower expenditure on research and development.
- Creating new business venture units in larger organizations does not affect the level of sales from the new products. This finding would tend to contradict the commonly held belief that highly structured organisations cannot be innovative.

Finally, the authors noted the observation that:

(5) *Corporate entrepreneurship influences performance*

- Scale of entry in new product introductions affects performance
- Venture backed start-ups tend to reach profitability twice as fast and end up twice as profitable as corporate start-ups.
- Early entry in new product markets does not affect performance.

The authors wrote this paper over ten years ago. Since that time many of the above hypotheses have been further researched. The results of some of this additional research are referenced in this paper.

Appendix 2: Miller's Typology of Firms.

Miller's typology of firms is based on Mintzberg's strategy making modes and therefore the characteristics of each type of firm closely follow his work. Miller's typology is as follows:

Miller's Typology of Firms		
Simple Firms (Entrepreneurial)	**Organic Firms (Adaptive)**	**Planning Firms (Planning)**
- Small firms usually operated by owner-managers.	- Due to the dynamic environment in which the companies operate decision-making is not centralised but is delegated to lower levels.	- Firms tend to be run through elaborate control and planning systems by committees and task forces.
- Power is centralised in the hands of owner operator.	- The firms operate in a dynamic environment where technology and customer requirements can change quickly.	- Power is centralised, either in the form of a dominant CEO or a powerful central group of managers or technocrats.
- Strategy within the firms is intuitive rather than analytical.	- Extensive use is made of technocrats in the search for new innovations who scan the environment for new opportunities.	- Analysts play a major advisory role in strategy making, there is systematic cost/benefit analysis and there is integration of decisions.
- There is little structural organisation. Rather the personality of the firm largely reflects that of the dominant individual.	- Open and extensive internal communications are encouraged to facilitate the successful implementation of innovative projects.	

Appendix 3: Prices and Technological Change in High Technology Industries.

In the cable industry between 1997 and 2002 US cable operator's margins rose from $11 billion per year to $18.8 billion per year. One explanation of this increase is that technological improvements in the industry have led to lower costs while prices have been maintained. However, other explanations have been advanced. While the industry would say that the increased offerings by the industry warrant the price increases, Cooper (2003) has said these price increases have occurred more due to the monopolistic power of a few dominant players in the marketplace. For example, 40% of the top TV channels are owned in whole or in part by the cable operators. In addition, the commercial terms that many cable operators offer are anticompetitive. At the same time however in markets where there are two or more cable operators prices have been shown to be on average 17% lower than in those markets where there is just a single cable operator. The monopolistic power of the cable operators has been further compounded by the mergers that have taken place in the industry. Between 1998 and 2001 operators spent six times as much on mergers and acquisitions as they spent on capital expenditures to upgrade their systems.

Contrary to certain price increases that have been seen in the cable industry, transmission rates within the telecommunications industry have fallen over the past decades. For example, the average local rate for a residential phone line (after adjusting for inflation) from 1940 to 1980 declined consistently. This trend changed in the 1980s when the inflation adjusted rates started to rise. This was principally due to the inclusion of subscriber line charges into the line rates. However, while the line rates have risen overall the local rates component of these rates have fallen.

Long distant rate prices from 1984 to 2003 have mirrored the movement of the local rates. The former rates over this twenty year period have dropped from 32 cents per minute to 8 cents per minute. This decline in prices represents a decline of more than 80% after adjusting for the impact of inflation (FCC Report, 2005)

The telecommunications equipment industry has also seen a fall in prices. This has been for a number of reasons. The 1990s saw a rapid pace of technological change which meant that the capabilities of equipment improved significantly at the same time as manufacturers were increasing their manufacturing capacities. This was largely in response to demand created by what was later to be known as the "Dot Com Bubble". At the time it appeared that demand for the latest telecommunications equipment could not be met in the foreseeable future so manufacturers kept increasing capacity or buying extra capacity with the result that established

companies acquired their competitors at premium prices. Ultimately, as in previous "bubbles", the bubble burst. Supply exceeded demand, prices fell and manufacturers went out of business.

Appendix 4: Standard and Poor's Global Industry Classification Standard 1200 Index.

The GICS or the Standard and Poor's Global Industry Classification Standard 1200 Index codes companies by using "8-digit codes that correspond to various business or industrial activities, such as Oil & Gas Drilling or Wireless Telecommunication Services. GICS is based upon a classification of economic sectors, which can be further subdivided into a hierarchy of industry groups, industries and sub-industries. In total, there are 10 economic sectors, 23 industry groups, 59 industries and 123 sub-industries categories, to date" (www.msci.com).
Within the GICS there are two high technology sectors:

- Information Technology (IT) Sector: this sector covers the following areas: firstly, Technology Software and Services, including companies that primarily develop software in various fields such as the internet, applications, systems, databases management and/or home entertainment, and companies that provide information technology consulting and services, as well as data processing and outsourced services; secondly Technology Hardware and Equipment, including manufacturers and distributors of communications equipment and peripherals, electronic equipment and related instruments; and thirdly, Semiconductors and Semiconductors Equipment Manufacturers.
- Telecommunications Services (Telecoms) Sector: this sector contains companies that provide communications services primarily through a fixed line, cellular, wireless, high bandwidth and/or fiber optic cable network (www.standardandpoors.com).

Appendix 5: Composition of Information Technology Sector of GICS.

Composition of Information Technology Sector of GICS as at September 15, 2005

Technology Sector: Company	Symbol	Country
ADC Telecommunications	ADCT	USA
Adobe Systems	ADBE	USA
Advanced Micro Devices	AMD	USA
Advantest	6857	Japan
Affiliated Computer	ACS	USA
Agilent Technologies	A	USA
Alcatel SA – A Shares	CGE	France
Altera Corp.	ALTR	USA
Analog Devices	ADI	USA
Andrew Corp.	ANDW	USA
Apple Computer	AAPL	USA
Applied Materials	AMAT	USA
Applied Micro Circuits	AMCC	USA
ARM Holdings plc	ARM	Great Britain
ASML Holding NV	ASML	Netherlands
Asustek Computer Incorporated	2357	Taiwan
ATI Technologies Inc.	ATY	Canada
Autodesk, Inc.	ADSK	USA
Automatic Data Processing Inc.	ADP	USA
Avaya Inc.	AV	USA
BMC Software	BMC	USA
Broadcom Corporation	BRCM	USA
Canon Inc.	7751	Japan
Cap Gemini SA	CAP	France
Celestica	CLS/SV	Canada
Ciena Corp.	CIEN	USA
Cisco Systems	CSCO	USA
Citrix Systems	CTXS	USA
Cognos Inc.	CSN_CN	Canada
Computer Associates Intl.	CA	USA
Computer Sciences Corp.	CSC	USA
Compuware Corp.	CPWR	USA
Comverse Technology	CMVT	USA
Convergys Corp.	CVG	USA
Corning Inc.	GLW	USA
Dassault Systemes SA	DSY	France
Dell Inc.	DELL	USA
Dimension Data Holdings plc	DDT	Great Britain
Electrocomponents	ECM	Great Britain
Electronic Arts	ERTS	USA
Electronic Data Systems	EDS	USA
EMC Corp.	EMC	USA
Epcos AG	EPC	Germany
Ericsson LM AB – B Shares	ERICB	Sweden
First Data	FDC	USA

Technology Sector: Company	Symbol	Country
Fiserv Inc.	FISV	USA
Freescale Semiconductor Inc.	FSL.B	USA
Fujitsu	6702	Japan
Gateway Inc.	GTW	USA
Hewlett-Packard	HPQ	USA
Hirose Electric	6806	Japan
Hitachi	6501	Japan
Hon Hai Precision Industry Company Limited	2317	Taiwan
Hoya Corp.	7741	Japan
Infineon Technologies AG	IFX	Germany
Intel Corp.	INTC	USA
International Bus. Machines	IBM	USA
Intuit, Inc.	INTU	USA
Jabil Circuit	JBL	USA
JDS Uniphase Corp	JDSU	USA
Keyence Corp.	6861	Japan
KLA-Tencor Corp.	KLAC	USA
Konica Minolta Holdings Inc	4902	Japan
Kyocera Corp.	6971	Japan
Lexmark Int'l Inc	LXK	USA
Linear Technology Corp.	LLTC	USA
LogicaCMG	LOG	Great Britain
LSI Logic	LSI	USA
Lucent Technologies	LU	USA
Maxim Integrated Prod	MXIM	USA
Mercury Interactive	MERQE	USA
Micron Technology	MU	USA
Microsoft Corp.	MSFT	USA
Misys	MSY	Great Britain
Molex Inc.	MOLX	USA
Motorola Inc.	MOT	USA
Murata Mfg. Co.	6981	Japan
National Semiconductor	NSM	USA
NCR Corp.	NCR	USA
NEC Corp.	6701	Japan
Network Appliance	NTAP	USA
Nintendo Co.	7974	Japan
Nokia Oyj	NOK1V	Finland
Nortel Networks Corp.	NT	Canada
Novell Inc.	NOVL	USA
Novellus Systems	NVLS	USA
NTT Data	9613	Japan
NVIDIA Corp.	NVDA	USA
Oracle Corp.	ORCL	USA
Parametric Technology	PMTC	USA
Paychex Inc.	PAYX	USA
PMC-Sierra Inc.	PMCS	USA
Qlogic Corp.	QLGC	USA
QUALCOMM Inc.	QCOM	USA

Technology Sector: Company	Symbol	Country
Quanta Computer Incorporated	2382	Taiwan
Research In Motion Limited	RIM0CN	Canada
Ricoh Co.	7752	Japan
Rohm Co.	6963	Japan
Sabre Holding Corp.	TSG	USA
Sage Group	SGE	Great Britain
Samsung Electronics Company Limited	5930	Korea
Sanmina-SCI Corp.	SANM	USA
SAP AG – Common Shares	SAP	Germany
Scientific-Atlanta	SFA	USA
Siebel Systems Inc	SEBL	USA
Softbank Corp.	9984	Japan
Solectron	SLR	USA
Spirent PLC	SPT	Great Britain
STMicroelectronics NV	STM	Netherlands
Sun Microsystems	SUNW	USA
Symantec Corp.	SYMC	USA
Symbol Technologies	SBL	USA
Taiwan Semiconductor Manufacturing Company Limited	2330	Taiwan
TDK Corp.	6762	Japan
Tektronix Inc.	TEK	USA
Tellabs, Inc.	TLAB	USA
Teradyne Inc.	TER	USA
Texas Instruments	TXN	USA
Tiscali SpA	TIS	Italy
Tokyo Electron	8035	Japan
Toshiba Corp.	6502	Japan
Unisys Corp.	UIS	USA
United Microelectronics Corporation	2303	Taiwan
Xerox Corp.	XRX	USA
Xilinx, Inc	XLNX	USA
Yahoo Inc.	YHOO	USA
Yahoo Japan Corp.	4689	Japan

Composition of Telecommunications Service Sector of GICS as at 15 September, 2005

Telecommunications Service Sector: Company	Symbol	Country
ALLTEL Corp.	AT	USA
America Movil, S.A. de C.V. - Series L	AMXL	Mexico
AT&T Corp. (New)	T	USA
BCE Inc.	BCE	Canada
BellSouth	BLS	USA
Bouygues SA	EN	France
Brasil Telecom Participacoes S.A. –PN (ADR)	BRP	Brazil
BT Group	BT/A	Great Britain
Cable & Wireless	CW/	Great Britain
Century Telephone	CTL	USA
China Mobile (Hong Kong) Limited	941	Hong Kong
China Unicom Limited	762	Hong Kong
Citizens Communications	CZN	USA
CTC - A (Cia. de Telecomunicaciones de Chile)	CTCA	Chile
Deutsche Telekom AG	DTE	Germany
France Telecom SA	FTE	France
Hellenic Telecommunications (OTE)	HTO	Greece
Koninklijke (Royal) KPN NV	KPN	Netherlands
Nippon Tel&Tel Co.	9432	Japan
NTT Docomo, Inc.	9437	Japan
O2 PLC	OOM	Great Britain
Portugal Telecom, SGPS, S.A.	PTC	Portugal
Qwest Communications International	Q	USA
SBC Communications Inc.	SBC	USA
Singapore Telecommunications Limited	ST	Singapore
SK Telecom Company Limited	17670	Korea
Sprint Nextel Corp.	S	USA
Swisscom AG	SCMN	Switzerland
TDC A/S	TDC	Denmark
Tele Norte Leste Participacoes SA-PN (ADR)	TNE	Brazil
Telecom Corporation Of New Zealand Limited	TEL	Australia
Telecom Italia SpA	TIT	Italy
Telefonica, S.A.	TEF	Spain
Telefonos de Mexico, S.A. de C.V. –Serie L	TELMEXL	Mexico
TELENOR ASA	TEL	Norway
TeliaSonera AB	TLSN	Sweden
Telstra Corporation Limited.	TLS	Australia
Telus Corp.	T	Canada
Verizon Communications	VZ	USA
Vodafone Group PLC	VOD	Great Britain

UK and US Companies Added to Information Technology Sector from 1 January 1998 to 15 September 2005

Information Technology Sector: Company	Symbol	Date of Inclusion
General Instrument Corporation	GIC.N	02-Feb-98
Gateway Inc.	GTW.N	27-Apr-98
Ascend Communications	ASND.O	12-Jun-98
Electronic Data Systems	EDS.N	11-Aug-98
BMC Software	BMCS.O	01-Oct-98
PeopleSoft Inc.	PSFT.O	02-Oct-98
Solectron	SLR.N	31-Dec-98
Compuware Corp.	CPWR.O	04-Jan-99
Time Warner Inc.	AOL.N	04-Jan-99
Applera Corp-Applied Biosystems Group	PEB.N	06-May-99
Network Appliance	NTAP.O	25-Jun-99
QUALCOMM Inc.	QCOM.O	22-Jul-99
ADC Telecommunications	ADCT.O	02-Aug-99
Lexmark Int'l Inc	LXK.N	13-Aug-99
Adaptec, Inc.(old)	ADPT.O	01-Oct-99
Analog Devices	ADI.N	12-Oct-99
Comverse Technology	CMVT.O	27-Oct-99
Xilinx, Inc	XLNX.O	08-Nov-99
Teradyne Inc.	TER.N	15-Nov-99
Citrix Systems	CTXS.O	01-Dec-99
Yahoo Inc.	YHOO.O	08-Dec-99
NCR Corp.	NCR.N	04-Jan-00
Conexant Systems	CNXT.O	31-Jan-00
Veritas Software	VRTS.O	03-Apr-00
Linear Technology Corp.	LLTC.O	03-Apr-00
Altera Corp.	ALTR.O	18-Apr-00
Sapient Corp	SAPE.O	05-May-00
Siebel Systems Inc	SEBL.O	05-May-00
Maxim Integrated Prod	MXIM.O	10-May-00
Corning Inc.	GLW.N	10-May-00
Agilent Technologies	A.N	05-Jun-00
Novellus Systems	NVLS.O	19-Jun-00
Sanmina-SCI Corp.	SANM.O	21-Jun-00
Mercury Interactive	MERQ.O	29-Jun-00
Broadcom Corporation	BRCM.O	03-Jul-00
JDS Uniphase Corp	JDSU.O	27-Jul-00
Palm Inc.	PALM.O	28-Jul-00
Avaya Inc.	AV.N	02-Oct-00
BROADVISION iNC.	BVSN.O	06-Nov-00
Symbol Technologies	SBL.N	11-Dec-00
Intuit, Inc.	INTU.O	11-Dec-00
QLogic Corp.	QLGC.O	12-Dec-00
Vitesse Semiconductor	VTSS.O	12-Dec-00
Applied Micro Circuits	AMCC.O	02-Jan-01
Jabil Circuit	JBL.N	30-Jan-01
Thermo Electron	TMO.N	01-May-01

Information Technology Sector: Company	Symbol	Date of Inclusion
PMC-Sierra Inc.	PMCS.O	03-Aug-01
Ciena Corp.	CIEN.O	30-Aug-01
NVIDIA Corp.	NVDA.O	30-Nov-01
Waters Corporation	WAT.N	02-Jan-02
Rational Software	RATL.O	01-Feb-02
Electronic Arts	ERTS.OQ	22-Jul-02
SunGard Data Systems	SDS.N	22-Jul-02
Molex Inc.	MOLX.OQ	01-Oct-02
Symantec Corp.	SYMC.OQ	31-Mar-03
FIserv Inc.	FISV.OQ	01-May-03
Convergys Corp.	CVG.N	01-May-03
Concord EFS Inc.	CE.N	01-May-03
Sabre Holding Corp.	TSG.N	01-May-03
Paychex Inc.	PAYX.OQ	01-May-03
Automatic Data Processing Inc.	ADP.N	01-May-03
First Data	FDC.N	01-May-03
Affiliated Computer	ACS.N	02-Apr-04
Freescale Semiconductor Inc.	FSLb.N	03-Dec-04

UK and US Companies Added to Telecommunication Sector from 1 January 1998 to 15 September 2005

Telecommunication Sector: Company	Symbol	Date of Inclusion
Nextel Communications	NXTL.O	01-Apr-98
Sprint Corp. PCS	PCS.N	24-Nov-98
Century Telephone	CTL.N	25-Mar-99
Global Crossing	GBLX.O	29-Sep-99
Qwest Communications International	Q.N	06-Jul-00
Citizens Communications	CZN.N	27-Feb-01
MCI Group	MCIT.O	08-Jun-01
AT&T Wireless Services	AWE.N	09-Jul-01
BT Group PLC		16-Nov-01
MMO2 PLC		16-Nov-01

UK and US Companies Excluded from Information Technology Sector from 1 January 1998 to 15 September 2005

Information Technology: Company	Symbol	Date of Exclusion	Specific Reasons for Exclusion
NextLevel Systems	NLV.N	02-Feb-98	
Digital Equipment	DEC.N	12-Jun-98	Acquired by Compaq Inc.
DSC Communications	DIGI.O	28-Aug-98	Merged with Alcatel SA
Bay Networks	BAY.N	31-Aug-98	Acquired by Nortel Networks Corp.
HBO & Company	HBOC.O	13-Jan-99	
Perkin-Elmer	PKN.N	06-May-99	Merged with EG+G, a division of URS Corp.
Ascend Communications	ASND.O	25-Jun-99	Acquired by Lucent Technologies
Data General	DGN.N	13-Oct-99	Acquired by EMC Corp.
Harris Corp.	HRSd.N	08-Nov-99	Restructured and Spun Off
General Instrument Corporation	GIC.N	06-Jan-00	Acquired by Motorola Inc.
Applera Corp-Applied Biosystems Group	PEB.N	10-May-00	
Shared Medical Systems	SMS.N	08-Jun-00	Acquired by Siemens AG
Silicon Graphics	SGI.N	21-Jun-00	
IKON Office Solutions	IKN.N	29-Jun-00	
3Com Corp.	COMS.O	28-Jul-00	
Seagate Technology	SEG.N	22-Nov-00	Acquired by Private Equity Cos.
Time Warner Inc.	AOL.N	16-Jan-01	Acquired by AOL
Ceridian Corp. (Old)	CEN.Nd	02-Apr-01	Company spun off into two companies: Ceridian Corp. & Artiron Inc.
Adaptec, Inc.(old)	ADPTo.O	14-May-01	Company spun off into two companies: Adaptec Inc. and Roxio Inc.
Cabletron Systems	CS.N	06-Aug-01	Reorganised as a holding company.
BROADVISION Inc.	BVSN.O	04-Sep-01	
Marconi Corporation PLC	MONI	27-Mar-02	
COMPAQ Computer	CPQ.N	06-May-02	Acquired by HP Co.
Sapient Corp	SAPE.O	13-May-02	
Conexant Systems	CNXT.O	26-Jun-02	
Nortel Networks Corp Hldg Co.	NT.No	22-Jul-02	
Palm Inc.	PALM.OQ	14-Aug-02	
Vitesse Semiconductor	VTSS.OQ	21-Aug-02	
CMG PLC	CMG	27-Dec-02	Merged with Logica PLC
Millipore Corp.	MIL.N	02-Jan-03	
Rational Software	RATL.OQ	24-Feb-03	Acquired by IBM Corp.
Psion PLC	PON.L	3-Oct-03	
Concord EFS Inc.	CE.N	27-Feb-04	Merged with First Data Corp.
Waters Corporation	WAT.N	01-Jul-04	

Information Technology: Company	**Symbol**	**Date of Exclusion**	**Specific Reasons for Exclusion**
Thermo Electron	TMO.N	01-Jul-04	
PerkinElmer	PKI.N	02-Aug-04	
Amersham PLC		19-Aug-04	Acquired by GE Health, a division of GE Co.
PeopleSoft Inc.	PSFT.OQ	29-Dec-04	Acquired by Oracle Corp.
Veritas Software	VRTS.OQ	05-Jul-05	Merged with Symantec Corp.
SunGard Data Systems	SDS.N	12-Aug-05	Acquired by Private Equity Cos.

UK and US Companies Excluded from Telecommunication Sector from 1 January 1998 to 15 September 2005

Telecommunication Sector: Company	**Symbol**	**Date of Exclusion**	**Specific Reasons for Exclusion**
MCI Communications	MCIC.O	15-Sep-98	Acquired by WorldCom Inc.
AirTouch Communications	ATI.N	30-Jun-99	Acquired by Verizon Communications Inc.
Frontier Corp.	FRO.N	29-Sep-99	
Ameritech	AIT.N	11-Oct-99	Merged with SBC Communications
GTE Corp.	GTE.N	03-Jul-00	Acquired by Verizon Communications Inc.
US West Inc.	USW.N	06-Jul-00	Acquired by Qwest Inc.
MCI Group	MCIT.O	11-Jun-01	Acquired by WorldCom Inc.
Global Crossing	GX.N	10-Oct-01	Entered Bankruptcy Proceedings
WorldCom Inc.-WorldCom Group	WCOM.O	15-May-02	Entered Bankruptcy Proceedings
BT Telecom PLC		16-Nov-02	Company renamed
Colt Telecom Group PLC	CTM.L	13-June-03	
Carlton Communications	CCM.L	30-Jan-04	
Sprint Corp. PCS	PCS.N	23-Apr-04	
AT&T Wireless Services	AWE.N	27-Oct-04	Merged with Cingular Wireless Inc.
Nextel Communications	NXTL.OQ	15-Aug-05	Merged with Sprint Inc.

Appendix 6: A Template for Corporate Governance.

Any description is largely subjective and will reflect the beliefs of the author. This paper has referred countless times to Corporate Governance and attempts have been made to define it. This appendix builds a framework of Corporate Governance based on publishings of governmental and quasi-governmental bodies. It must be emphasised that this framework only reflects the latest recommendations on good corporate governance, starting with the Cadbury Report and progressing through to the Sarbanes Oxley Act of 2002. However, it has proved impractical to list all the suggestions and recommendations of all the most recent committees that have looked at Corporate Governance as many of the recommendations are either very similar or too vague to be interpretated into substantive recommendations. Also, it is assumed that the majority of companies now comply with the basics of corporate governance that have been laid down both by US and UK governmental regulations over the past 60 years so that the framework builds on these basics and highlights the differentiators between basic and good corporate governance.

In order to create a framework of corporate governance the tenets of governance, outlined above, are classified according to the main drivers of corporate governance that were identified in Chapter B1 of this paper. These drivers were: legal, historical and financial considerations, board composition, stock ownership and executive remuneration.

Legal

Topic	Source of Recommendation	Recommendation
Auditors' Responsibilities	Hampel, Recomm. para. 50	No audit firm should receive more than 10% of their annual audit fees from one client.
Separation of duties of auditors	S-O, Sec. 201	Auditors may not provide contemporaneous services with the audit any non audit services.
Auditors duties to be defined by the Audit Committee.	S-O, Sec. 202(i) (1)(A)	All audit services and non-audit services must be pre-approved by the Audit Committee.
Rotation of Audit Partners	S-O, Sec. 202(j)	Audit partners must be rotated after 5 years as partner in charge of a client.
Auditor Reports	S-O, Sec. 202(k)	Auditors must report to the audit committee: (1) all critical accounting policies and practices, (2) all alternative treatments of financial information within GAAP, (3) other material written communications between the auditor and the management.
Conflicts of Interest	S-O, Sec. 206(1)	No audit firm may audit a company if any member of the audit firms was an officer of the company being audited in a one year period prior to the audit.
Responsibility of Audit Committee	S-O, Sec. 301(2)	The audit committee shall be directly responsible for the appointment, compensation and supervision of the audit firm
Membership of Audit Committee	S-O, Sec. 301(3)	Each member of the audit committee shall be a member of the board of the issuer company, be independent and may not accept any other paid work from the issuer company.
Rights of Audit Committee	S-O, Sec. 301(4)	Each audit committee shall establish procedures for the receipt of complaints from the issuer company and its employees.
Rights of Audit Committee	S-O, Sec. 301(5)	Each audit committee shall have the right to engage independent counsel or other advisers as is deemed necessary by it to carry out its duties.
Disclosure of Audit Committee Financial Expert	S-O, Sec. 406	Each Audit Committee shall comprise of at one member who is a financial expert.
Improper influence on the conduct of audits	S-O, Sec. 303(a)	No company officer shall take any action to fraudulently influence the outcome of any audit.

Financial

Topic	Source of Recommendation	Recommendation
Approval of Financial Reports	S-O, Sec. 302(a)	The financial reports must be certified as correct by the company officer(s) responsible for the production of the reports.
Insider Trades	S-O, Sec. 306	It is unlawful for any director or officer of a company to trade in any equity of that company during any blackout period.
Disclosures in Reports	S-O, Sec. 401(a)(i)	Financial reports prepared under GAAP must reflect all material corrections identified by auditors.
Off Balance Sheet Transactions	S-O, Sec. 401(a)(j)	All financial reports must report of all material off-balance sheet transactions.
Untrue Statements	S-O, Sec. 401(b)	No financial statements shall contain untrue statements of material fact or omit any material fact.
Conflict of Interest Provisions	S-O, Sec. 402(a)(k)	No personal loans shall be made to a director or an officer of a company.
Management Assessment of Internal Controls	S-O, Sec. 404(a)	Each annual report must contain an internal control report which shall: a. state the responsibility of management for establishing and maintaining adequate controls b. contain an assessment of the effectiveness of the internal controls and procedures in the company.
Management Assessment of Internal Controls	S-O, Sec. 404(a)	Any auditor that prepares an audit report shall report on the assessment report on internal control required to be prepared under Sec. 404(a).
Code of Ethics	S-O, Sec. 405	Every company is obliged to adopt a Code of Ethics, and if one is adopted the reason a Code has not been adopted.

Board Composition

Topic	Source of Recommendation	Recommendation
Directors Responsibilities	Hampel, Recomm. para. 14	The roles of chairman and chief executive officer should be separated.
Directors Responsibilities	Hampel, Recomm. para. 15	Companies should establish nominating committees to make recommendations on all key appointments. The nomination committee should consist of a majority of non executive directors.
Directors Responsibilities	Hampel, Recomm. para. 24	Directors' contracts should be limited to a period of one year.
Directors Responsibilities	Hampel, Recomm. para. 48	Each company should establish an audit committee of at least three non-executive directors.
Directors Responsibilities	Hampel, Recomm. para. 54	Companies should on a periodic basis consider the need for an internal audit function.
Directors Responsibilities	Higgs Report	At least half the members of boards, excluding the Chairman, should be independent non-executive directors.
Directors Responsibilities	Higgs Report	The role of chairman and chief executive should be separated.
Directors Responsibilities	Higgs Report	All directors should take decisions objectively in the interests of the company.
Directors Responsibilities	Turnbull, para. 16	The board of directors is responsible for a company's internal controls.

Stock Ownership

Topic	Source of Recommendation	Recommendation
Shareholder Responsibilities	Hampel, Recomm. para. 33	Pension funds should be encouraged to take the long view in managing their investments.
Disclosures of transactions involving management and principal stockholders	S-O, Sec. 403	Every person who is the beneficial owner of more than 10% of any class of equity shall file the statements required by the SEC.

Executive Remuneration

Topic	Source of Recommendation	Recommendation
Remuneration Committees	Greenbury, Sec. A2	Boards of Directors must set up Remuneration Committees comprising of Non-Executive Directors to set the remuneration and pension rights of executive directors.
Remuneration Committees	Greenbury, Sec. A4	Remuneration Committees should consist entirely of Non-Executive Directors who have no financial interest in the company apart from that as shareholders, have no conflict of interest from cross-directorships and have no day to day involvement in the running of the company.
Remuneration Committees	Greenbury, Sec. B1/B2	The remuneration committee should make a report each year to the shareholders setting out the company's policy on executive directors remuneration, including levels, components, performance criteria and contracts of service
Remuneration Committees	Greenbury, Sec. C1	Remuneration committees should provide packages that attract, retain and motivate directors of the quality required but should not pay more than is necessary.
Remuneration Committees	Greenbury, Sec. C4	The performance related element of remuneration should be designed to align the interests of the Directors and the shareholders and to give directors incentives to perform at their highest levels.

Other

Topic	Source of Recommendation	Recommendation
Employees' Responsibilities	Turnbull, para. 19	All employees have some responsibility for internal control as part of their accountability for achieving objectives.

Appendix 7: Summary of Companies Researched.

Adelphia Communications Corporation (OTCBB: **ADELQ**), named after the Greek word for "brotherhood", was the sixth largest US cable television operator before it filed for bankruptcy in 2002 due to internal corruption. John Rigas who founded the company in 1952, was, along with two of his sons convicted in the summer of 2004 of conspiracy, bank fraud, and securities fraud.

The majority of Adelphia's revenue-generating assets were officially acquired by Time Warner Cable and Comcast on July 31, 2006.

Global Crossing Limited was a major telecommunications company that provided computer networking services worldwide. It maintained a large backbone and offered transit and peering links, VPN and VoIP, mainly to large enterprise customers and other carriers. The company was legally domiciled in Bermuda although its administrative headquarters was in New Jersey.

The company rode the dot-com boom of the 1990s with its stock reaching a high of $64 per share. However in January 2002, the company declared Chapter 11 bankruptcy. The company was subsequently bought out of bankruptcy by Singapore Technologies for $750 million.

Guidant Corporation designs and manufactures artificial pacemakers, implantable defibrillators, stents, and other cardiovascular medical products. The company headquarters is located in Indianapolis, Indiana. Their main competitors are Medtronic, St. Jude Medical, Boston Scientific, and Johnson and Johnson. Guidant was once a part of Eli Lilly but in April 2006 was purchased by Boston Scientific.

Qwest Communications International Inc. is a large telecommunications carrier serving 14 western U.S. states: Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. The company provides local telephone service, long distance, and backbone services. They also provide wireless, DSL and digital television service in some areas.

Founded in 1996 Qwest Communications grew aggressively, acquiring LCI, a low cost long distance carrier in 1997. This launched Qwest as not only a provider of high speed data to the niche market of corporate customers, but also a quick-growing residential and business long distance customer base that it quickly merged into its data service.

Qwest "merged" with "Baby Bell" US West on June 30, 2000 through an apparent hostile takeover.

Qwest (and previously US West) has been plagued by an image of poor customer service and has been sued by the Federal Communications Commission (FCC) because of its trade practices as well as the Securities Exchange Commission (SEC) because of its accounting practices.

Waters Corporation, founded in 1958 by James L. Waters and headquartered in Milford, Massachusetts, U.S.A., is the world's leading supplier of high performance liquid chromatography, mass spectrometry, thermal analysis and rheology instrumentation and consumables. Waters products are used by pharmaceutical, biotechnology, industrial, university, and government research & development, quality assurance, and environmental testing laboratories.

Waters is a member of the Standard and Poors 500 Index.

WorldCom Inc. was an American telecommunications company headquartered in Ashburn, Virginia. The corporation was the result of the merger of WorldCom (formerly known as LDDS) and MCI Communications, and used the name MCI WorldCom before taking its current name of MCI on April 14, 2003 as part of the corporation's emergence from bankruptcy.

In February 2005 Verizon Communications acquired MCI.

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