CORPORATE GOVERNANCE

A Study of the Corporate Governance of Quoted Firms in the United Kingdom

By

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SUMMARY

The purpose of this study is to examine the corporate governance of firms quoted on the stock market. An important contribution of the thesis is the derivation of the conceptual framework for analysing corporate governance which places conduct at the centre of the understanding of corporate governance. I propose a conceptual framework by extending the concept of incomplete contracts to include expost observability/verifiability of the contracts between shareholders and managers. Strategic co-operation between shareholders and managers is only feasible in the procedural justice mode. Deliberation between the contracting parties is identified as the centre piece of corporate governance. Managerial decision behaviour is shown to be endogenous to the corporate governance framework.

A number of empirical issues emerge from the conceptual framework. We examine two of these using panel data techniques and data on 218 manufacturing firms and the complete list of 44 authorised financial institutions observed over a six year period, 1987-88 to 1994-95. I examine whether there is a case for deliberation in a corporate governance framework given that the procedural justice mode is the only basis of strategic co-operation. The second issue that was evaluated relates to the implications of the adoption of a dominant strategy by shareholders given that the UK corporate governance framework places a primary reliance on the market for corporate control.

My evidence shows that firm-specific factors are important in control changes as measured by top management turnover. Thus the crucial recommendation of the procedural justice based corporate governance framework, that deliberation will have to be an integral component of the corporate governance framework, has been validated by the empirical analysis. In the absence of strategic co-operation based on procedural justice mode the conceptual framework proposed envisages the adoption of dominant strategy by shareholders. The consequence of this will be an emphasis on power relations in the top management team in a bid to minimise their human capital risk. There will be ambiguity in the control changes as reflected by top management turnover. I also find evidence that demonstrates the role of power in control changes. Control changes as reflected by turnover of all directors and executive directors, in all the estimates, are found to be consistently related to CEO changes. Financial performance indicators are consistently inversely related to directors turnover in the manufacturing sector but their impact on directors as reflected by elasticity measures are very low. The effect of financial performance on the likelihood of CEO change is not sgnificant for all the measures used in the study. Thus the evidence shows that there is little accountability in the processes of corporate governance as reflected in the top management turnover.

The conceptual framework proposed is not in conflict with the principal and agents framework. The empirical results have also been used to evaluate the significance of individual variables and compare and contrast with the findings of the existing literature on top management turnover.

Analysis of the regulatory arrangement for authorised financial institutions has shown that the central banks act as the centrepiece of the control structure in the financial services sector. The role of the central banks in terms of corporate governance, however, has been to replace the conventional governance goal of shareholder wealth maximisation with concerns for depositors security and the stability of the financial system. There are very few studies on the functioning of corporate governance mechanisms in banks. Researchers are also increasingly interested in how corporate governance mechanisms in general, vary in different legal and regulatory environments. The study of the manufacturing and financial services sectors of the same country provides valuable evidence for this comparison of corporate governance under differing legal and regulatory arrangements.

Declaration

The following papers are based on the work carried out for the thesis.

1.Sinha, Rajeeva (1998a),'Incomplete contracts and Corporate Governance: a conceptual framework for analysing corporate governance', Business School Research Series, Paper No: 1998:6, ISBN: 1 85901 138 1, Loughborough University. Also in 1997 British Academy of Management Annual Conference, Proceedings, London UK

2. Sinha, Rajeeva (1998b), 'Corporate Governance in Manufacturing Firms ', Business School Research Series, Paper No: 1998:7, ISBN: 1 85901 139 X, Loughborough University. Also in, 1997 Academy of Management Annual Meeting, Proceedings, Boston USA

3. Sinha, Rajeeva (1998c),'Corporate Governance in Financial Services Firms ', Loughborough University Banking Centre, Paper No: 121/98, March, 1998, ISBN: 1 899275 401, Loughborough University

4. Sinha, Rajeeva (1998d),' Corporate Governance in the United Kingdom: A review of the recommendations of the Hampel Committee,' Business School Research Series, Paper No: 1998:7, ISBN: 1 85901 139 X, Loughborough University.

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ABBREVIATIONS

AFIs	Authorised Financial Institutions
BOE	Bank of England
ICs	Incomplete Contracts
IICs	Inevitably Incomplete Contracts
MCC	Market for Corporate Control
P & A	Principal and Agents

The variable abbreviations used to report the empirical findings are listed in the table in Appendix 2 of Chapter 4 .

CHAPTER 1

CORPORATE GOVERNANCE

1.1 Introduction

The purpose of this study is to examine the corporate governance of quoted firms in the United Kingdom. Shleifer and Vishny (1997) in a survey define corporate governance as...'the ways in which suppliers of finance to corporations ensure themselves of getting a return on their investment'. Managerial accountability is an issue in shareholder management relationships. In the property rights view of the firm, the separation of ownership from control as first identified by the study of US firms (Berle and Means, 1932), is seen as a potential source of reduction in the value of corporate assets owned by shareholders. Thus the identification of separation of ownership from control is the genesis of the interest in corporate governance.

The principal and agents framework has been the primary basis for the conceptualisation of corporate governance issues. In the context of property rights this is a valid framework for representing shareholder management relationships.

However, the principal and agents framework is an abbreviated view of the relationship between shareholders and management. There is little attempt to understand the conduct of corporate governance. This is significant, as governance by definition is a process. Important issues like the design of the corporate control structure is unexplored even when there is an empirical recognition of the complementarity and interdependence of the various corporate governance mechanisms (Rediker and Seth, 1995; Zajac and Westphal, 1995).

The implications of the abbreviated characterisation of corporate governance in terms of principals and agents are apparent in the analytical and empirical literature. For example, the role of corporate governance in managerial decision behaviour (e.g. short termism) remains an analytical enigma (Laverty, 1996, Morris, 1998). At the empirical level there is a preoccupation with structure and performance studies at increasingly disaggregated levels. A Meta analytic review of studies on board composition, leadership structure and financial performance shows that there is little evidence of systematic relationship between governance structure and company performance (Dalton, Daily, Ellstrand and Johnson, 1998). The meta analysis demonstrates that we lack an understanding of corporate governance.

The original aim of the study was to present empirical evidence on the corporate governance of manufacturing firms in the United Kingdom. This is relevant as it is noted that in discussions on corporate governance, 'opinion has drowned fact' (Mayer, 1997). There is also an empirical bias in the literature as much of the evidence is based on US firm data (Shleifer and Vishny, 1997). Specifically, an important line of

enquiry in corporate governance is directed towards investigating factor, which explain top management turnover. As Table 2.2 in Chapter 2 shows the evidence on British management turnover is limited. The UK corporate control environment is unique in terms of the strong mediating role of the stock market (Jenkinson and Mayer, 1994; Franks and Mayer, 1996). The concomitant threat of hostile take-overs that the stock market presents to managerial human capital provides in the UK governance environment an accentuated empirical opportunity for the evaluation of top management turnover.

The thesis however, goes beyond a presentation of the UK evidence on managerial turnover. With the progress of the empirical work and a greater awareness of the literature the conception of corporate governance has broadened from '...the ways in which suppliers of finance assure themselves of getting a return on their investment' (Shleifer and Vishny, 1997), to how it provides a decision-making context for top management. Corporate governance is important as an institutional device not only for correcting the imbalance of power between shareholders and managers resulting from the separation of ownership from control but also as an aid to the decision-making process (Pound, 1995). Corporate governance is significant not only for ensuring shareholder wealth maximisation but also because it provides the context for top management decisions. The existing literature lacks a conceptual framework that accounts for both the agency concerns and the competitiveness implications of corporate governance. In this thesis in Chapter 3 a conceptual framework of corporate governance which accounts for such agency and competitiveness concerns is proposed.

The empirical work presented in Chapters 5 and 6 represent first steps in converting conceptual explorations to empirical claims. Chapter 3 emphasises the role of conduct in corporate governance. We follow an eclectic approach in constructing the conceptual framework as economics provides only a limited view of incomplete contracts and opportunism in strategically dependent relationships.

The empirical work presented in Chapter 5 provides an assessment of the role of governance structure in ensuring top management accountability. Although the work includes variables used in existing empirical work the interpretation of the empirical work is not restricted to the conventional principal agents evaluation of the impact of the corporate governance structure. The conceptual framework of Chapter 3 provides our basis for interpreting some of the empirical findings. This framework emphasises the role of conduct in the form of unstructured communication in corporate governance and the econometric evaluation using panel data techniques provides a limited assessment of the potential for unstructured communication in corporate governance. A direct assessment of the role of unstructured communication in ensuring managerial accountability and in providing an appropriate context for top management decisions will have to be based on primary data which is part of the agenda for future work.

1.2 The Conceptual Framework

The literature on corporate governance has attempted to enhance the understanding of shareholder management relationship by:

a. Questioning the property rights view of the firm (Davis, Schoorman and Donaldson, 1997; Donaldson and Preston, 1995);

b. Exploring the nature of contracts between shareholders and managers (Hart, 1995).

Given the pre-eminence of the right to property as the basis of economic interaction, further explorations of the nature of contracts between shareholders and managers are justified within the property rights view of the firm. This route offers an opportunity for understanding the existing nature of relationships between shareholders and managers and its implications for managerial decision behaviour. The questioning of the property rights view of the firm has much wider connotations in terms of re-evaluating the basic premises that form the basis for economic interactions.

Hart (1995) considers the contracts between shareholders and managers as incomplete. This provides the theoretical justification for corporate governance as an institutional device for mediating the relationship between shareholders and managers. The corporate governance structure is comprised of mechanisms for 'channels of communication'. However, the conception of incomplete contracts is limited to observable but not verifiable contracts (Dekel, Lipman and Rustichini1998). This is the conventional interpretation of incomplete contracts in Economics (Schwartz, 1992). The limited value of this theoretical framework is reflected in the second part of the paper. There is little insight offered by the framework on the design of the corporate governance structure and the complementarity/interdependence of the various corporate governance mechanisms. The familiar 'Chicago School' argument that 'the market knows best' is invoked. This does not reflect a reason-based conclusion but is a reflection of a lack of understanding.

In Chapter 3 a conceptual framework for analysing corporate governance between shareholders and managers is proposed. There are two characteristics of the contracts between shareholders and managers that make them distinctive:

a. The contracts between shareholders and managers are not discrete in time.

b. Shareholders have multiple and varying expectations from the contracts.

In addition to the factors identified by Hart (1995) 'unforeseen contingencies' (Dekel, Lipman and Rustichini, 1998) or 'strong non-contractability' (Schwartz, 1992) are important reasons for contractual incompleteness between shareholders and managers. Given the nature of incomplete contracts between shareholders and managers, a corporate governance framework will have to be devised such that it encourages strategic co-operation in the procedural justice mode. Strategic co-operation can only be sustained in the procedural justice mode. The critical requirement of the procedural justice mode of strategic co-operation is equality in the opportunity and influence of messages even if the outcome of such co-operation is unfavourable to one of the contracting parties. Thus the critical element of procedural justice mode will be communication and the structure of communication between shareholders and managers. This is the principal recommendation, which has to be incorporated in the design of a corporate governance structure.

It is interesting that we find elements of this conceptual framework in the latest committee to look into corporate governance in the United Kingdom (Hampel, 1998). The recommendations of the Hampel committee are significant in the context of the

framework for analysing corporate governance proposed in Chapter 3. The Committee recommends that shareholders should take into account '...the diversity of circumstances and experience among companies....,' in their interpretation of matters relating to corporate governance (Section 1.13). The Committee argues that good governance needs to be agreed between companies and their shareholders on a case by case basis, 'shareholders and others should show flexibility in the interpretation of the code and should listen to directors' explanations and judge them on their merit...' (Section 1.11). The Committee is also in favour of greater communication when it proposes the inclusion of a narrative statement in the company annual report (Section 2.1). It also recommends that departing directors go public and explain why they left the board and that the terms of their contract termination are published along with their original employment contract. However, in the absence of a clear understanding of why there is no participation by institutional shareholders the recommendations of the committee are in effect statements of good intentions, 'But we urge trustees to encourage the investment managers to take a long view' (Section 5.6).

1.3 Empirical Issues

There are two sets of empirical issues, which emerge from the conceptual framework proposed in Chapter 3. The first set of issues relates to the need for deliberation or direct communication between shareholders and managers for effective corporate governance. In corporate governance we can identify two channels of communication between shareholders and managers. The first channel is comprised of the 'focal points' or financial performance indicators. This form of communication is standardised and simplified to be universally understood and is independent of firm

specific norms and practices (Kreps, 1988). The second form of communication is the corporate board. The corporate board represents a channel for the communication of unstructured information between the shareholders and the managers. The board attributes like board duality, directors block shareholdings, board size etc., reflect the volume of unstructured communication between shareholders and managers. A board characterised by duality reflects greater concentration of power at the apex of the organisation and the top management will have a reduced inclination to communicate to the board. Board size has also been associated with control. Jensen (1993) considers large boards as dysfunctional and easier to control. Hence larger boards can be hypothesised to have a lower volume of unstructured information flow. Large block shareholdings by directors reduces the separation of ownership from control and information asymmetry. Large directors' block shareholding implies a larger volume of unstructured information available to shareholders. A larger proportion of non-executive directors on the board may increase the flow of unstructured information depending upon their affiliation. Similarly, institutional block shareholdings may take a direct interest in their shareholdings and induce greater information flow. However, it is possible that regulatory provisions like insider laws may prevent a direct involvement. Greater information flows may then be induced by insistence on separation of the posts of chairman and the CEO or a greater representation/effectiveness of non-executive directors on the board.

The relevance of the two types of communication can be evaluated for top-management accountability, which is a key concern in corporate governance. Top management accountability can be proxied by top management turnover. We can

examine the role of financial performance indicators (structured information) and board configuration (unstructured information) for 'disciplinary' top management turnover. If we use panel data some additional assessment of the relevance of unstructured information for top management accountability can be obtained.

Panel data techniques allow for the identification of firm-specific heterogeneity as group effects. Large group effects will suggest that the unidentified variables have systematic variation with governance changes. The use of dummies in panel data estimates to allow for firm-specific and sample period-related variation does not allow for the identification of the causes that lead to a shift in the regression lines. However, the existence of fixed effects show that the firm specific heterogeneity is correlated with the explanatory variables (Kmenta, 1986, Pindyck and Rubinfield, 1998). It is possible that some form of this firm-specific heterogeneity will be resolved through deliberation.

The second set of empirical issues relates to the implication for corporate governance of the adoption of a dominant strategy by shareholders. The second set of issues has also been evaluated in the conventional principal and agents framework. The difference is that even within the property rights view of the firm the conceptual framework proposed in Chapter 3 does not consider opportunism and the adversarial shareholder management relationship as given but as an outcome partly endogenous to the corporate governance process. In the decentralised mode shareholders will prefer to adopt a dominant strategy and a breakdown in strategic co-operation with managers will ensue. The evidence on the role of power relations in governance changes

presented in the thesis has to be interpreted as symptomatic of the process of governance not a given phenomenon which has to be configured to maximise goals such as shareholder wealth maximisation. As shown in Chapter 2 the UK corporate governance framework places a primary reliance on the market for corporate control. The consequence of the adoption of a dominant strategy is that there will be opportunistic behaviour manifested in the processes of the corporate governance framework. Power relations will have a role in corporate governance.

The firms in the samples are drawn from two sectors, viz., the manufacturing sector and the financial services sector. The data-set comprises 218 UK controlled quoted manufacturing enterprises listed in *The Times 1000* for the year 1987-88 and the complete list of 44 quoted and UK controlled authorised financial institutions (AFIs) listed in the February, 1989 issue of the *Bank of England Quarterly Bulletin.* Data on financial performance has been collected for the years 1987-88 to 1994-95. Data on corporate governance has been gathered for the period 1989-90 to 1994-95.

The empirical investigation of the manufacturing sector shows that financial performance indicators are significant but have a marginal impact on 'disciplinary' top management turnover. Directors' block shareholdings have a positive and significant influence on top management turnover. The literature is of the view that directors are in possession of firm specific information (Fama and Jensen 1983) and 'expert knowledge' (Rosenstein and Wyatt, 1997). Greater levels of insider block shareholdings indicate a close alignment of shareholder and management interests (Jensen and Meckling, 1976). A positive association of directors block shareholdings

with CEO turnover shows that firm specific information or unstructured information has an important role in top management accountability. Firm-specific factors or the group effects in the fixed effects model are substantial and explain more of the variation in governance changes than the financial performance variables and the board attributes. It is possible that some of the firm specific variation in top management turnover is thus related to organisation specific norms and customs. The findings suggest that unstructured information exchange and an understanding of firm specific variation associated with governance changes will be important in furthering our understanding of corporate governance. Board attributes reflecting the role of power relations in top management turnover also emerge as significant.

The structure of deliberation that will conform to the requirements of strategic co-operation in the procedural justice mode will comprise the agenda for further work. Evaluation of the structure of deliberation, will have to be based on primary data obtained through questionnaires and interviews of top management. Similar investigation of the procedural justice mode have been carried out in the context of entrepreneur-investor interactions, the management of innovation teams and headquarters-subsidiary relations in strategic decision-making (Sapienza and Korsgaard, 1996; Kim and Mauborgne, 1993; Korine, 1997). Section 7.4 in Chapter 7 provides a brief description of the research design that can be used to identify what constitutes procedural justice in shareholder management relationship.

In the absence of strategic co-operation based on procedural justice mode the conceptual framework proposed in Chapter 3 envisages the adoption of a dominant

strategy by shareholders. The consequence of this will be an emphasis on power relations in the top management team in a bid to minimise their human capital risk. We find evidence, which demonstrates the role of power in control changes. Several board attributes emerge as having a significant influence of top management.

The interest in the financial services firms or what are termed, as 'authorised institutions' in the UK is an outcome of the conceptual framework developed in Chapter 3. An important conclusion of the conceptual framework is that in the presence of an active market for corporate control, shareholders will lack the incentive to give credible commitments in the contracting relationship and the managers, fearing the risk to their human capital, will engage in opportunistic behaviour. Thus opportunism, instead of being controlled by the corporate governance structure will be endogenous to the corporate governance arrangement. Our initial understanding based on the public pronouncements of the Bank of England was that the Bank discouraged hostile take-overs. Further, there are only two referrals of financial services firms on take-overs in banks to the Monopolies and Mergers Commission since 1966. Thus the authorised institutions sector represents a control sector where the market for corporate control as a disciplining device is not a readily available option for the exercise of corporate control.

Analysis of the regulatory arrangement in Chapter 6 shows that the central banks act as the centrepiece of the control structure in the financial services sector. The role of the central banks in terms of corporate governance, however, has been to replace the conventional governance goal of shareholder wealth maximisation with concerns for

depositors security and the stability of the financial system. Thus the mere absence of hostile take-overs will not result in the shareholders giving credible commitments and starting to engage in deliberative corporate governance. In effect the study of authorised financial institutions does not serve as a control case for testing the hypotheses arising out of the conceptual framework proposed in Chapter 3. In this light the hypotheses set up in section two of Chapter 4 have been appropriately modified in section 6.3 of Chapter 6. There are very few studies on the functioning of corporate governance mechanisms in banks (Roncaglia, 1997). Researchers are also increasingly interested in how corporate governance mechanisms in general, vary in different legal and regulatory environments (Prowse, 1997b). The comparative study of the manufacturing and financial services sectors within the same country provides valuable evidence for this comparison of corporate governance under differing legal and regulatory arrangements.

1.4 Overview of the Chapters

Chapter 2 is a selective review of the literature on corporate governance. The focus of the literature review is on the implications of corporate governance for managerial decision-making. The chapter is divided into four sections. In the second section we review the theoretical and empirical literature on corporate governance and managerial decisions. The third section highlights the differentiating characteristics of the UK corporate governance environment. The fourth section concludes the chapter. The literature review in Chapter 2 shows that our insight into the role of corporate governance in managerial decision behaviour is limited. The discussion is further augmented by a summary of the empirical studies on top management turnover

presented in Table 2.2 in Chapter 2. The principal and agents literature does not provide an analytical framework which shows how rights of ownership have to be re-negotiated given that effective day to day control has passed into the hands of managers. In the absence of such a framework for re-negotiation the literature has come to be dominated by empiricism. The differentiation between studies is large with dissimilar data sets drawn from different countries. The studies in this area are characteristically dominated by a focus on structural attributes like board characteristics and their impact on performance, measured by financial performance indicators, or control changes, such as board turnover, or through the market for corporate control. The conduct of corporate governance has been ignored.

A conceptual framework of corporate governance within the institutional framework of property rights is proposed in Chapter 3. Justification for corporate governance mechanisms has been provided in terms of incomplete contracts (Hart, 1995; Schwartz, 1992). Section two of Chapter 3 examines the nature of the incomplete contract between shareholders and managers. The analysis shows that a learning mechanism has to be incorporated in the corporate governance structure because of the incomplete contracts between shareholders and managers. The third section discusses the relevance of various modes of co-operation. In the fourth section we identify the pure procedural justice mode as the basis for strategic co-operation between shareholders and managers. In section five we show that a primary reliance on the market for corporate control (MCC) implies that strategic co-operation based on pure procedural justice cannot be the basis of interaction between shareholders and managers. Shareholders will adopt a dominant strategy and deliberation, a critical

component of strategic co-operation based on pure procedural justice, will be minimal and of poor quality. Opportunistic behaviour by managers will become endogenous to the system of corporate governance. Finally, the sixth section summarises this analysis of corporate governance.

In Chapter 4 we discuss the methodology of the empirical evaluation. The Chapter is divided into five sections. In the second section we identify the hypotheses which we evaluate in the following two chapters. These hypotheses are based on the conceptual framework of corporate governance proposed in Chapter 3. In the third section we discuss the methodology of panel data analysis. The method of panel data is helpful for evaluating the principle hypotheses. The discussion provides the basis for model specification. In the fourth section, the variables to be used in the study are identified on the basis of relevant literature in this area. This section also defines the variables used and the data sources. The fifth and the final section concludes the chapter.

Chapter 5 discusses the panel data estimates of the factors affecting control changes in large manufacturing firms in UK. The justification for the use of panel data techniques and the variable definitions has been provided in Chapter 4. The major hypotheses to be evaluated in light of the empirical estimates have been specified in section 4.2 of Chapter 4. This chapter is divided into five sections. Section two lists the steps involved in the estimation process and the empirical specification of the models to be estimated. In sections three and four we discuss data characteristics and evaluate hypotheses in light of the estimated models. The fifth section summarises the principal conclusions of the chapter.

In Chapter 6, we examine control changes in financial institutions which are authorised by the Bank of England (BOE) and are hence under its regulatory control. It has been argued that the legal and regulatory framework in which the banks operate renders external control mechanism such as hostile take-overs ineffective as a method of corporate control (Prowse, 1997a). Thus, control issues in banks have to be discussed in an environment where the management has a considerably reduced threat perception from the MCC. The analysis of the financial services sector is important to our discussion of corporate governance in several respects. There are very few studies, which examine corporate governance in the financial services sector (Roncaglia, 1997; Prowse, 1997b). The existence of a regulatory regime which to a certain extent replaces the MCC and which does not subscribe to the goal of shareholder wealth maximisation, makes the analysis interesting in its own right. In addition the evaluation of the financial services sector provides supplementary evidence on the issues examined in Chapter 5.

Chapter 6 is divided into six sections. In the second section we examine the regulatory framework and its implications for the corporate governance of authorised financial institutions (AFIs). It emerges from the evaluation of the regulatory framework that the corporate governance of AFIs differs not only in terms of the role of the MCC but also in the very basis for which governance is undertaken. In the next two sections we discuss the panel data estimates of the factors affecting control changes in the AFIs in UK. In the third and fourth sections we discuss the data characteristics and evaluate the hypotheses in light of the estimated models. The justification for the use of panel

data techniques and the variable definitions has been provided in Chapter 4. The steps involved in the estimation process and the empirical specification of the models to be estimated are the same as specified in Section 5.2 of Chapter 5. The fifth section compares the results for the AFIs with the findings relating to the manufacturing sector presented in Chapter 5. The sixth section summarises the principal conclusions of the chapter.

We bring together the conclusions of Chapters 2-6 to advance a consistent understanding of corporate governance and its implications for managerial decision behaviour in Chapter 7. We also discuss in section 7.4 a research design, which might be used in future research to identify the components of procedural justice in shareholder management relationships.

CHAPTER 2

TOP MANAGEMENT TURNOVER AND MANAGERIAL DECISIONS

A Review of Literature

2.1 Introduction

The relationship between shareholders, the owners of the firm's assets, and the managers of those assets is the subject matter of corporate governance. The Berle and Means classic study (1932) evoked a keen interest in corporate governance. The study identified 88 of their sample of 200 US companies, to be 'management controlled'. The findings were and continue to be significant in the context of the property rights view of the firm. This view of the firm is the dominant view of the business firm in competitive capitalism. The firm in the property rights view is an institutional device where various factors of production participate for the production of value. The rewards to the various factors of production are determined in markets external to the

firm. The shareholders by virtue of being owners of the firm's assets are claimants of all residual income after the factors of production have been compensated for their role in the creation of value. The emergence of the management as a controlling group in a large number of firms significantly altered the shareholders' expectations regarding the value of the firm's assets. It represented a constraint on the economic options of the shareholder. A critical component of property rights is the right of ownership. The right of ownership of an asset comprises:

(a) The right to use the asset

(b) The right to appropriate the returns from the asset; and

(c) The right to change the form, substance and location of the asset

(Furubotn and Richter, 1992).

The emergence of management control may have the effect of reducing the value of the assets for the owner. Managerial actions regarding the utilisation of the firm's assets may be motivated by their self-interest. Thus the empirical findings of the Berle and Means (1932) study were instrumental in focusing interest on corporate governance.

In this chapter we review the literature on top management turnover and its implications for corporate governance. As a background to the empirical analysis in chapter 5 certain aspects of the UK corporate control environment are also discussed. Jensen (1993) provides a typology of governance mechanisms that can be used to protect the rights of shareholders. The typology classifies the corporate governance environment in terms of:

a. Capital market

b. Legal/Political regulatory systems

c. Product and factor markets

d. Internal governance systems headed by the board of directors

The capital market functions as a governance mechanism through the market for corporate control or the incidence of hostile takeovers. The regulatory framework can also influence the corporate governance of firms. An example of this is the impact of the Bank of England on the corporate governance of banks in the United Kingdom. We have examined this in great detail in Chapter 6. The product and factor market can also have a corporate governance role. Different product and factor market forms will have different implications for corporate governance. The internal governance mechanisms will also have implications for corporate governance behaviour by providing implicit incentives and constraints for top management behaviour (Clarke, Conyon and Peck, 1998). Examples of these internal mechanisms are the structure of the board, block shareholders, debt structure of the board and the use of executive compensation to align managerial motivations with shareholder objectives. There are several good surveys of the literature on corporate governance such as those by Shleifer and Vishny (1997) and John and Senbet (1998). Examples of more focused surveys of individual governance mechanisms are Conyon and Peck (1998a) on executive compensation and (Morris, 1998; O'Sullivan, 1997) on takeovers.

The scope and aim of this chapter is to provide a survey of the literature on top management turnover and to understand its significance for corporate governance and

managerial decision behaviour. Much of the literature on corporate governance refers to the effectiveness of governance in ensuring the returns to the providers of capital who have been dissociated from day to day control of the assets. As stated in Chapter 1 corporate governance is an institutional arrangement for not only correcting the imbalance of power between shareholders and managers brought about by the separation of ownership from control but also an institutional arrangement which provides the context for top management decision-making. The literature lacks a framework that accounts for both the agency concerns and the implications of corporate governance for the competitiveness of the firm. In Chapter 3 we propose a framework for the analysis of corporate governance that accounts for both the agency and competitiveness implications. This literature review provides an assessment of the current understanding on corporate governance and managerial decision behaviour and the specific context of corporate governance in the United Kingdom. Thus it lays down the background for the discussion undertaken in the subsequent chapters. The chapter is divided into four sections. In the second section we review the theoretical and empirical literature on corporate governance and managerial decisions. The third section highlights the differentiating characteristics of the UK corporate governance environment. The fourth section concludes the chapter. The literature review provides the basis for the development of the conceptual framework in Chapter 3.

2.2 Corporate Governance and Managerial Decision Behaviour

The empirical findings of Berle and Means (1932) study led to a keen interest in corporate governance. The emergence of managers as a controlling group in a significant manner represented changes in the expectations of the shareholders

regarding the economic value of their assets. The dominant property rights view of the firm looks at shareholders as the claimants to all residual income. The separation of ownership from control, a consequence of managers emerging as the controlling group, was perceived as a possible source of reduction in the value of the shareholders' assets. Shareholders' fears were based on the information asymmetry between themselves and the managers and the apparent freedom managers had to pursue their own agenda. Over a period of time two possible avenues emerged to overcome the problem posed by information asymmetry. Internal control structures represented by various board attributes like block shareholdings, non-executive directors, etc. were identified as one set of control devices which the shareholders could make use of to reduce the information asymmetry. A second route, which tackled the problem, was based on the market for the right to manage corporate assets. This obviated the need to overcome the problem of information asymmetry. This market is visualised, as one where alternative management teams compete with each other for the right to manage a corporate asset owned by the shareholders. The team which attaches the highest value to the corporate asset, in other words, promises the highest returns to shareholders and takes over the right to manage the asset until it is replaced by another management team which attributes greater value to the corporate asset, that is, promises greater returns to the shareholders. This process continues independent of the volition or consultation of the current management team (Jensen, 1988). The market for corporate control represents a simple method of countering the threat posed to shareholder wealth by the emergence of managers as a controlling group.

Different countries have evolved corporate control structures that have placed different emphases on internal control devices and on the market for corporate control in their design of corporate control structures. In the US and the UK the control structure primarily relies on the market for corporate control and internal control devices are relatively neglected. The corporate control environments of Japan and Germany, on the other hand are characterised by a near total reliance on internal control devices and the market for corporate control is nearly absent in their corporate environments (Prowse, 1994). The primary concern in the evolution of both types of corporate governance structures has been to safeguard shareholders interests. However, their historical development is based on the expectations that flow from the right of ownership and are determined by the legal, economic, social and cultural norms/customs of each country. Thus the design and emphasis in the corporate governance structure has been in several ways, unique to each country.

Growing activity in the market for corporate control in the US and UK in the 1980s, coincided with a decline in competitiveness of these countries relative to Japan and Germany. Anxiety over US and UK firms' ability to compete induced rethinking in a number of areas. The nature of the corporate governance environment and its implications for firm competitiveness has over the last decade been keenly rethought and investigated. Demirag (1994), Ezzamel, Wilmott and Liley (1992), Grinyer, Russell and Collison (1998) provide evidence that managers believe that the corporate governance structure has a role in shortening their decision horizons. However, the analytical basis for this 'managerial belief' in short-termism is not clear (Laverty, 1996; Morris, 1998).

In the absence of a clear understanding of the link between managerial decision behaviour and the corporate governance structure, empirical differences in the two types of governance structures have formed the basis of several hypotheses on their implications for competitiveness. Thus, for example, in the literature there is extensive discussion of the capability of the signalling mechanism (the stock market) and the signals (of financial information flows) to allow for managerial decisions which are based on inter-temporal concerns (see Morris, 1998). The role of the stock market expressed through the working of the market for corporate control is the most apparent difference between the corporate governance structures of the US and the UK on the one hand and Germany and Japan on the other. Thus the focus of the discussion has been on the institutional robustness of the stock market in incorporating intertemporal decisions and not on the institutional robustness of the corporate governance structure in bridging the information asymmetry between the shareholders and managers.

The corporate governance environment in the US and the UK is primarily based on the MCC and the governance structures in Germany and Japan lay emphasis on internal governance devices. The use of hostile takeovers in the MCC subsumes the working of the governance structure into the working of a larger institution, the stock market. Given this distinguishing role of the stock market, shareholder behaviour has become an important factor for explaining the differing trends in corporate competitiveness in the two types of governance environment. The declining competitiveness of the US and UK economies has been attributed to the shareholder

concern for short-term gains. As a consequence it is argued managers have been prevented, by the threat of a take-over, from taking long-term decisions to promote competitiveness. This is an ambitious assertion and shifts the focus of the discussion from the institutional robustness of the corporate governance mechanism to the institutional efficiency of the stock market and, in particular, to an evaluation of the stock market's ability to decompose financial signals into those reflecting returns from previous investments and those reflecting future returns. There is anecdotal evidence to support this argument. Surveys of the behaviour of analysts in UK have found a strong preference for 'fundamentals' (key financial ratios) in the decision to *'buy' and 'sell'* (Arnold and Moizer, 1984; Pike Meerjanssen and Chadwick, 1993). Financial information in the form of financial ratios plays an important role in the investment analyst's decision to purchase or dispose of a shareholding. This suggests that long-term investments, which will reduce current earnings and involving new and innovative opportunities, will not be properly evaluated. The verdict of the literature on the efficiency of the stock market is that some weak form of the efficient market hypothesis holds (Blair, 1995). Event studies have shown that the stock market reacts favourably to the announcements of R&D expenditures (Griliches, 1984). In the absence of a clear consensus on whether a short-term decision bias is induced by the stock market it has been suggested that it is possible that the stock market fails to value long-term investment in intangibles like organisational human capital (Sheard, 1989). Although, there is extensive discussion on the relevance of human capital for the competitiveness of Japanese industry, there is no evidence that the stock market is unable to value investment in human capital (Odagiri, 1992).

At another level, in an attempt to establish the link between the decision bias of managers and the functioning of the stock market, it has been suggested that the decision environment in the market for corporate control emphasises financial information flows. The exercise of managerial discretion with regard to forms of investment will be motivated by the desire to bridge the information gap between managers and shareholders. Risk-averse managers will want to take decisions, which build their reputation. These efforts can be broadly classified in terms of:

(a) Visibility biases — the incentive to make short-term indicators look better.
(b) Resolution preference — the incentive to advance the arrival of good news and delay the receipt of bad news and
(c) Mimicry and avoidance — the incentive to take actions that better managers are seen to take and avoid the actions of bad managers (Hirshleifer and Yoon, 1992).

The above characterisation of managerial effort faced with information asymmetry shows that it is for shareholders to interpret managers' intent. For example, a decision having a long resolution period may well turn out to be the top management's attempt to delay bad news or postpone the discovery of bad decisions. A consequence of such a decision environment is that financial information, e.g., earnings and dividends, will constitute the basic input for the interpretation of managerial action by shareholders. The problem with financial information is that it induces managers to short change long-term decisions and emphasise current earnings and dividends. Even if shareholders do recognise the existence of visibility bias in managerial decisions, managerial behaviour will not necessarily change, for managers are caught in a

situation similar to the prisoner's dilemma. Only if all managers co-ordinate their activities so that no manager tried to cut back on long-term expenditures, can there be an avoidance of myopic behaviour. However, if one manager was to act alone he would be perceived to be a bad manager because shareholders have no way of distinguishing his behaviour from the rest of the managers who could be distorting dividends and earnings signals. So shareholders are likely to view any signals indicating shortfalls in earnings and dividends as occurring in spite of the visibility bias and not as a consequence of long-term expenditure decisions. It is therefore argued that investors do infer the correct position by allowing for equilibrium distortion but managers nonetheless will forgo long-term decisions to prevent a drop in share prices (Stein 1988).

Tendencies towards herd behaviour in managerial decisions will have implications for the firm's competitiveness. The competitiveness of a firm is dependent on its ability to carry out adjustments in the light of changes in costs, technological opportunities and demand changes. Measures of competitiveness, in very general terms, can be viewed as ratios — the numerator of which comprises the development of new competencies and new product concepts - that is, visualising and realising new opportunities. The denominator, on the other hand, involves attributes, which enhance cost competitiveness (Hamel and Prahalad, 1994). Cost competitiveness could be realised by disposing/acquiring units or downsizing/restructuring in the context of current demand. If the top management is under pressure to show performance in terms of earnings and dividend announcements on a year-to-year basis, managerial behaviour will emphasise the denominator component of competitiveness.

Managerial behaviour, which emphasises the numerator of competitiveness, will be possible only in a corporate governance environment where the penalties of late entry far outweigh those of errors of judgement and building ahead of demand. If the corporate environment allows for hostile take-overs then there will be a negative inducement for innovative behaviour. Firms will be unwilling to build ahead of demand or build competencies in new product areas where costs are high (e.g., when the products/processes are in the initial stages of the learning curve). Late entrants can establish presence by acquiring an already established firm after the opportunities have become reasonably identifiable for the insiders in the industry. This will not, however, be the best strategy when the firm is open to international competition. There is evidence to support the view that managers in the UK use mergers and acquisitions as a strategic tool. It has been found that mergers and acquisitions are ranked by senior management as among the top three events in the list of strategic decisions, along with investing in new locations and expansion of existing sites (Marginson et al, 1993). From the survey data it appears that large companies use acquisitions and divestments as directional tools for achieving strategic focus. However, it is not clear whether the desire for strategic focus involves structural adjustments of the enterprise's activities in terms of demand, or technological opportunities, or is primarily motivated by financial considerations.

The centrality of financial information flows to the relationship between shareholders and managers in the US and UK, as compared to Japan and Germany, is identified as an important distinguishing feature in the decision environment of managers. It is

pointed out that a special feature of corporate financing in Japan is the practice of mutual shareholdings or stable shareholdings among firms and financial institutions. Shareholdings are based on implicit self-enforcing agreements to hold shares as 'friendly insiders'. Inter-corporate relationships are strengthened by inter-locking directorates among non-competing companies and are deepened by exchanges of personnel at most levels. As large corporate interests have access to most of the information they need to assess the prospects of their investments, financial statements of companies, profit and dividend fluctuations have lesser significance as indicators of performance of Japanese enterprises. This, it is believed, has allowed Japanese enterprises to focus on long run profit growth and market-share (OECD Economic Survey of Japan, 1991; Hoshi, 1994; Sheard, 1994).

The belief that financial information is not of primary, or of much, significance in the decision environments of corporations in Japan and Germany, compared to the US and UK is largely based on anecdotal evidence. Thus from Table 2.1 we get the impression that stock prices are not a significant consideration for Japanese managers. Several studies have examined the relevance of financial performance for corporate governance. The accountability of top management has been the principal concern in the literature on corporate governance. This is because the emergence of management control may have the effect of reducing the value of the assets for the owner. The divorce between ownership and control suggests that managerial actions regarding the utilisation of the firms' assets may be motivated by their own self-interest. Top management accountability can be proxied by top management turnover (Jensen and Murphy, 1990; Weisbach, 1988). This is because managerial human capital is firm

specific. Hence increases in managerial turnover because of shareholder dissatisfaction with corporate performance will have the effect of reducing the value of this managerial human capital. The role of financial performance indicators and board configuration for top management turnover can be examined to assess the effectiveness of corporate governance.

Table 2.1

Management Goals in Japanese and US business Corporations

Management Goals	United States	Japan
Return on investment	2.43	1.24
Higher stock price	1.14	0.02
Market share	0.73	1.43
Improved product portfolio	0.50	0.68
Streamlined production and distribution	0.46	0.71
Higher ratio of net worth	0.38	0.59
Higher ratio of new products	0.21	1.06
Improving image of company	0.05	0.09
Improving working conditions	0.04	0.09

Figures are averages based on top three choices.
Source: Economic Survey of Japan 1989-1990

Table 2.2 summarises the existing evidence on top management turnover. Our specific interest is in the comparative relevance of financial performance for top management turnover in different corporate governance environments. Is it that financial performance is less relevant in explaining top management turnover in Japan and Germany where the MCC is weak? Recent large sample studies show that short-term financial performance indicators are critical in the assessment of managerial effort by financial stakeholders in Japanese and German corporations (Kaplan, 1994a; 1994b; Kang and Shivdasani, 1995; and Kaplan and Minton, 1994). These studies show that

financial performance indicators have similar implications for managerial human capital in countries where the market for corporate control is not the basis of the corporate governance. Kaplan (1994a, 1994b) examines the relationship between top management turnover and financial performance of companies in Japan and Germany. In his study of German management Kaplan (1994a), examines the relationship between financial performance indicators of the firm and executive turnover for management and supervisory board members in German firms. The sample comprises the 42 German firms listed in the Fortune 500 list of non-US firms in 1980. Turnover of the management board increases significantly with a decline in stock prices and with negative earnings but is unrelated to sales and earning growth. However, turnover of supervisory board members is not consistently related to any measure of performance. Kaplan (1994b) is an important contribution to the literature on comparative corporate governance, as it compares the relationship between managerial turnover and financial performance for the largest corporations in Japan and the US. The study covers 119 of the largest Japanese corporations in the Fortune 500 list of non-US firms ranked by sales in 1980. The US sample is also drawn from the Fortune 500 list of the largest US corporation ranked by sales in the year 1980. The study covers the period 1980-1988. Two conclusions are drawn from the findings of the study. First, the relations between turnover and financial performance in Japan and the US are the same. In the regression results virtually all the coefficients on the

Table 2.2
Studies on Management Turnover

Study	Data	Turnover Measure	Principal Explanatory Variable	Signs Significance
Coughlan and Schmidt (1985)	249 US firms; 1977-80	CEO turnover	Abnormal share price returns	Negative and significant
Warner Watts and Wruck (1988)	269 US firms; 1963-1978	Management team turnover (CEO, Chairman or President)	Abnormal share price returns	Negative and significant
Weisbach (1988)	367 US firms; 1980-88	CEO turnover	Outside directors	Performance measure more highly correlated with CEO turnover on outsider dominated boards
Kaplan (1994; 1995); Kaplan and Minton (1994)	146 US and Japanese Firms; 1980-88; 61 German firms; 1981-89	CEO turnover; Change in the composition of top management team	Stock returns Sales Growth Earnings	Negative and significant
Denis and Denis (1995)	1689 US firms; 1985-88	Management team turnover (CEO, Chairman or President)	Stock returns Operating income	Negative and significant prior to turnover; positive and significant after turnover.
Franks, Mayer and Renneboog (1995)	74 UK firms from the lowest quintile and 77 from the middle quintile; 1985	CEO turnover, Board turnover, executive and non-executive directors	Abnormal stock returns Proportion of non-executive directors Block shareholdings	Poor performance, non-executive directors; outside block shareholdings increase CEO and board turnover

Kang and Shivdasani (1995)	270 manufacturing Japanese firms	CEO turnover	Returns on assets Abnormal stock returns Block shareholdings	Negative and significant prior to turnover; positive and significant after turnover. Performance measure more highly correlated with CEO turnover with strong main bank ties; outside succession more likely with block shareholdings and main bank ties
Khorana (1996)	5169 US fund management firm (1979-1992)	Fund manager turnover	Stock based performance measure Assets growth rate	Negative and significant
Franks and Mayer (1996)	35 successful hostile takeovers, 23 unsuccessful hostile takeovers, 35 accepted bids, UK firms 1980-86	Board turnover	Hostile takeovers;	Board turnover positively and significantly related to hostile takeovers; except Tobin's Q no other financial performance indicator used in the study (abnormal stock returns; Dividend per share; Cash flow rate return) related to hostile takeovers
Conyon (1998)	184 UK firms; 1986-1994	CEO turnover	Stock returns	Negative and significant
Denis and Serrano (1996)	98 unsuccessful takeovers, US firms; 1984-89	Management team turnover (CEO, Chairman or President)	Abnormal stock returns Block shareholdings	Management turnover related to poorly performing firms with block shareholders
Denis , Denis and Sarin (1997)	1394 US firms; 1985-88	Management team turnover (CEO, Chairman or President)	Block shareholdings Stock returns	Negative and significant; probability of turnover negatively related to share

				ownership of directors and positively related to the ownership of outside blockholders; turnover of managers less sensitive to performance changes in firms with higher managerial ownership
Cosh and Hughes (1997)	75 UK electrical engineering firms; 1989-1994	CEO turnover, Board turnover	Returns on capital employed Stock returns	CEO turnover negatively related to financial performance especially Returns on capital employed Block shareholders do not affect the turnover of top management
Abe (1997)	687 Japanese firms; 1974-1990	CEO turnover	Stock returns Sales Growth Pretax income/assets Negative pretax income Emplyment growth	Contemporaneous firm performance measures not significantly related to CEO turnover except sales growth and employment growth which increase turnover probability; however the long run performance measures (annualised average of cumulative performance as a CEO) are significantly related to turnover
Mikkelson and Partch (1997)	US firms over two periods. 227 firms in 1984-88, a period of active takeover market and 218 firms in 1989-1993 a period of less active takeover market	Management team turnover (CEO, Chairman or President); CEO turnover	Stock returns Market to book value of assets Earning before taxed, interest and depreciation to assets ratio.	Absence of relationship between performance and turnover in the less active takeover period (1989-93)

performance variables have the same signs and most do not differ statistically. The second finding to emerge from the study is that low earnings are consistently and significantly related to, and explain, more variation in Board turnover in Japan than in the US. This second result is not consistent with the commonly held perception that Japanese managers are able to ignore short-term earnings or cash flows. The earnings results do not support the perception that Japanese managers are more able to invest in projects, which do not payoff in the short run.

Kaplan and Minton (1994) examine the relationship between the appointment of outside directors and the financial performance of Japanese companies. The study is an extension of the study cited earlier (Kaplan, 1994b) and covers the same Japanese companies. The major finding of the study is that outside interventions at the board level are related to the firm's stock performance and to low earnings in the current and in the previous year.

In Japan it is very rare for firms to have outside directors. All the directors in the median firm are in the employ of the firm. So the appointment of outside directors represents a major intervention from outside. A MITI (1985) study cited by Ballon and Tomito (1988) found that 43.5% of the manufacturing companies listed on the Tokyo Stock Exchange did not have outside directors. Between 1981 and 1989 of the 119 firms in the sample 44 had bank-nominated directors appointed to their board and 31 had directors appointed by other non-financial companies with large shareholdings. The study found that banks had appointed directors when stock performance was poor and companies were expected to have difficulty in meeting their financial obligations

(due to a large debt to asset ratio). The corporate shareholders on the other hand stepped in when earnings were low and the firm appeared to have problems, which were temporary and reversible. Further, the banks and the corporate interests rarely appointed outside directors in the same year (the reasons behind their respective appointments were different). However, interventions by banks and other corporations are driven most strikingly by poor stock performance in the current and previous year.

Outside intervention by banks and corporate interests can be either for the insurance function or for the disciplinary function. As an insurance function appointment of outside directors is a signal to suppliers, customers and workers that the financial institutions will continue to support the functioning of the firm, It is also possible that the appointment of outside directors is effected to discipline the managers. The two functions are not mutually exclusive. If the empirical evidence is that the appointment of outside directors does not lead to a statistically significant turnover of top managers then it is possible that the appointment of outside directors does not lead to the disciplining of managers, at least not in terms of their continuance as members of the top management team. However the finding (Kaplan and Minton, 1994) is that the appointment of outside directors does lead to disciplining of managers in terms of a termination of their relationship with the firm. Given the nature of employment relationships in Japan where most members of the top management team come through the internal hierarchy of the firm, it represents a severe threat to managers. These results are probably an understatement of the phenomenon in Japan as the firms represent the largest non-financial firms in Japan. The position of banks and outside corporate interests can be expected to be even stronger in relation to smaller firms.

Thus financial information flows are of similar relevance in governance structures dominated by the market for corporate control and in control environments emphasising internal mechanisms.

Kang and Shivdasani (1995) examine the association between the non-routine turnover of top executives and industry adjusted financial performance indicators. The sample covers 270 Japanese firms listed in Moody's International Reports. The study covers the period 1985-1990. The results are consistent with the findings of Kaplan (1994b) though it does not give us the comparative picture *vis-à-vis* the top management teams in alternative corporate governance relationships. There is a negative relation between the likelihood of turnover and earnings and stock price performance.

Corporate governance structure has a degree of specificity to each country. To be able to place the discussion in the following chapters in the context of the country's governance environment we next take a closer look at the corporate governance environment in the UK.

2.3 Corporate Governance in UK

Some of the important differentiating characteristics of the UK corporate governance environment are discussed in the following paragraphs.

A. Strong mediating role of the stock market:

Table 2.3 shows market capitalisation in four OECD countries. The percentage figures indicates the extent to which the dynamics of the owner management relationship is mediated through the stock market. From Table 2.3 it is clear that the mediation of the stock market is greater in the UK than in US, the other country having a similar corporate governance environment. It would be inappropriate to compare the market capitalisation rate in the UK with that of Japan. In the years after the war there was a deliberate attempt to introduce a US style corporate governance environment in Japan. However, the market for corporate control did not have a significant role in the governance structure as Japanese companies devised a system of stable shareholdings and cross share holdings (OECD, 1991; Odaigiri, 1992). Thus companies developed share interests in each other and refused to trade in them on the stock market (for examples of behaviour where shares were not traded even when their prices rose multifold see Miwa, 1995). This illustrates the point that the system of property rights and the right of ownership evolves within the context of each country's social and cultural norms and influences the corporate governance structure.

By 1993, in the UK, the market capitalisation as a percentage of GDP was nearly double that of the US. Market capitalisation as a percentage of GDP stood at 120% for UK in comparison to 66% for the US (unadjusted figures, Datastream and World Tables, 1993). This implies that the size of the UK quoted sector and the market for corporate control is proportionately larger in the UK than in the US. Another feature of the UK corporate governance environment is that the ownership concentration is relatively lower than in the US, Japan and Germany (Prowse, 1994). The shares are

also widely dispersed. Thus a survey found that that out of 170 UK companies examined, 84% were widely held in the UK. A widely-held company being defined as a company in which there is not a single shareholder who owns more than 25% of the equity of the firm (Mayer, 1994). The proportionately larger market capitalisation in conjunction with the pattern of ownership in the

Table 2. 3
Market Capitalisation as a percentage of GNP (Current Prices; 1985)

Country	Unadjusted	Adjusted
USA	51	48
UK	90	81
Germany	37	29
Japan	71	14

Note: Adjusted figures are corrected for double counting of shares associated with inter corporate shareholdings and relate to 1985.
Source: Borio 1990

UK suggests that ownership changes will be more frequent in UK companies. Diffused share ownership reinforces the separation of ownership from control as it encourages impersonal share ownership (Scott, 1986). The tendency towards frequent changes in ownership is further reinforced by the role of institutional investors.

B. Institutional Shareholders:

As is evident from Table 2.4, between 1963 and 1992 there has been a rise in the share of equity held by institutional investors. Institutional shareholders now have a decisive presence in corporate equity holdings. Institutional investor interest in equity holdings increased significantly in the 1970s. In the first stage the institutional

investors' interest in their equity holdings was essentially passive. There was a pliant belief in the efficient market hypothesis and the stock market was buoyant. A well-

Table 2.4
Percentage of total equity owned by institutional investors, (UK)

	1963	1969	1975	1981	1989	1990	1991	1992
a. Pension Funds	6.4	9.0	16.8	26.7	30.5	31.4	31.1	34.7
a. Insurance cos.	10.0	12.2	15.9	20.5	18.5	20.4	20.7	16.5
c. Unit Trusts	1.3	2.9	4.1	3.6	5.9	6.1	5.7	6.2
a+b+c	**17.7**	**24.1**	**36.8**	**50.8**	**54.9**	**57.9**	**57.5**	**57.4**
Individuals	54.0	47.4	37.5	28.2	20.6	20.3	19.8	21.3
Banks	1.3	1.7	0.7	0.3	0.7	0.7	0.2	0.4
Others	27	26.8	25	20.7	23.8	21.1	22.5	20.9

Source: CSO; Share Register Survey, 1992.

diversified portfolio was a reasonable assurance for a rate of return higher than the bank rate of interest. Even today around 25% of the shares owned by the pension funds are indexed (*Economist,* January 29, 1994). Portfolio strategy was based on 'indexing'. This meant that in principle if an investor owned 1% of the stock market, his portfolio would comprise 1% of every stock traded in the stock market. Such investors have no interest in the performance of any particular stock. Two developments have changed the behaviour of institutional investors in UK over the years:

a. Lowering of expectations with regard to returns from the stock market

b. Maturing of pension funds with the shift in the demographic profile resulting in pensions being paid out of investment income rather than cash flow from new

contributions (see Table 2.5). These two factors have the effect of greater emphasis on dividend income by the shareholders.

Table 2.5
Pension Funds; Contributions and Payments (£ million: UK)

Years	Contributions net of Refunds	Payments to members and their Dependants
1986	9922	8328
1987	9420	9684
1988	9604	10427
1989	10440	12098
1990	9753	13212
1991	9268	15208

Source: CSO; Institutional Investments, 1991 and 1993

Most institutional investors today delegate the management of equity to separate and specialist fund managers (Davies, 1993). These intermediaries compete with each other for the funds of institutional investors. Among other aggressive policies the fund managers and institutional investors are aware that there are substantial bid premiums to be realised by putting a company into 'play' that is as a target for take-overs. The evidence shows that the stockholders of target firms tend to gain from a take-over bid (Jensen and Ruback, 1983; Franks and Mayer, 1996). The SEC has estimated that US hostile take-overs during the period 1981-1986 created $167 bn in stockholder wealth (Corporate Growth, July/ August, 1990).

C. Hostile Takeovers

The incidence of hostile takeovers as a percentage of all takeovers is significantly higher in the UK than in the US. Thus in the governance environment in the UK a greater percentage of takeovers have been used to exercise corporate governance

rather than for purposes of diversification and other synergistic reasons. Traditionally the literature tends to interpret hostile takeovers as the exercise of control and friendly takeovers as taking place for synergistic reasons (Davis and Stout, 1992). There were only three instances of hostile takeovers in Germany since the Second World War until 1990 (Prowse, 1994). Of the three one failed and in another the bidder though successful in cornering the majority of the shares could not exercise control, because

Table 2.6
Hostile Takeovers as a percentage of all attempted transactions 1985-89

UK	US	Rest of Europe
37.1	17.8	9.6

Source: Prowse 1994

of voting right restrictions (Mayer, 1994). The number of unfriendly take-overs is about the same in Japan. There have been only three market tender offers between 1971-90; OECD *Economic Survey*, Japan, 1991.)

D. Take-over Defence:

Faced with a hostile bid, target companies in the UK largely adopt defence strategies based on financial announcements like updated forecasts, disposal or revaluation of assets or finding a white knight. While target companies employ multiple defence strategies, it was found in the case of 42 hostile take-over bids that took place between January 1989 and March 1990, 81% employed dividend and profit announcements as defence strategies. In contrast, the defence strategies available to US companies are quite extensive (Jenkinson and Mayer, 1994). Defences are available in the form of

charter amendments, poison pills, greenmail and litigation. One possible reason for the growth of the proactive institutional shareholders in the US is the decline in the market for corporate control, the management having ensconced themselves with various legal and statutory provisions in the corporate legal framework (Jenkinson and Mayer, 1994).

From the above discussion it emerges that compared to the US (the other country having a stock market based governance structure) the UK has a relatively more active market for corporate control. Market capitalisation is the highest among four countries, the percentage of hostile takeovers is greater and ownership is more diffused. Thus the UK corporate governance environment represents an opportunity to assess the working of a governance structure based primarily on the market for corporate control.

2.4 Conclusion: Implications for Managers

The discussion in section 2.3 shows that financial information flows have similar relevance in all governance structures irrespective of whether they rely on the market for corporate control or on the internal governance devices like the board. Despite the identical role of financial information flows in all governance environments, the belief that the market for corporate control produces short-termism persists. Short-termism implies the preoccupation with current financial returns, of managers functioning within the purview of the market for corporate control. This restricts their decision horizons to short-term goals as opposed to intertemporal choices. Similar pressures are presumed to be absent in governance structures which do not place primary

reliance on the market for corporate control but make use of internal governance devices. In a recent study it was found that the emphasis on short-termism is viewed as being among the four major changes in managerial work of the top management in the UK in the 1980s. Respondents (top management teams) were asked to select five from a list of 18 items in order of importance, which they perceived to describe the ways in which the work of management has changed during the 1980s, and pressure to incorporate short-term objectives in their decision criteria figured prominently (Ezzamel, Willmott and Liley, 1992). Similarly another study has found that R &D managers in UK felt that they frequently experienced pressure for short-term financial returns from their owners and therefore sometimes cancelled projects that ought to have been undertaken in the long-term interest of the firm. Most respondents also felt that analysts and major shareholders are not in a position to make decisions based on technically informed analysis of quality and value of the R&D undertaken. The study also found that R&D managers and directors felt that institutional investors, analysts and major shareholders often exhibited a strong bias against high risk long-term research in favour of lower risk short-term product development (Demirag, 1994).

Thus short-term decision horizons are perceived as a constraint on managerial behaviour. We have seen in section 2.2 that there is no reason to believe that this is a consequence of the working of the signalling mechanism (the stock market) or the signals (financial information). In Chapter 3 we propose a conceptual framework of corporate governance which will help us understand the effects of the governance structure for managerial decisions/perceptions. An understanding of short-term decision horizons in managerial decision behaviour has to be sought in the

perceptions of managers and not in the behaviour of shareholders. The approach adopted by the literature on management strategy and in the study of organisation behaviour becomes relevant here. Managerial perceptions will influence the choice of competitive actions and organisational design (Spulber, 1993; 1994).

Two sets of attributes will have important roles in framing managerial perceptions. The first set of influences follows from the incomplete specification of the expectations and obligations (the incomplete contract) between shareholders and the managers. The problem posed by information asymmetry between shareholders and managers can be resolved if it is possible completely ex-ante to specify the expectations and obligations between the two parties (a complete contract). There is substantive literature in the principal agent framework, which has attempted to design incentive contracts to ensure that management effort is directed towards the maximisation of shareholder wealth. The problem with these complete contract models is that they do not take into account the transaction costs associated with the drawing up of these contracts. In the light of high transaction costs, contracts will have to be incompletely specified. We will undertake a detailed characterisation of the incomplete contracts between managers and shareholders and its implications in Chapter 3. The framework highlights the role of conduct in corporate governance.

The second factor having an important influence in the formation of managerial perceptions is the market for corporate control itself. The market represents an arrangement where shareholders have the option of terminating the ownership of the firm's resources at will without any loss of reputation or credibility. The stock market

also allows shareholders to diversify the risk associated with investment in the firm's resources by allowing them to hold the shares of several companies simultaneously. On the other hand managers suffer a loss in reputation and credibility if shareholders divest the shares of the companies they manage on a significant scale. This puts the returns on their human capital at risk. Human capital is the asset which managers utilise to manage the firm's resources. When managers take decisions they put their human capital at risk. The managers' futures, and their current income through executive compensation contracts, are dependent upon the success or failure of such decisions. The evidence on the influence of corporate performance on executive income is not clear though a weak positive association is discernible (Conyon and Peck, 1998a). A recent study of executive compensation in the UK, however, does find that the relationship between top management pay and corporate governance is much stronger in firms with boards, which are dominated by outside directors and have remuneration committees (Conyon and Peck 1998b). The managers are also constrained by their inability to diversify this human capital risk. They are not normally expected to manage several companies simultaneously. Evidence suggests that in corporate governance systems strongly mediated by the market for corporate control, the position of the senior management team is vulnerable. There are several studies, which show a high rate of management turnover subsequent to a take-over — friendly or hostile (see Walsh, 1988 for studies using US firm data). In the UK a similar pattern in turnover of top management subsequent to a merger or an acquisition has been noted (Franks and Mayer, 1996).

Table 2.7 shows that 50% of all executive and non-executive directors at the senior level resigned subsequent to a friendly take-over. In the aftermath of a successful hostile bid 90% of all directors resigned. For the sample of firms for which the hostile bid was unsuccessful the corresponding figure was 39%. These findings have important implications for managerial behaviour. Thus, in effect, decisions will be motivated by not only their potential for returns to risk neutral shareholders but also by their potential effects for firm specific managerial human capital. As we have seen in section 2.4 the market for corporate control is relatively more active in the UK than

Table 2.7

Proportion of directors who *resigned in the targets of accepted and hostile bids*
(Size of sample in parentheses)

Panel 1

	Friendly	Successful; Hostile	Unsuccessful; Hostile
Executive and non-executive directors	50% (n=34)	90% (n=31)	39% (n=23)
Executives only	50% (n=26)	88% (n=26)	36% (n=22)

Panel 2

t-statistic (difference in proportions)

	Executive and non-executive	Executive
Successful hostile versus accepted	3.52	3.00
Unsuccessful hostile versus hostile	-4.01	-3.76

Source: Franks and Mayer, 1996

in any other country. Hostile take-overs are proportionately more frequent in the UK than in the US, the other comparative corporate governance environment. The UK corporate governance environment is characterised by the absence of legal defences for managers against a hostile take-over. The UK market works on self-regulatory code of conduct and the employment of financial defence strategies. In contrast the US market for corporate control has been severely constrained by the legal defences available to managers. Finally, the increasing use of executive compensation schemes such as one year revolving employment contracts have the potential of adding to the sense of insecurity among top management teams. This will further induce defensive opportunistic behaviour from the top management. The working of the market for corporate control has an important influence on managerial perceptions. Incomplete contracts and the inability to diversify risks represent serious threats to the human capital of managers. The implications of the incomplete contracts and the working of the market for corporate control for managerial decision behaviour are analysed in Chapter 3.

CHAPTER 3

THE GOVERNED CORPORATION AND CORPORATE GOVERNANCE

A Conceptual Framework for Analysing Corporate Governance

3.1. Introduction

Shleifer and Vishny (1997) define corporate governance as the '....ways in which suppliers of finance to corporations assure themselves of getting a return on their investment' However, the corporate governance framework also has implications for the decisions of the top management. Demirag (1994), Ezzamel, Wilmott and Liley (1992), Grinyer, Russell and Collison (1998) provide evidence that managers believe that the corporate governance structure has a role in shortening their decision horizons. The analytical basis for this 'managerial belief' in short-termism is not clear (Laverty, 1996; Morris, 1998). This chapter proposes a conceptual framework that shows how corporate governance provides the decision context for the top management. The conventional frame of reference of corporate governance as

outlined by Shleifer and Vishny (1997) is nested in the analysis. Following Pound (1995), the corporate governance framework is visualised not only as an institutional device for correcting the imbalance of power between shareholders and managers due to the separation of ownership from control but also as an aid to the decision making process. The objective of the proposed corporate governance framework is to identify a basis for strategic co-operation between shareholders and managers such that the agency problem is reduced and a decision context is provided to promote the competitiveness of the firm. The emphasis in the framework is on what Herbert Simon (1976) defines as procedural rationality[1]. The need for research that combines the contextual and processual analysis of top management behaviour has been suggested in the study of managerial elites and strategic decision processes (Pettigrew, 1992; Rajagopalan, Rasheed and Datta, 1993). The conceptual framework proposed provides the basis for such an exploration in corporate governance.

The more standard conceptualisation of corporate governance in terms of principal and agents represents an abbreviated understanding of the structure and processes of corporate governance. It ignores the transaction costs of specifying the incentive contracts between shareholders and managers. A complete specification of the incentive contracts will require a full listing of the expectations and obligations between the contracting parties. The cost of such an exercise will be prohibitive. The

[1] Simon (1976:130-32) makes a distinction between procedural rationality and substantive rationality. Behaviour is procedurally rational when it is the outcome of appropriate deliberation. Procedural rationality is usually studied in problem situations in which the subject must gather information of various kinds and process it in different ways in order to arrive at a reasonable course of action, a solution to the problem. Behaviour is substantially rational when it is appropriate to the achievement of given goals within the limits imposed by given conditions and constraints. In the corporate governance context substantive rationality is encapsulated in goals like shareholder wealth maximisation.

principal and agents framework also ignores the institutional context that will determine the willingness of the contracting parties to engage in specifying their respective obligations and expectations. For example, shareholders may be unwilling to specify their expectations and commitments as this may restrict their rights of ownership (e.g. share premiums in hostile takeovers).

The emphasis in the principals and agents framework is on substantive rationality. The abbreviated representation of the relationship between shareholders and *managers* by the principal and agents framework ignores the role of conduct in the analysis of corporate governance. In the empirical analysis the focus is on gathering evidence at increasingly disaggregated levels on the hypothesised incentive effects of the individual mechanisms for managerial performance (for a survey of the literature see John and Senbet, 1998; Shleifer and Vishny, 1997). Dalton, Daily, Ellstrand and Johnson (1998) in their meta analytic review of studies on board composition, leadership structure and financial performance find that there is little evidence in the empirical literature of a systematic relationship between governance structure and firm performance relationship). This meta analysis demonstrates that we lack an understanding of corporate governance.[2] There is also a need for an overall conception of the corporate governance structure that accounts for the interdependence and complementarity of individual mechanisms like block shareholdings, non-executive directors, takeovers, etc. Studies show that there is complementarity and

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Procedural rationality on the other hand will involve identification of processes that will reduce opportunism in shareholder management relationship.

[2] The article concludes that future research will have to concentrate on the role of subcommittees and that managerial motivations will have to be at the heart of the debate regarding suggested board configurations and leadership structure (1998:285). How it arrives to the latter conclusion is not clear.

interdependence of the individual corporate governance mechanisms (Kang and Shivdasani, 1995; Rediker and Seth, 1995; Weisbach, 1988; Zajac and Westphal, 1995).

This emphasis has also deflected the enquiry into the possible links between corporate governance and top management decision behaviour to an enquiry into the robustness of related institutions like the stock market and its ability to account for intertemporal decisions. As discussed in Chapter 2, large sample studies of Japanese, German and US firms, however, suggest that share prices have a similar and in Japan greater relevance in bringing about governance changes (Kang and Shivdasani 1995; Kaplan, 1994b; Kaplan and Minton 1994). Moreover, there is little evidence in the corporate finance literature, to support the hypothesis that the stock market is unable to make a distinction between short-term decisions to promote current profitability and long term decisions. In the literature evaluating the efficiency of the stock market the understanding is that some weak form of the efficient market hypothesis holds (Copeland and Weston, 1992; Blair, 1995). Event studies have also shown that the stock market reacts favourably to the announcements of research and development expenditures (Griliches, 1984).

The link between the market for corporate control and competitiveness has also been explained by questioning the property rights view of the firm. Alternative theories of the firm have been proposed. These theories argue that the shareholders are not the only constituent of the firm. Top management decisions should not be guided by shareholder objectives alone (Davis, Schoorman and Donaldson, 1997; Donaldson

and Preston, 1995). Exclusive concern for shareholder wealth maximisation will lead to a neglect of the other constituents of the firm and constrain the ability of the firm to compete. The analysis of corporate governance in this chapter is located within the property rights view of the firm. Short of a revolutionary revision of property rights in the society, a consistent framework for corporate governance has to be located within this view of the firm and should aim to reduce the agency problem while also providing the basis for superior managerial decision-making.

The framework proposed in this chapter is based on the premise that an evaluation of the links between corporate governance and managerial decision behaviour has to be conducted in terms of the institutional robustness of the corporate governance structure itself. The evaluation of the institutional efficiency of the stock market will only be meaningful if the institutional basis for the corporate governance structure has been identified. To identify the institutional basis for a corporate governance structure we examine the nature of contracts between shareholders and managers. The analysis shows that a learning mechanism is necessary in the corporate governance structure because of the incomplete contracts between shareholders and managers. Employing the distinction made by Ghoshal and Moran (1996) between opportunism as an attitude and opportunism as behaviour we show that managerial decision behaviour will be a function of the learning mechanism.

To identify the learning mechanism we consider the three modes of strategic co-operation identified in the literature, viz., the direct agreement mode, the justice mode and the decentralised mode. The learning mechanism of these modes cannot be the

basis for strategic co-operation given the incomplete contracts between shareholders and managers and given the endogeniety of managerial decision behaviour. A mixed mode called the procedural justice mode is identified as a valid basis for strategic co-operation. The procedural justice mode emphasises greater communication between the shareholders and managers. Procedural justice provides not only the context for superior decisions but also achieves the agency goal of reducing managerial opportunism. In arriving at this conclusion we make use of two different strands of literature on the role of procedures in decision-making. One strand emphasises the importance of procedures as the basis for strategic co-operation between two interdependent economic agents characterised by bounded rationality (Dekel, Lipman and Rustichini1998; Moulin, 1995; Salmon 1995; Simon, 1976). The other body of literature emphasises the role of procedures in strategic decision-making (Kim and Mauborgne, 1998; Korine, 1997; Sapienza and Korsgaard, 1996). Finally we show that if there is a primary emphasis on the market for corporate control in corporate governance, shareholders will be unwilling to engage in communication and the corporate governance structure will employ a learning mechanism as implied in the decentralised mode. Shareholders will adopt a dominant strategy and managers will respond with increased opportunism, This will exacerbate the agency problem and mitigate against competitiveness. In conclusion we discuss how an empirical validation of the framework can be attempted in research.

3.2 Nature of contracts and opportunism

3.2.1 Nature of contracts

Hart (1995) provides a theoretical basis for the corporate governance mechanisms in terms of incomplete contracts. He lists three reasons why the contracts between shareholders and managers will be incomplete (Hart, 1995):

a. cost of thinking and planning all the different eventualities

b. cost of negotiation

c. cost of writing down the contract

Incomplete contracts between managers and shareholders require the use of corporate governance mechanisms to bridge the gaps in contracts. The mechanisms comprising the corporate governance structure provide the institutional basis for the interpretation of the unspecified component of the contract. They are channels for the communication of the expectations and obligations of the shareholders and the managers on a continuing basis. Wiggins (1990) in his evaluation of long term contracts also concludes that firms will use governance structures when they cannot use contracts. While the rationale by Hart (1995) for the use of corporate governance mechanisms in terms of incomplete contracts is correct there is little insight provided into the design of the corporate governance structure. The corporate governance structure is viewed as a collection of mechanisms. The relative emphasis on different mechanisms is the outcome of the market forces (Hart, 1995).

We get a limited insight into the design of the corporate governance structure because the incomplete contracts are underidentified. Schwartz (1992) lists five causes for contractual incompleteness. These are:

a. vague wording of the contract
b. failure to contract an issue
c. prohibitive cost of writing a complete contract
d. asymmetric information between the contracting parties. The asymmetric information can be observable and verifiable expost. A contract will be weakly non-contractible if the information can be observed but cannot be verified expost. A contract will be strongly non-contractible if the information can be neither observed nor verified expost.
e. heterogeneity one side of the market. A complete contract will condition on each pooling type. The uninformed type can screen the informed type. Screening equilibra are usually separating. Contracts will be incomplete when screening is not feasible or when the informed party cannot disclose its type credibly (Schwartz, 1992).

A comparison of the factors leading to contractual incompleteness shows that Hart in his specification does not account for strong non-contractability and heterogeneity on one side of the market. Deekel, Lipman and Rustichini (1998) also make similar observations in their assessment of Hart's incomplete contracts models.

"This approach assumes that some of the variables which are relevant to the contracting parties are observed by them but cannot be 'shown' in the court (1998: 538)".

They also make an important distinction between unforeseen contingencies and 'standard' uncertainty.

"....By the latter we mean those models, such as nonadditive probability which are intended to represent an agent who knows the state space but not the appropriate probabilities and behaves 'conservatively' because of the lack of knowledge. Conceptually, atleast there is a difference between this and not knowing the state space and behaving 'conservatively' as a result" (1998)

Strong non-contractability and heterogeneity on one side of the market are important reasons for contractual incompleteness in shareholder management relationship. The shareholder management contracts are not discrete in time. It is not possible to specify a finite time span of the contract at the time of its commencement. The length or the period of the contract is a function of the expectations and obligations implied in the contract. Termination is a sanction - an indication that one of the parties failed to fulfil its expectation or felt that the other party did not fulfil its obligations. Thus the shareholder management contract is neither discrete nor repetitive but an ongoing contract. Observability, let alone verification, cannot be based on exogenous objective criteria but will be a function of subjective interpretation of the interests of the parties involved. It would be a simplification to presume that these expectations and obligations are completely identified at the time of the commencement of the contract and remain unaltered during the contract. At any point of time, the shareholder gets some information on the extent of fulfilment of the contract and receives information that allows him or her to form expectations regarding the possibilities of the remaining obligations being fulfilled in the future. Also new expectations are being added to the relationship. Thus the degree of observability and verifiability is endogenous to the incomplete contracts between shareholders and managers.

The subject of exchange between shareholders and managers is incompletely identified. Different shareholders will interpret shareholder wealth maximisation differently. Only some of the constituents of which contribute to shareholder wealth maximisation can be identified on a common basis. The weights to be attached to the different interpretations is implicit in the transaction but unobservable for the top management, the other party in the transaction. For example, Holland (1996) identifies three types of investment policy employed by financial institutions viz., relationships with large stakes, long investment horizons and little trading; stable holdings with some regular trading around a stable target stake; and short-term, transient, arms-length investing. The financial institutions attach different weights to the different emphasises in their investment policies. The weights are frequently changed and for strategic reasons not revealed.

In addition to the factors identified by Hart (1995) 'unforseen contingencies' (Dekel, Lipman and Rustichini, 1998) or 'strong non-contractability' (Schwartz, 1992) are important reasons for contractual incompleteness between shareholders and managers. In such a contract environment learning becomes critical to the conduct of their relationship. It becomes important to understand how the two parties construct their expectations and obligations in matters relating to the contract. The existing literature on corporate governance lacks a theory of learning. In fact this gap is attributed to the wider body of literature on expectation formation in economics. (Dekel, Lipman and Rustichini, 1998; Hodgson, 1998; Salmon, 1995; Shull, Debecq and Cummins, 1970). Hodgson (1998) defines learning as more than the gathering of information. It is the

development of new means and modes of cognition, calculation and assessment. It is about 'procedural rationality' (Simon, 1976). Thus learning is about how information is accrued and how it is processed. The environment and the agent's approximation of that environment play a critical role in both aspects (Salmon, 1995).

In the principals and agents framework of corporate governance there is no role for learning in the interaction between shareholders and managers. The information asymmetry is bridged by a system of incentives to align managerial motivations with shareholder objectives. In his incomplete contract justification Hart (1995) does recognise the role of governance mechanisms as 'channels of communication'. Learning is however, limited to the gathering of information by the observable but not verifiable specification of incomplete contracts. The emphasis in the learning mechanism is left to market forces (Hart, 1995) or 'natural selection'. The scope for interdependence between the shareholders/managers and the environment for the process of learning itself is not recognised. However, as we have seen, shareholder management contracts are strongly non-contractible and also display heterogeneity in the motivations of the shareholders. Incomplete contracts incorporating 'unforeseen contingencies' and 'strong non-contractability' will have to be based on a learning process, which leads to the identification of the ongoing and evolving of the expectations and obligations in the shareholders and management contract. This learning process will be based on a symbiotic relationship between the individual and the environment in the construction of the 'state space' (Salmon, 1995; Hodgson, 1998). The significance of this symbiotic relationship is emphasised by the distinction between opportunism as an attitude and opportunism as behaviour.

3.2.2 Opportunistic Attitude and Opportunistic Behaviour

The relationship between shareholders and managers' is one of strategic interdependence. The separation of ownership from control and the firm-specific nature of managerial human capital imply that neither shareholders nor managers can hope to pursue rational behaviour alone. Co-operation between the two parties, characterised by the pursuit of selfish interest, is the only way to maximise the total surplus available for distribution. The role of opportunism is an important consideration in the conduct of the strategic interaction. Opportunism is distinct from self-interest. The assumption of self-interest visualises individual behaviour motivated by own preferences. However, the individual will candidly disclose all pertinent information on enquiry and meet all obligations expected of him or her from the transaction. Opportunism is pursuit of self-interest with guile. The individual is not expected to disclose all the truth and fulfil all obligations under the contract (Williamson, 1993). Individual behaviour can be based on 'influence activities' (Milgrom and Roberts, 1988).[3]

Ghoshal and Moran (1996) draw a distinction between two types of opportunism, viz., opportunism as an attitude and opportunism as behaviour. The former is a product of the human condition and the latter a product of institutions and technology.

[3]Most information is not innocent and suffers from misrepresentation as it is gathered and communicated in the context of conflict of interest and with consciousness of decision consequences. Milgrom and Roberts (1988) term such information manipulation and activities as 'influence activities'. Dechow, Sloan and Sweeny, (1995) provide evidence on the manipulation of earnings information by managers with the objective of inducing shareholders to take decisions favourable to managers. This is an example of managerial influence activity Studies also show managerial bias for investments and mergers and acquisitions that enhance the significance of the incumbent management team (Amihud and Lev, 1981; Shleifer and Vishny, 1989; Stiglitz and Edlin, 1992).

Opportunism as an attitude is the proclivity or inclination of the individual to act opportunistically. Opportunism as behaviour is positively related to the expected benefits and is negatively related to safeguards and controls. Thus opportunism as behaviour can be a variable of the institutional context. Two factors will have an influence on opportunism as behaviour. First, opportunism as behaviour will be a function of 'prior conditioning'. For example, the 'prior conditioning' of the shareholder management relationship is a derivative of property rights. Secondly, opportunistic behaviour is a function of the 'feeling for the entity'. This perception emerges from the contracting parties' assessment of each other. A positive perception will reduce opportunism while a negative assessment will exacerbate opportunism.

The goal of the corporate governance structure is to reduce opportunism. Corporate governance mechanisms are employed to reduce opportunism. The market will not be able to make a distinction between opportunism as an attitude and opportunism as behaviour. It will not incorporate the role of opportunistic behaviour in the design of the corporate governance structure. This distinction becomes even more difficult given the incomplete contracts between shareholders and managers. The design of the corporate governance structure has to be a policy choice. The conceptual framework that is proposed in this chapter treats 'prior conditioning' as the outcome of the property rights framework. The operational objective of the corporate governance structure is to minimise the possibility of opportunism as an attitude. However, in the design of the corporate governance structure there has to be an explicit recognition of the possible links between the institutional arrangement and opportunism as behaviour. It is possible that a corporate governance structure attempting to curb

opportunism as an attitude may reduce the 'feeling for the entity' and induce opportunistic behaviour. Opportunistic behaviour and consequently opportunism can be endogenous to the corporate governance structure. The implications of the corporate governance structure for the 'feeling for the entity' will depend upon the choice of the learning mechanism. The market cannot distinguish between the two types of opportunism; the choice of the learning mechanism will have to be a policy choice.

Three modes of strategic co-operation between strategically interdependent agents motivated by self interest is identified in the economics literature (Moulin, 1995). Each of the three modes incorporates a learning mechanism for the formation of expectations in the co-operative relationship. Next we examine the appropriateness of the learning mechanism of each of the three modes of strategic co-operation in the context of the incomplete contracts between shareholders and managers and the endogeniety of managerial decision behaviour as identified in the distinction between opportunism as a behaviour and opportunism as an attitude.

3.3 Modes of Strategic Co-operation and Learning

3.3.1 Direct agreement mode

The direct agreement mode is independent of any institutional context as the agents engage in free and face-to-face transaction. This mode is unsuitable for co-operation given the separation of ownership from control and the incomplete contracts between shareholders and managers. The learning mechanism requires that shareholders replicate all managerial functions in the direct agreement mode.

3.3.2 Justice mode

The justice mode is also inappropriate for strategic co-operation in the incomplete contract environment. In the justice mode the judge decides on an equitable distribution of the surplus generated by the strategic co-operation among the concerned agents. There are two requirements for the justice mode to work. The judge or the arbitrator will have to be equitable. The second requirement for the justice mode is that the judge will have to be omniscient. There is no role for bounded rationality in this process. The formula for a fair and just assessment of expectations and obligations has to measure all aspects of similarities and differences in expectations and obligations, across shareholders and managers. This will require detailed information. It is difficult to imagine an indivisible collective authority representing all shareholders given their different and varying motives for holding shares. Without a benevolent and omniscient dictator the only option in the justice mode is to devise mechanical rules. An example of a mechanical rule is the business judgement rule used by courts in the evaluation of franchise contracts. This however, goes against the essence of the decision context for which co-operation is being sought. Mechanical rules cannot be the basis for the conduct of the strategic relationship between shareholders and managers based on contractual incompleteness. There is also the issue of acceptability of decisions. The acceptability of decisions will depend on whether the parties involved understand the decision process.

3.3.3 Decentralised mode

In the decentralised mode decision-making power is distributed among individual agents. Co-operation takes place as strategic interactions based on conjectures

regarding each other's expectation formation. The basic framework of expectation formation in the shareholder management interactions is the property rights view of the firm. Shareholders as owners of the firm's assets can choose institutional structures that allow them freedom to pursue their objectives. Shareholders can, for example, choose a corporate governance structure where co-operation is based on the shareholders adopting a dominant strategy. In a two person game, strategy L by a player A is a dominant strategy if, no matter how the other player B plays, strategy L will maximise A's pay off over his or her strategic choices. Thus strategy L is unambiguously the best strategy for player A even if he or she does not have the slightest idea of how the other player will act. Thus A's behaviour will be insensitive to the amount of information possessed on the other player's preferences. The market for corporate control mechanism implies the adoption of a dominant strategy by shareholders vis-à-vis the firm's management. The learning mechanism in the dominant strategy is that shareholders provide information through the sale and purchase of shares and inflict sanction on the management through the market for corporate control. By the provision of information and sanctions in this form, shareholders establish expectations. This is expected to elicit co-operation from managers such that shareholder returns are maximised.

The adoption of a dominant strategy as implied in hostile takeover-bids however, makes it difficult for managers to form expectations about shareholder behaviour. Shareholders are a group, constituents of which have individual preferences. Firms have a mix of shareholders in their equity base and every investor will have an investment portfolio, which has some distribution of motives. Games with mixed

strategies (shareholders having a range of motives for holding shares) have multiple equilibra (Knight, 1992). The social and public choice literature also shows that given the diversity in preferences of shareholders, voting will not display a transitive ordering of preferences even when individual shareholders' preferences are transitive. Majority voting is arbitrary and a function of the institutional matrix (Shepsle, 1992). Factors like the distribution of the preferences, composition of the coalition that constitutes the majority, who controls the agenda and what procedures are followed in the sale and purchase of shares, in the process of a takeover, become important in deciding the outcome of the majority decision rule. As we have seen one of the factors which increases the contractual incompleteness between shareholders and managers is the heterogeneity on one side of the market (that is heterogeneity in the motivations of the shareholders). The decentralised mode increases the contractual incompleteness by allowing the shareholders not to disclose credible information about their motivations.

Corporate governance structures primarily based on the market for corporate control will elicit a response from managers keen to reduce their human capital risk. Hostile takeovers lead to large-scale replacement of the top management (Franks and Mayer, 1996; Walsh, 1988). A study of the psychoanalytic response of managers shows that hostile takeovers evoke images of unfairness, subjectivism and irrationality about the event (Schneider and Dunbar, 1992; Shleifer and Summers, 1988). Managers will have a significantly reduced 'feeling for the entity'. This increases the demands on the corporate governance structure. Thus a significant component of managerial

opportunism may be a self-fulfilling prophecy. Opportunistic behaviour will be an endogenous variable and a function of the corporate governance structure.

The corporate governance structure with a primary reliance on the market for corporate control will fail in its goal of reducing managerial opportunism. The adoption of a dominant strategy reflected in the emphasis on the market for corporate control will lead to ambiguity and lack of accountability in the corporate governance process. Managers will respond to shareholders' emphasis on the market for corporate control by taking recourse to opportunistic behaviour in their bid to minimise their human capital risk. The adoption of dominant strategy will therefore lead to a break down in strategic co-operation between shareholders and managers

The three conventional modes of strategic co-operation cannot provide the basis for learning and the narrowing of contractual incompleteness. A learning mechanism has to be an integral part of the corporate governance structure because of the incomplete contracts. Given the endogeniety of managerial decision behaviour the learning mechanism has to emphasise the 'feeling for the entity' if the scope for opportunism in shareholder management relationship is to be reduced. The learning mechanism in the direct agreement mode and the justice mode are ideal for reducing opportunism but cannot be implemented given the nature of contracts between shareholders and managers. The learning mechanism of the decentralised mode of strategic co-operation will reduce the 'feeling of entity' and exacerbate the problem of opportunism in shareholder management relations.

In discussions on economic behaviour in a bounded rationality context the role of procedural learning has been emphasised (Dekel, Lipman and Rustichini, 1998). Procedural learning views learning as a process in which individuals construct approximate models of the environment which is updated as more information becomes available (Salmon, 1995). A procedural learning mechanism can enhance the 'feeling for the entity' and minimise the scope for opportunism as an attitude as well as behaviour. However, this will depend upon how the learning mechanism is specified. In Economics procedural learning is incorporated using statistical algorithms like the Bayes's rule. This is not procedurally rational in the bounded rationality context. Procedural rationality emphasises the decision-makers perception of the environment as it shapes their cognition and the choice of decision outcomes. Learning under procedural rationality is the outcome of the interaction between the individual and the decision environment and is not a statistical artefact. In the shareholder management relationship a procedure that promotes the 'feeling for the entity' is important. A procedural learning mechanism that not only reduces the contractual incompleteness but also encourages the 'feeling for the entity' has been termed as procedural justice (Folger, 1993; Kim and Mauborgne, 1998; Moulin, 1995; Thibaut and Walker, 1978; Tyler and Lind, 1990).[4]

[4] Moulin (1995) identifies procedural justice as a mixed mode for strategic co-operation in a bounded rationality context. Kim and Mauborgne, (1998) promote this concept as a valid decision making procedure for strategic decisions. Both identify this concept independently, however, both acknowledge the antecedents of procedural justice in the legal and justice literature. For a survey of the procedural justice literature and its applications in law see Bayles, (1990), Rohl and Machura (1997). We find the implications of procedural justice in the context of strategic co-operation (Moulin, 1995) and in the context of strategic decision procedures (Kim and Mauborgne, 1998) complementary. It

3.4 Procedural Justice Mode

The procedural justice mode combines the justice and decentralised modes (Moulin, 1995). Procedural justice will involve designing a mechanism to elicit information from individual agents about their relevant characteristics and choosing the outcome from the information provided. We now examine the relevance of the procedural justice as a mode of learning, which will promote 'the feeling for the entity'. Unstructured deliberation or deliberation is identified as the critical requirement for learning in the procedural justice mode. We develop two further propositions. First, the use of financial performance indicators as 'fire alarms' will be the most economical way for engaging in deliberation. Second, deliberation will not be a feature of corporate governance structure if the market for corporate control is the preferred mechanism of corporate governance.

Rawls (1971) distinguishes between pure, perfect and imperfect procedural justice. Pure procedural justice emphasises justice of the procedure independent of the outcome. Perfect and imperfect procedural justice requires independent criteria of the justice of particular outcome. Perfect procedural justice implies that the procedures always give just outcomes. Given the incomplete contracts between shareholders and managers only the pure procedural justice can be a mode of strategic co-operation between shareholders and managers. Under pure procedural justice the interacting parties have equal opportunities to exchange messages and there is equal influence of everyone's message. The outcome chosen is from the decentralised mode. The option chosen can even involve dismissal of top management or shareholders agreeing to a

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provides a unique learning mechanism for reducing the agency problem and a positive decision context

hostile takeover. Such decision environments are treated as just, independent of the outcome.

The emphasis of the pure procedural justice mode of strategic co-operation is on the decision processes. Procedures can be an end in itself, irrespective of the outcome. Procedures can be seen as the best guarantee, for the realisation of 'self interest' (Thibaut and Walker, 1978), as the indicator of 'group value' (Tyler and Lind, 1990), in the perception of 'dual obligation' (Folger, 1993) or in the 'emotional and intellectual recognition' (Kim and Mauborgne, 1998). Procedures will contribute to the perception of equality, which is critical for pure procedural justice. It will also promote the 'feeling of entity' which Ghoshal and Moran (1996) point out reduces the scope for opportunism as behaviour.

3.4.1 Pure Procedural Justice and Communication Behaviour

Strategic co-operation between shareholders under pure procedural justice requires equal opportunity and influence in the exchange of messages. The outcome chosen from the decentralised behaviour of contracting parties is considered as just even if it has adverse consequences for one party. Several studies on procedural justice have found a positive association between communication behaviour and perceptions of procedural justice (Greenberg 1994; Korosgaard, Scweiger and Sapienza, 1995, Miles and King, 1997; Sapienza and Korosgaard, 1996)[5]. Thus the operative part of the pure

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for voluntary co-operation in an environment characterised by incomplete contracts.

[5] In the analysis of relationships that cannot be fully specified or controlled in advance of their execution and where underlying expectations can vacillate in unforeseeable ways, the legal literature draws similar conclusions. For the management of such relationships it is concluded that a communication infrastructure that simply does not engage the parties to process information but

procedural justice mode is that there has to be equality in opportunity and influence of messages. Procedural justice requires a learning mechanism with extensive information processing capabilities. This is also relevant for the incomplete contracts between shareholders and managers.

Kim and Mauborgne (1998) list three requirements for procedural justice in strategic decision procedures, viz., explanation, engagement and clarity of expectations. The pattern of communication will require decisions on the mix of structured and unstructured exchange of information and the periodicity and intensity of exchanges of information. Structured information is through formally identified channels like company financial reports. Unstructured information exchange can be through general body meetings of shareholders, board meetings, board committees, social exchanges, professional gatherings, etc. We term unstructured information exchange between shareholders and managers as deliberation. The argument advanced regarding the communication behaviour between shareholders and managers is in two steps. First, deliberation will have to be the centrepiece of strategic co-operation, under pure procedural justice. Second, the use of company financial information as 'fire alarms' will be the most cost-effective way of engaging in deliberation.

3.4.2 Deliberation

Deliberation is important in the context of the incomplete contract between shareholders and managers. Decision deliberation is a cognitive process in which the decision-maker engages as the decision is framed, as goals and plans are adopted or

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promotes sustained engagement is needed. Such sustained engagement will depend on relational assets

rejected and as implementation is monitored and plans and goals are retained or replaced in light of progress. This conception of learning identifies the sources of deliberation as the decision-makers own knowledge of the organisation; suggestions of support persons; examples offered by outsiders; and existing rules and regulations (Beach, Mitchell, Paluchowski and van Zee, 1992).

Managers will have more information on the mixed and variable motives of their shareholders. A decision-making environment based on unstructured information exchange will not only reduce the agency problem but also improve the quality of decisions, as it will provide the basis for voluntary co-operation. Voluntary co-operation implies going beyond the call of duty wherein individuals exert effort, energy and initiative to the best of their abilities on behalf of the organisation (Kim and Mauborgne, 1998). Such co-operative behaviour is essential for a knowledge-based firm. The decision frame will also improve because there will be a greater flow of firm-specific idiosyncratic information and a knowledge based firm has also been conceptualised as a distributed knowledge system (Tsoukas, 1996).

3.4.3 Fire Alarms

Company accounts have been the traditional structured channel of communication used by managers in their strategic co-operation with shareholders. Such forms of information have to be simple and standardised to be understood and interpreted by all concerned. Such standardised information is termed 'focal point' (Kreps, 1988). There are two possible uses of 'focal points' by the shareholders, if they are not

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like favourable prior belief, trust and goodwill (Salbu, 1995).

ignored. Shareholders can use 'focal points' to follow a dominant strategy or, they could be used as 'fire alarms'. It is not advisable to ignore focal points. The gathering and communication of information serves a ritualistic purpose indicating to the contracting parties that a proper attitude about decision-making exists (Feldman and March 1981). Information is not simply a basis for action but a representation of competence. Thus, the gathering of simple and universal information is a reflection of credible decisions and will contribute positively towards perceptions of procedural justice.

The use of 'focal points' as 'triggers' to buy and sell ownership will be contrary to the requirements of the pure procedural justice mode of strategic co-operation. Shareholders will in effect adopt a dominant strategy. There is no reciprocity in the exchange of messages. Shareholders will not need to communicate with managers except through the sale and purchase of shares. As pointed out earlier, the pursuit of a dominant strategy leads to greater ambiguity as shareholders have mixed and varying motives for sale and purchase of shares. Such use of focal points will lead to a strong perception of unfairness and a lack of faith in the authority of the shareholder. Healy and Palepu (1995) examined investor communication in the case of a marketing firm and found that it was difficult to convince investors through financial reports. Investor communication through financial reports led to stock mis-valuation over an extended period.

Deliberation or unstructured information exchange is a costly exercise. High intensity deliberation cannot be sustained for long. Conceptually it will amount to the adoption

of the direct agreement mode of strategic co-operation described above. A cost-effective alternative will be the use of focal points as 'fire alarms' as signals for initiating deliberation (McCubbins and Schwartz 1987). Should deliberation be initiated only when 'fire alarms' are sounded, that is when the focal points suggest poor performance? The monitoring authority in our case is the shareholders. Given incomplete contracts the characteristics of the messages and their interpretation cannot be identified in advance. Contracting parties will need to gather information that may not have any immediate consequences. The varying and implicit nature of expectations and obligations imply that there is need to scan the environment for gathering what is termed as 'gossip' (Feldman and March 1981). Focal points can function as 'fire alarms' only when shareholders have some deliberation on a continuous basis. The level of these deliberations need not be intensive but there is a need for continuous communication.

There is also the issue of reliability of information. The evidence that financial reporting will be susceptible to Milgrom and Roberts' 'influence activities' (1988), is provided by Dechow, Sloan and Sweeny (1995). A low-key continuous deliberation also helps in quick response to 'fire-alarms'. Outside intervention at the board level can be quickly effected with a steep learning curve if there is a 'live' database available from continuous low key deliberation. Therefore the framework for information exchange proposed is one of low key continuous deliberation with 'focal points' as 'fire alarms' signalling the need for more intensive deliberation. This framework is illustrated using the example of Japanese governance in manufacturing.

The presidents' meetings of the corporate group in Japan serve this very function. There seems to be some misunderstanding about the role of these meetings because of their informal nature. Miwa (1995) contends that given the deep financial interests involved, these meetings should serve as the headquarters or the central office of the corporate group. This is not a correct representation of presidents' meetings. These meetings represent a low key, continuous deliberation. There are no rules and regulations laid down on an ex ante basis, the violation of which is identified by the regular monthly gathering. This is in the spirit of the incomplete contracts that govern the shareholder management relationship. These deliberations represent the passive collection of information and a tactical advantage like fire stations or hydrants distributed over an inhabited area. This allows for a quick response when the 'fire alarm' is sounded.

In Japan, poor financial performance leads to the appointment or activation of outside directors to the board. The outside directors are the existing employees of the firm just below the board level. They have established links or previous association with the banks or companies having cross shareholding interests. The outside directors then go about bringing changes in the top management on a selective basis by firing some and promoting others from within the board. At the end of the intervention when the changes in the top management are complete they withdraw from the board (Kaplan and Minton, 1994). The understanding of Japanese and German corporate governance structures as relationship based have been interpreted to mean a 'patrol car' oversight. An example of 'patrol car' oversight, in public governance, is the Public Accounts Committee. The Public Accounts Committee continuously samples the expenditure

behaviour of various government departments to ascertain whether they fulfil the criteria of legislative intent (McCubbins and Schwartz, 1987). This is a misrepresentation of the Japanese and German corporate governance structures. Shareholders in Japan and Germany do not engage in sustained overt monitoring or in 'patrol car' oversight of the management. Deliberation between the controlling group and the managers is stepped up by the sounding of 'fire alarms'. Financial performance indicators are the means to effective corporate governance. It is the signal to gather more information, not the trigger to abdicate from the relationship. Fire alarm oversight is less centralised and requires less active and direct intervention than the 'patrol car' mode and thus is an economical way of gathering information. A corporate governance structure should use 'focal points' as 'fire alarms' and deliberation in the pure procedural justice mode of strategic co-operation between shareholders and managers.

It is interesting that we find elements of a deliberative framework of corporate governance in the latest committee that examined corporate governance in the United Kingdom (Hampel, 1998). The recommendations of the Hampel Committee are significant in the context of the framework proposed here. The Committee recommends that shareholders should take into account '...the diversity of circumstances and experience among companies....,' in their interpretation of matters relating to corporate governance (Section 1.13). The Committee believes that good governance needs to be agreed between companies and their shareholders on a case by case basis, 'shareholders and others should show flexibility in the interpretation of the code and should listen to directors' explanations and judge them on their merit...'

(Section 1.11). The Committee is also in favour of greater communication when it proposes the inclusion of a narrative statement in the company annual report (Section 2.1). It also recommends that departing directors go public and explain why they left the board and that the terms of their contract termination be published along with their original employment contract. However, not having a clear understanding of why there is no participation by institutional shareholders the recommendations of the committee are in effect statements of good intentions, 'But we urge trustees to encourage the investment managers to take a long view' (Section 5.6).

3.5 Deliberation and the Market for Corporate Control

Deliberation cannot be an attribute of the corporate governance structure if the market for corporate control is the preferred mode of interaction between shareholders and managers. This will be the case for two reasons. First, shareholders will be unwilling to engage in deliberation if they have a ready recourse to the market for corporate control. Second, it will be difficult to give credible commitments to sustain meaningful deliberation and opportunistic behaviour will be endogenous to the corporate governance structure.

The possibility of opportunism is recognised by shareholders and managers. To sustain strategic co-operation there will be a need for credible commitments. Only in the presence of credible commitments will it be possible to make superior transactions that will enhance the volume of the surplus available for redistribution. However, a calculated response for superior outcomes requiring the addition of commitments to contracts will only be undertaken if such additions are cost-effective. A far-sighted

solution to the problem will create a bilateral dependency and support it with contractual safeguards but only to the point where the benefits exceed costs. For example, this is the basis of cartel formation in oligopoly markets. Incorporation of credible commitments in the contract between the shareholders and managers will depend on the perception of costs and the relative asymmetry in the degree of incompleteness of the contracts between the two parties.

In a corporate governance structure based primarily on the market for corporate control, the shareholders will lack the incentive to engage in deliberation. Shareholders will consider it in their strategic interests to keep their contracts terms ambiguous and by adopting a dominant strategy. They will be unwilling to give commitments that limit their freedom of strategic behaviour as such limitations can translate into costs for shareholders like loss of share premiums subsequent to a hostile bid. The extent of the ambiguity will depend on the cost involved in reducing the ambiguity. The perception of costs will be specific to the corporate governance environment of each country, as each country will have its own social, cultural and legal norms for interpreting its property rights.

The shareholders are unwilling to reduce ambiguity and provide credible commitments as they are not constrained by reputational considerations in a market for corporate control. Shareholders can function under anonymity. Reputation is associated with an identity that is stable over time. The composition of shareholders is not stable in the market for corporate control. The shareholders as a group may be stable but the identity of individual members can keep on changing. The individual

shareholder's behaviour will not be constrained by reputational concerns. The managers, however, face the risk to their firm-specific human capital in the event of a hostile takeover (Franks and Mayer, 1996; Walsh, 1988). Unlike in franchise contracts reputational concerns are reversed. Instead of the franchiser (shareholder) having the reputational concern it is the franchisee (manager) that is apprehensive of the reputational effects of the termination of the contract. The consequence is that there is a lack of credibility in the exchange of information and deliberation will be non-existent or at the most of a very low quality. This will have the effect of making the incomplete contract between shareholders and managers even more incomplete and less sensitive to details than justified by the costs of making the contracts less incomplete.

Incomplete contracts need not be symmetrically incomplete for the contracting parties (Al-Najjar, 1995). The degree of incompleteness will differ from the point of view of managers and shareholders. The contracts will be less complete in specifying the obligations of the party with access to flexible instruments of governance. In comparison the party with poorer access to such instruments will have its obligations specified in greater detail. Shareholders have the power in their relationship with managers as they have the residual rights of control and the ultimate option of resorting to the market for corporate control. They can make their part of the obligations even more ambiguous than necessitated by the incomplete contracts. Managers on the other hand do not have the same degree of freedom given the highly firm-specific nature of their human capital. A good example of this is the growing

complexity of executive compensation contracts in spite of a poor correspondence between executive pay and performance as noted by Conyon and Peck (1998b).

There is evidence in support of the argument that deliberation will form the basis of interaction if the market for corporate control is not readily available to shareholders. In the US, the growing intensity of shareholder activism is a consequence of the decline in the market for corporate control in the US (Bratton and McCahery, 1995). The working of Federal politics has led to the empowerment of the managers. The opportunism of the 1980s made possible by the active market for corporate control was countered by State legislation in favour of the managers (Roe, 1994). The behaviour of the States is explained by the theory of collective action in the presence of interests groups (Oslon, 1965). The argument is that focused groups will prevail in the determination of outcomes over dispersed groups or disorganised groups. Consider a State, the managers of whose industries are threatened by takeovers. Given their human capital risk and the possible consequences for their employees in terms of restructuring etc., they will be more focused and organised in lobbying their legislators to pass legislation against takeovers in comparison to the raiders for whom such a move will not be so critical to their activities. The legislation in question is being enacted in only one of the 50 States. The raiders are more dispersed and less intensely motivated than the targets in the States. The politicians will also be more inclined to listen to them than the raiders from outside the States. The raiders from within the States will also be less motivated because they consider targets from all over the country and not only the companies from within the State for acquisition. The interests of the raiders and targets in obtaining or resisting changes in the

legislation through Congress legislation will be symmetrical. However, the targets have one advantage. The President of the United States is the only nationally elected politician on Capitol Hill.

The relative unattractiveness of the MCC may also have come about by the rise in institutional shareholdings. Growing concentration of ownership makes it difficult to use the stock market for share returns. Large-scale transfer of shares will have the effect of bringing the share prices down. Relationship based governance structures as in Japan and Germany are characterised by concentrated ownership (Mayer, 1997). The 1990s have seen the evolution of rules and procedures in the US, which have had the effect of generating a more credible basis for deliberation between managers and shareholders (Szeremet, 1993; Sharara and Hoke-Witherspoon, 1993; Bratton and McCahery, 1995). The rule changes have helped in the development of a better information environment with companies keen to provide related information for a better assessment of financial information.

Japan and Germany have only three instances of hostile tender offers until recently (Prowse, 1994). In Japan the equity capital of most large firms is in the hands of a few shareholders. These large shareholders are other corporations, financial institutions and trade partners. These shareholders maintain the right as large shareholders under corporate law and legal system to deprive the management of its leadership. However, there is little evidence of large shareholdings responding to the stock market. The position of large shareholders remains stable. Of the 10 largest institutional investors in 1990 firms in various sectors, on an average, seven to eight were also on the top 10

list in 1980. The large shareholders remain stable even in the face of windfall gains. Even when share prices go up ten times there is little change in the shareholdings of the large shareholders (Miwa, 1995). The absence of the option of abdicating ownership is because of 'hostages' or commitments given through cross shareholdings and trade relations. It is also the outcome of legal, social and cultural norms used to interpret the property rights in the Japanese corporate environment.

Recent developments in the Japanese economy especially in the financial services sector suggest that the near absence of a market for corporate control is also not helpful for good corporate governance. These developments however, cannot be a negative justification for the primacy of the market for corporate control in the corporate governance structure. The design of the corporate governance structure identified in this chapter is based on positive analysis of the nature of contracts, the objective of corporate governance and the modes of strategic co-operation available to shareholders and managers. Emphasis on the market for corporate control, different from Japanese and German corporate governance can be visualised. An example is the idea of voluntary dissolution (McGinty, 1996). In voluntary dissolution shareholders holding a specified portion of the stock can initiate a vote to dissolve the corporation and would require the board to obtain the highest value by auctioning the corporation. The advantage of voluntary dissolution by shareholders is that shareholders will take recourse to it only when they genuinely want to force an auction. As the process has to be initiated through the board it will ensure that there is sufficient opportunity for deliberation. Such innovative ideas need further analysis.

3.6 Conclusion

The relationship between shareholders and managers is one of strategic interdependence. In the proposed framework there can be two possible modes of strategic co-operation between shareholders and managers. These two modes are the decentralised mode where the shareholders pursue a dominant strategy and the procedural justice mode in which unstructured communication or deliberation will be the basis for corporate governance. In the conventional analysis of corporate governance typified by the principals and agents literature on corporate governance this choice has been represented in terms of 'exit' and 'voice' options before the shareholders. For example, shareholders can express their dissatisfaction with managerial performance either by voting with their feet and relinquishing their ownership of the company's shares (the market for corporate control) or by expressing their displeasure through the internal control mechanisms like the company board and getting the top management removed. The choice between the two options for the expression of shareholders assessment of the top management is visualised as a function of the liquidity of the stock market. Voice is perceived as a costly alternative and will not be the preferred behaviour of shareholders if they operate in a liquid stock market. Thus the emphasis found in the corporate governance structure will be a derivative of the capital market.

The framework proposed in this Chapter show that the choice between the two modes of strategic co-operation has implications for corporate governance itself. The aim of corporate governance is to reduce managerial opportunism and provide a decision context for top management. The incidence of managerial opportunism is shown to be

endogenous to the mode of strategic co-operation. The decentralised mode will not reduce the scope for opportunism in shareholder management relationship as shareholders will adopt a dominant strategy and managers will attempt to protect their human capital. Pure procedural justice will be the desirable basis for strategic co-operation between shareholders and managers. The pure procedural justice mode incorporates a learning mechanism that is appropriate to the incomplete contracts between shareholders and managers. The learning mechanism reduces opportunism as behaviour by promoting 'a feeling for the entity'. Pure procedural justice requires equality in the opportunity and influence of messages. Communication between shareholders and managers will be the cornerstone of strategic co-operation. In the context of incomplete contracts unstructured communication or deliberation will be a key requirement for strategic co-operation.

There are two sets of empirical issues, which emerge from the conceptual framework proposed. The first set of issues relates to the implications of the adoption of a dominant strategy by shareholders. As shown in Chapter 2 the UK corporate governance framework places a primary reliance on the market for corporate control. This implies the adoption of a dominant strategy by shareholders. The consequence of the adoption of dominant strategy is that there will be opportunistic behaviour and ambiguity in control changes manifested in the processes of the corporate governance framework.

The second set of issues relates to the need for deliberation or effective and direct communication between shareholders and managers under the procedural justice

mode of strategic co-operation. The issue can be further disaggregated in the following terms. First, is there a case for deliberation in corporate governance based on the procedural justice mode? Second, if there is evidence in support of a deliberation in corporate governance what is the form of unstructured communication that will induce co-operation in the procedural justice mode? The empirical evaluation of the second question will only be necessary if there is evidence in support of deliberation as an integral component of the corporate governance framework. Deliberation will be necessary to give substance and credibility to the use of financial performance indicators as the basis of control changes if there is a systematic and unobservable variation in control changes. This systematic and unexplained variation reflects the 'corporate culture' of the firm. Corporate culture refers to the organisation specific norms and customs (Kreps, 1988). Ignoring unstructured communication in control changes and relying exclusivly on financial performance indicators by shareholders in deciding on control changes will not conform to the requirements of a corporate governance structure based on the procedural justice mode.

We turn to the empirical formulation of these issues in the next chapter.

CHAPTER 4

EMPIRICAL HYPOTHESES, DATA AND VARIABLES

4.1 Introduction

This chapter is divided into five sections. In the section two we identify the hypotheses which we evaluate in the following chapters. These hypotheses are based on the conceptual framework of corporate governance proposed in Chapter 3. In section three we discuss the methodology of panel data analysis. Panel data techniques have been employed for the evaluation of the empirical hypotheses. The discussion provides the basis for model specification. In the fourth section, the variables to be used in the study are identified on the basis of relevant literature in this

area. This section also defines the variables used and the data sources. The fifth and the final section concludes the chapter.

4.2 Hypotheses

Chapter 3 identifies the decentralised mode and the procedural justice mode as the two possible modes of strategic co-operation between shareholders and managers. The consequence of the adoption of the decentralised mode is that in a property rights framework, shareholders will pursue a dominant strategy. Shareholders will use focal points like financial performance indicators as the basis for their decisions regarding share ownership. The adoption of dominant strategy will not lead to the narrowing of contractual incompleteness and managers will be unable to form expectations about shareholders motives. The threat to their human capital perceived by the management will lead to greater opportunism as managers will respond to the adoption of dominant strategy by shareholders. The consequence of this will be an exacerbation of the corporate governance problem. Shareholder management relations will be based on opportunism and there will be breakdown in strategic co-operation. The procedural justice mode can be the other basis for strategic co-operation in the property rights view of the firm. This mode of strategic co-operation between shareholders and managers can have the effect of reducing opportunism in shareholder management relationship. A critical requirement of the procedural justice mode given the incomplete contracts between shareholders and managers will be unstructured communication between shareholders and managers. The conceptual framework discussed in Chapter 3 generates two sets of empirical issues. The first set of issues relates to the use of procedural justice as a mode of strategic co-operation between

shareholders and managers. The second set of empirical issues relates to the existence and consequence of the adoption of dominant strategy for corporate governance.

The balance of the thesis is concerned with the empirical exploration of these issues by studying the corporate governance in the United Kingdom. In the discussion that follows the dependent variable is identified. The UK corporate governance environment is a valid testing ground for these issues. We have noted in Chapter 2 that there is a greater emphasis on the MCC in the corporate governance of firms in UK as compared to the US, Japan and Germany (Borio, 1990; Jenkinson and Mayer 1994). Surveys of the behaviour of analysts in UK have found a strong preference for 'fundamentals' (key financial ratios) in the decision to 'buy' and 'sell' (Arnold and Moizer, 1984; Pike, Meerjanssen and Chadwick, 1993). By 1993, in the UK, the market capitalisation as a percentage of GDP was nearly double that of the US. Market capitalisation as a percentage of GDP stood at 120% for UK in comparison to 66% for the US (unadjusted figures, Datastream and World Tables, 1993). This implies that the size of the UK quoted sector and the MCC is proportionately larger than in the US. Another feature of the UK corporate governance environment is that the ownership concentration is relatively lower than in the US, Japan and Germany (Prowse, 1994). The shares are also widely dispersed. Thus a survey found that out of 170 UK companies examined, 84% were widely held. A widely-held company being defined as a company in which there is not a single shareholder who owns more than 25% of the equity of the firm (Mayer, 1994). The proportionately larger market capitalisation in conjunction with the pattern of ownership in UK suggests that ownership changes will be more frequent in UK companies. Diffused share ownership

reinforces the separation of ownership from control as it encourages impersonal share ownership (Scott, 1986). The UK corporate governance environment represents an accentuated opportunity to examine the consequences of a dominant strategy adopted by shareholders.

The case for the use of procedural justice as a mode for strategic co-operation can be examined in two stages. In the first stage we can evaluate whether unstructured communication is a significant issue in shareholder management relationship. As shown in Chapter 3 unstructured communication is central to this mode of strategic co-operation. In the second stage we can examine the form of unstructured communication which will support this form of strategic co-operation. The second stage evaluation will be useful if there is evidence consistent with the understanding that unstructured information exchange is a significant issue in shareholder management relationships. The second stage evaluation is not undertaken in the empirical exercise and will constitute the agenda for further work if unstructured communication is shown to be a significant attribute of shareholder management relationships.

The existence and implications of the adoption of dominant strategy and the relevance of unstructured communication can be evaluated for top-management accountability, a key concern in corporate governance. As discussed in Chapter 2 the emergence of the management as a controlling group in corporations significantly altered the shareholders expectations regarding the value of the firm's assets. The emergence of management control may have the effect of reducing the value of the assets for the

owner. Managerial actions regarding the utilisation of the firms' assets may be motivated by their self-interest. Top management accountability can be proxied by top management turnover. Greater accountability will be ensured through turnover because of the associated risks to managerial human capital (Jensen and Murphy, 1990; Weisbach, 1988). Top manager changes have also been associated with corporate decisions. Changes in the top management may alter the strategy, structures and internal processes (Wallace Worrell and Cheng, 1990) or it may lead to board reforms (Schellenger, Wood and Tashakori, 1989). We can examine the role of financial performance indicators and board configuration for top management turnover to assess the existence and consequences of the use of dominant strategy by shareholders.

Communication between shareholders and managers can be of two types, viz., structured and unstructured. Structured communication will be through 'focal points' such as financial performance indicators. The form of communication is standardised and simplified to be universally understood and is independent of firm specific norms and practices (Kreps, 1988). Financial performance indicators are a good example of structured information exchange. When shareholders adopt a dominant strategy what matters is structured communication. Unstructured communication on the other hand, will be informal and not in a predetermined form. It will take place through fora like the corporate board. It will comprise idiosyncratic information about organisation specific norms or what Kreps (1988) refers to as organisational 'culture'. With the help of the hypotheses we explore the relevance of unstructured communication for effective corporate governance. This will provide evidence in support of the use of

the procedural justice mode as the basis for strategic co-operation between shareholders and managers.

Unlike structured communication unstructured communication can only be proxied. The board attributes like boarding duality, directors block shareholdings, board size etc. may reflect the volume of unstructured communication between shareholders and managers. A board characterised by duality reflects greater concentration of power at the apex of the organisation and the top management may have a reduced inclination to communicate to the board. Board size has also been associated with control. Jensen (1993) considers large boards as dysfunctional and easier to control. Hence larger boards can be hypothesised to have a lower volume of unstructured information flow. Large block shareholdings by directors reduces the separation of ownership from control and information asymmetry. Larger directors' block shareholding implies a larger volume of unstructured information available to shareholders. Larger proportion of non-executive directors on the board may increase the flow of unstructured information depending upon their affiliation. Similarly institutional block shareholdings may take a direct interest in their shareholdings and induce greater information flow. However, it is possible that regulatory provisions like insider laws may prevent a direct involvement. Greater information flows may then be induced by insistence on separation of the posts of chairman and the CEO or a greater representation/effectiveness of non-executive directors on the board.

The problem is that these board attributes are also proxies for relative power. We have to distinguish between the influence of relative power (a reflection of opportunism)

and unstructured communication for governance turnover'. Among the board attributes identified as proxies for the volume of unstructured communication directors block shareholdings is the most appropriate variable to make this distinction. Larger directors block shareholdings narrows the separation of ownership from control. Information asymmetry between shareholders and managers will be reduced. The insider manager will in possession of considerable firm-specific information (Fama and Jensen 1983). Inside ownership will align managerial and shareholder interests (Jensen and Meckiling, 1976). Rosenstein and Wyatt (1997) in their study of the stock market reactions to the appointment of inside directors with block shareholdings conclude that the expected costs of an inside director's expert knowledge clearly outweigh the expected costs of managerial entrenchment only when managerial and outside shareholder interests are closely aligned. Thus it is possible that large block shareholdings will contribute to greater managerial accountability by being positively associated with top management turnover. Larger directors block shareholdings will also increase the relative power of the incumbent management vis-à-vis the remaining body of shareholders (Morck, Shleifer and Vishny, 1988a). However, if larger director block shareholdings are positively associated with governance turnover then it will demonstrate the value of unstructured communication for top management accountability. The positive influence of directors block shareholdings on governance turnover will show that board monitoring increases even though the principal agents conceptualisation would suggest that greater power in shareholder management relationship lies with the incumbent management.

Forms of unstructured communication by definition cannot be completely identified. There will always be the problem of omitted variables. Panel data techniques allow for the identification of firm-specific heterogeneity as group effects. Group effects will pick up omitted variables. Significant and large group effects will suggest that the governance changes will have systematic variation with unidentified variables. The use of dummies in panel data estimates to allow for firm-specific and sample period-related variation does not allow for the identification of the causes that lead to a shift in the regression lines. However, the existence of fixed effects show that the firm specific heterogeneity is correlated with the explanatory variables (Kmenta, 1986, Pindyck and Rubinfield, 1998). It is possible that some of this firm-specific heterogeneity relate to information that has a bearing on the shareholder management relationship and hence require unstructured communication or deliberation between shareholders and managers. Large group effects will be consistent with the relevance of unstructured information exchange though they will not constitute evidence in support of deliberation between shareholders and managers.

The discussion leads us to the hypotheses that are specifically tested.

Hypothesis 1 is formulated in the following terms to reflect the pursuit of dominant strategy by shareholders

Hypothesis 1

Top management turnover will be inversely related to financial performance and more specifically to stock markets based performance.

The second hypothesis will indicate of the relevance of structured information for governance changes. It is expected that the financial performance indicators will have a relatively small impact on top management turnover as managers engage in opportunistic behaviour.

Hypothesis 2

The impact of financial performance indicators on top management turnover as measured by the partial elasticity of top management turnover due to financial performance change will be low.

$$e_{ip} \cong 0$$

Where e_{ip} is the partial elasticity of governance change due to financial performance change.

The consequences of the adoption of dominant strategy will be pervasive opportunism in shareholder management relationship. Board attributes, which reflect relative power of the incumbent management vis-à-vis shareholders will be significant in explaining 'disciplinary top management turnover. This gives us several variants of the third hypothesis, which can be individually identified with specific variables. This hypothesis incorporates the principal agents issues examined in the conventional literature on corporate governance.

Hypothesis 3A

Top management turnover will be inversely related to board duality.

Duality in the top position on the Board has been the subject of much interest in the literature (Boyd, 1995; Rechner and Dayton, 1991). Duality has been associated with

better performance as it gives the firm a clear direction and other positive leadership attributes (Cochran Wood and Jones, 1985; Vance, 1964). However, duality has also been associated with ineffective governance and hostile takeovers (Morck, Shleifer and Vishny, 1989).

Hypothesis 3B

Top management turnover will be inversely related to board size.

Board size has been hypothesised to have implications for corporate governance. Large boards are deemed to be ineffective and dysfunctional (Jensen, 1993). This has been supported by a number of empirical studies (Eisenberg, Sundgren and Wells, 1998; Huther, 1997; Yermack, 1996; Conyon and Peck, 1998c).

Hypothesis 3C

Top management turnover will be positively related to the proportion of non-executive directors.

The role of non-executive directors is difficult to interpret. From the human capital perspective it has been argued that non-executive directors need to signal their expertise and hence will monitor the executive management (Fama and Jensen, 1983). However, the non-executive directors may not have the necessary incentive to monitor if they have insufficient financial involvement in the firm and may be obligated to the

top management for their position (Fama and Jensen, 1983; Hart, 1995; Weisbach, 1988).

Hypothesis 3D

Top management turnover will be positively related to institutional block shareholdings.

Shleifer and Vishny (1986) show that institutional block shareholders can monitor top management either through informal negotiations with management or through the market for corporate control by facilitating the takeover of a firm whose management is underperforming. The latter form of monitoring is however, not substantiated by the empirical evidence on UK firms. Franks and Mayer (1996) do not find that the incidence of hostile takeovers is associated with past performance. Given the share premiums associated with tender offers it is more likely that large shareholdings will increase the likelihood of a hostile takeover for opportunistic reasons.

This fourth hypothesis demonstrates the relevance of unstructured communication or firm-specific investment for corporate governance.

Hypothesis 4

Top management turnover will be positively related to larger director block shareholdings.

Panel data analysis provides an assessment of the role of firm-specific variation in explaining top management turnover. If firm-specific variation is large it is possible

that a better understanding of firm-specific heterogeneity in top management turnover can be obtained through unstructured information exchange between shareholders and managers.

4.3.1 The Methodology of Panel Data Analysis

In a panel data set the various variables of interest are observed both across firms and over several time-periods (t). It is a time series of cross-sectional data. Typically, t < n, n being the number of individual units (which in this case are firms) observed. As the number of time periods involved is not very large, the data set is not quite suited to the econometric techniques appropriate to time-series data. At the same time such a data set does not qualify for analysis as a cross-section data set. A simple pooling of the data will require strong assumptions. All observations will have to be presumed to be homogenous. Thus if **i** firms are observed over **t** number of years and there are **k** exogenous variables $x_1, x_2 \ldots\ldots x_k$, and a dependent variable y_{it}, then a panel data model in its most general form will be:

$$Y_{it} = \beta_{1it} + \beta_{2it} X_{2it} + \ldots\ldots\ldots + \beta_{kit} X_{kit} + \mu_{it} \quad \ldots\ldots\ldots (1)$$

In effect the implications of homogeneity are:

$$\beta_{kit} = \beta_k \text{ , For all i and t; where } k > 1$$

and

(i) $var(\mu_{it}) = \sigma^2$, a constant

(ii) $Cov(\mu_{it}, \mu_{js}) = 0$, where $i \neq j$ and $s \neq t$

The use of panel data has a number of advantages. There are **n** x **t** observations. Thus the efficiency of the estimators is improved because of the increase in the number of observations. Panel data sets also alleviate the problem of multicollinearity as the explanatory variables vary in two dimensions. In principle, panel data techniques allow for more sophisticated models with less restrictive assumptions. When choosing the econometric methodology and econometric specification, an important consideration is to allow for the aggregative nature of the information represented by secondary data. The advantage of panel data techniques is that it makes a distinction between residual heterogeneity associated with changes over time (period effects) and across firms (group effects). This allows for a better identification of the factors leading to changes in corporate governance.

The general descriptive model represented by equation (1) above needs to be structured by specifying the assumptions with regard to the explanatory variables, the properties of the disturbance term and the relation between explanatory variables and the disturbance term (for surveys of panel data techniques see Hsiao, 1986; Matyas and Sevestre, 1995; Maddala, 1993; Baltagi, 1995). In addition to these assumptions common to the identification of an econometric model we also need to make assumptions regarding the variability of the regression coefficient or the specification of the residual heterogeneous behaviour across firms. The latter is specific to the analysis of panel data. All the models discussed in the literature assume that the

explanatory variables are non-stochastic and independent of the errors. They differ in their assumptions regarding the residual term and the degree of variability of the regression coefficients. The different panel data models arising from the different specifications are:

(a) Individual regression model

(b) Seemingly unrelated regression model

(c) Error components model

(i) Fixed effects

(ii) Random effects

(d) Random coefficients model

4.3.2 Choice of Specification

The choice of the econometric specification depends on the way the problem is visualised and the characteristics of the data set. In the individual regression model the coefficients are taken to be specific to each specific firm, but the coefficients are constant over time, that is $\beta_{kit} = \beta_{ki}$ for all **i** . The classical assumptions of constant variance and uncorrelated observations continue to hold. Thus in this specification each corporate governance change is independent of the corporate governance changes in other firms. This technique is not appropriate if **t**, the time period is small (Gujarati 1995). Furthermore our interest in the present exercise is not the specific firm but the identification of firm characteristics which form the basis for the governance changes.

The second specification for the evaluation of panel data is the seemingly unrelated regression model (SURE). Here $\beta_{kit} = \beta_{ki}$ for all **i** as before, however,

(i) $E(\mu_{it}) = 0$ for all i and t;

(ii) $E(\mu_{it}, \mu_{js}) = \sigma_{ij}^2$ for all t = s;

(iii) $E(\mu_{it}, \mu_{js}) = 0$, where t≠s;

Essentially, this specification relaxes the assumption of constant coefficients over time. The specification argues that some non-observable factors may affect all or some of the individual coefficients at the same time giving rise to a non-zero covariance between the disturbance for two different individual firms. In this manner the interdependence in the behaviour of individual firms is introduced into the estimation process. The model is quite comprehensive in the sense that it simultaneously accounts for individual specific effects and interdependence among firms. However, when **n** is large and **t** is small, as is the case in our data set (218 firms observed annually over 6 years) there is a serious problem of degrees of freedom. The number of parameters to be estimated is **n x k** coefficients and (1/2)(n)(n+1) elements of the coefficient matrix. This reduces the reliability of estimates especially for small values of **t**.

The purpose of using panel data analysis is to capture in the estimation process the heterogeneity across the years and the heterogeneity across individual firms in their corporate governance behaviour. This implies an error structure, having the following characteristics

(i) $var(\mu_{it}) = \sigma_i^2$, i = 1,2,....n;

(ii) $Cov(\mu_{it}, \mu_{is}) > 0$, where $s \neq t$;

An error structure which incorporates the firm specific effects and the period effects is given by the error components model. The general form of the error components model is:

$$Y_{it} = \beta_{1it} + \beta_{2it} X_{2it} + ...+ \beta_{kit} X_{kit} + \nu_i + \omega_t + \xi_{it} \qquad (2)$$

where, $\mu_{it} = \nu_i + \omega_t + \xi_{it}$

and ν_i = firm-specific error component

ω_t = period specific error component

ξ_{it} = the normal error term or the pure error term.

For the purpose of the present discussion we will ignore the period effects.

There are the two approaches to estimating the error components model, the fixed effects model and the random effects model. The fixed effects model assumes that the β coefficients are the same for all individuals except for generic individual (fixed) effect. Thus ν_i and ω_t are fixed parameters and the generic effect can be allowed in the specification by allowing for a different intercept for each individual firm. The general form of the fixed effect model is :

$$Y_{it} = \beta_{1i} + \beta_{2it} X_{1it} + ...+ \beta_{kit} X_{(k-1)it} + \xi_{it} \qquad (3)$$

The individual differences are uniquely related to the coefficients β_{1i}. The model has (n + k-1) parameters. The generic individual effects represent the whole range of factors affecting the corporate governance behaviour of firms. These unobservable

differences can also be viewed as random firm specific differences as in the classical regression model where the effects of omitted variables, across the firms are captured by the error term.

For the random effects model it is typically assumed that the unobserved differences are uncorrelated with any of the explanatory variables. That is, $Cov(X_{kit}, \nu_i) = 0$. This in effect implies that the firms undergoing changes in corporate governance and those, which have not undergone corporate governance changes, have the same expectations regarding corporate governance changes. This is a strong assumption, which is unlikely to be satisfied except when observations are collected by randomised experiment. Thus the Ordinary Least Squares (OLS) estimators is biased. In the absence of such data the random effects model is estimated using the generalised least squares estimators (*GLS*).

The random coefficient model is an extension of the random effects model where not only is the intercept term random but all coefficients can take random values. Thus,

$\beta_{kit} = \beta_k + \mu_{ki}$, where β_k is fixed (unknown) and μ_{ki} is random.

An appropriate stochastic specification is adopted. The estimation process in random coefficient and random effects models requires estimation of k parameters. However, the implications for degrees of freedom are different as the unknown parameters of the covariance structure of the random components model must be estimated. Typically, for such models, the estimation procedure requires as a first step, estimation of the covariance model. In the case of the random effects model the estimation of the

covariance is feasible whenever $t \geq 2$. The random coefficients model necessitates OLS estimation of the covariance model individual by individual which implies that at least $t \geq k$, the number of independent regressors.

From the discussion above, it can be concluded that the error components model, is the appropriate model for our data set. The individual regression model cannot be used as we expect considerable firm-specific differences in corporate governance behaviour. The random coefficients model and the SURE model are not appropriate models because of the low value of **t**. In the error components model the choice between the fixed effects and the random effects models can be based on the various specification tests. LIMDEP allows for the estimation of both using the same estimation routine and the appropriate specification can be chosen using various test statistics based on the LM and the Hausman test statistic. However, there are á priori reasons for making the choice between the random effects and the fixed effects models. The fixed effects model is less restrictive. As pointed out the random effects model is based on the assumption that the unobservable differences are uncorrelated with the explanatory variables. The fixed effects model does not require such an assumption. The individual intercept terms automatically control for all unobserved differences regardless of whether or not these differences are associated with the likelihood of corporate governance changes. Generality of the inferences that can be drawn from the estimated coefficients is also cited in the literature as a possible consideration in the choice between the fixed effect and the random effect models (Kennedy, 1995). It is argued that if the exercise draws inferences, which are recognised to be applicable only to the sampled observation, then the fixed effects

model will serve the purpose. If one wants to draw inferences about the entire population then the use of the random effects model is advised.

The above discussion has enabled us to identify the error components model as the correct modelling specification. There can be á priori reasons for arguing in favour of the fixed effects or the random effects but these arguments by themselves are not conclusive. The choice between the random effects model and the fixed effects model will be based on the specification test statistics. We estimate both versions of the error components models and incorporating firm fixed effects and period effects in the first instance. Then on the basis of the specification tests we decide between the random effects and the firm fixed effects as a next step. Subsequently, we make a choice between the two way error components model incorporating both the firm fixed effects and the period effects and the one way error components model incorporating either the firm fixed effects or the period effects on the basis of significance tests. The tests and the results are reported in the next chapter.

The fixed effects model is the same as the dummy variable model. It is easily estimated using OLS with a set of additive dummies. This is possible if the number of observations are only a few thousand (Greene, 1997). In our case the observations are less than a thousand. In the case of the random effects model the method of generalised least squares is used to account for the possible correlation between the unobserved differences and the error term. There are a number of ways of estimating the variances, which are required to estimate the random effects model using

generalised least squares. For example the sample variance of the estimated fixed effects can be used.

Two of the four measures employed in the study to measure corporate governance changes are dichotomous. Another attribute of the data, which can have important implications for the estimation process, is the number of takeover bids identified in the sample. The data condition for dichotomous dependent variable techniques, like the logit /probit model is that there should be a fair distribution of ones and zeroes, that is, there should be a fair distribution of instances of takeovers and firms which did not experience such an event during the sample period. As a minimum requirement there should be at least **k** values of each, where k is the number of regressors. In this data set there are 77 instances of tender offers. Thus the instances of takeovers are fewer though this is a fairly large proportion of the 218 firms in the sample which have been subjected to the extreme discipline of the market for corporate control at some point in the sample period. As pointed out earlier a large majority of the incumbent top management team lose their job within one year of hostile takeover (Franks and Mayer, 1996).

Binary choice models can be normally estimated using either the logit or probit models. The choice is often based on computational convenience and the numerical equivalence of the estimates can be worked out (Amemiya, 1981). However, in the case of panel data we have to take into account particularly restrictive computational problems while making a choice between logit or probit models. The random effects

model can be estimated using the probit model only while the fixed effect model can be estimated using the logit model only.

In any model to be estimated the intercept coefficient and coefficients of the regressors are the parameters to be estimated. When t tends to infinity the maximum likelihood estimates of α_i , the firm specific effects are consistent. When t is finite, as is usually the case in panel data, there are only a limited number of observations of the dependent variable Y_{it} that contain information about α_i. An increase in the number of the cross-sectional units, n provides no information about α_i and the number of firm-fixed effects that need to be estimated goes up. In the case of the linear regression model, the inability to obtain consistent estimates of α_i does not preclude the possibility of obtaining a consistent estimate of β because the estimation of β and α_i are asymptotically independent. It is possible to do this by finding a consistent estimator for the parameter by finding functions of the parameter which are independent of α_i and satisfy the property that the structural parameters are true values and the function converges to zero in probability as $n \rightarrow \infty$. This is done for example in the case of linear probability models by taking the difference with respect to the individual means and taking the least squares regression of the difference equation. This yields a consistent estimation of β as $n \rightarrow \infty$. It is possible to identify such functions for the fixed effect logit model but difficult to identify such functions for the probit model.

In the case of the random effects model it is not possible to estimate the logit model. As we know the composite error term with random effects is correlated across cross-section units even if the v_{it} is IID. The multivariate logistic distribution has the disadvantage that the correlations are all constrained to a fixed value (1/2). Therefore in the case of random effects we only use the probit models.

We estimate both the fixed effects logit and the random effects probit models. LIMDEP is able to carry out an internal check of the appropriateness of the two models for the data set being analysed. If the data does not show evidence of random effects the estimate of ρ, the starting value will turn out to be negligible. The estimation process gives a diagnostic and reverts back to reporting the result of the basic probit model. If it turns out that there is no evidence of random effects in the data then the fixed effect logit model will be estimated. Here it is possible to test for the existence of heterogeneity in the data by using a Hausman specification test.

4.4.1 Measurement of Variables

Given the range and interdependence of factors having influence on changes in corporate governance, the scope for empirical investigation is extensive. New contributions can be identified in most major journals on a regular basis. Three conclusions can be drawn from a perusal of the literature in the area. First, studies statistically evaluate the effectiveness of the individual components of the governance structure. However, the various corporate governance devices are seen as multiple devices reflecting the understanding that none of these devices individually is comprehensive and efficient enough to resolve the problem of monitoring. The

conduct of corporate governance is ignored and there is little insight offered by these studies regarding the overall design of the corporate governance structure and the role of these individual devices like takeovers, block shareholdings etc., in the design of such a mechanism. As cited earlier there is evidence now on the interdependence or complementarity of various governance mechanisms in empirical studies. However, these studies do not see the various mechanisms of corporate governance as part of a structure and that one component of the structure can impede the working of the other components thereby reducing the effectiveness of the corporate governance as a whole.

Second, the consequences of such a fragmented view of corporate governance can be seen in the empirical literature. Most studies focus on one corporate governance mechanism at a time. Such studies do not contribute to an understanding of the problem of monitoring and efficacy of the corporate governance structure as a whole. It is now recognised that there is a degree of complementarity and substitutability between corporate governance mechanisms (Rediker and Seth, 1995; Zajac and Westphal, 1995). It is possible that the inferences drawn about the effectiveness of one corporate governance mechanism is not valid because the particular mechanism is not the preferred mechanism of corporate governance in that environment or because the effects are actually the implicit effects of another governance mechanism. The studies fail to give a complete view of the relevance of the mechanism. Individual devices are evaluated with different data sets, making it difficult to have an overall picture of corporate governance structure in any corporate environment.

The third remark about the studies on corporate governance also relates to the empirical coverage of the literature. The UK corporate governance environment is unique in terms of the strong mediating role of the stock market (Jenkinson and Mayer, 1994; Franks and Mayer, 1996). It represents an accentuated empirical opportunity for the evaluation of the hypotheses set up in section two. The ambiguity in the decision making environment of top management under stock-market corporate governance mechanisms, at times loosely termed as 'short-termism' can be evaluated with considerable insight in the context of UK companies.

The studies reported in Table 2.2 in Chapter 2 show that there is a consistent and significant relationship between turnover of top management and the performance of the firm. The interdependence of the corporate governance mechanisms as demonstrated by the interrelationships between block shareholdings, performance and the internal and external control mechanisms in determining their influence over top management turnover is another important finding of the literature. However, it is unclear the extent to which the board characteristics can be dis-aggregated to identify a consistent set of influences of the board attributes for top management turnover and accountability. The empirical studies do not give an assessment of the extent of firm specific and period related influences for top management accountability. The principal and agents conceptualisation of corporate governance with its emphasis on structure and performance has difficulty in explaining the possible implication of these firm specific variations in corporate governance except in terms of sampling and specification errors. As we have seen in Chapter 3 it is possible that the firm-specific effects may have the effect of altering the nature of the shareholder management

relationship itself. A preference of dominant strategy by shareholders or an absence of strategic co-operation in the procedural justice mode will have the effect of increasing opportunism in shareholder management relationship and exacerbating the corporate governance problem. Finally, as Table 2.2 in Chapter 2 shows much of the empirical work on top management turnover relates to US firms and of late Japanese firms. There are only three studies on top management turnover in firms in the United Kingdom. Evidence on top management turnover relating to UK firms will add to our understanding given the intensity of the influence of the market for corporate control in the United Kingdom as discussed in section 2.4 of Chapter 2.

It is expected that top management turnover will be greatly influenced by what Kreps (1988) terms as organoisational culture or firm-specific norms and customs. These norms and customs can also be related to board attributes used to explain top management turnover. Panel data techniques account for these firm specific influences in the estimation process. In the studies on management turnover summarised in Table 2.2 in Chapter 2 only Kaplan (1994b) and Kaplan and Minton (1994) include firm-specific and time related dummies. Other studies in corporate using panel data techniques are Jensen and Murphy (1990), Conyon and Peck (1998b; 1998c) in the area of executive compensation and Yermack (1996) in the study of the effects of board size.

4.4.2 Sample

The data set comprises separate samples of manufacturing and financial services firms in the UK. All the firms are UK controlled and quoted. We have drawn the sample

from two sectors, viz., the manufacturing sector and the financial services sector. The interest in the financial services firms or what are termed as authorised institutions in the UK is an outcome of the conceptual framework developed in Chapter 3. An important conclusion of the conceptual framework is that in the presence of an active market for corporate governance, shareholders will lack the incentive to give credible commitments in the contracting relationship and the managers fearing the risk to their human capital will engage in opportunistic behaviour. Thus opportunism, instead of being controlled by the corporate governance structure will be endogenous to the corporate governance arrangement. Our initial understanding based on the public pronouncements of the Bank of England was that the Bank discouraged hostile takeovers. Further, there are only two referrals of financial services firms on takeovers in banks to the Monopolies and Mergers Commission since 1966. Thus in a way the authorised institutions sector represents a governance sector where the market for corporate control as a disciplining device is not a readily available option for the exercise of corporate governance.

Analysis of the regulatory arrangement has shown that the central bank acts not only as the centrepiece of the governance structure in the financial services sector. The role of the central banks in terms of corporate governance, however, has been to replace the conventional governance goal of shareholder wealth maximisation with concerns for depositors security and the stability of the financial system. Thus the mere absence of hostile takeovers does not result in the shareholders giving credible commitments and starting to engage in deliberative corporate governance. In effect the study of authorised financial institutions will not serve as a control case for testing the

hypotheses arising out of the conceptual framework proposed in section two of this chapter. As a result in this light the hypotheses set up in section 4.2 have been appropriately modified in section 6.3 of Chapter 6. The study of governance changes in authorised institutions is an interesting study of corporate governance in the financial services sector and can provide the initial basis for a search for a supervisory arrangement in tune with the changes in this sector over the last few years. The setting up of the new super regulatory body, the Financial Services Authority, and the divestment of the supervisory function from the traditional responsibilities of the Bank of England is indicative of the policy interest in this area.

The empirical evaluation of corporate governance in AFIs contributes to the thin existing evidence on this sector. It is also interesting as it allows for comparison of governance of firms in the same country but under different regulatory environments.

The data-sets comprises 218 UK controlled quoted manufacturing enterprises listed in *The Times 1000* for the year 1987-88 and the complete list of 44 quoted and UK controlled authorised financial institutions listed in the February, 1989 issue of the *Bank of England Quarterly Bulletin*. Data on financial performance has been collected for the years 1987-88 to 1994-95. Data on corporate governance has been gathered for the period 1989-90 to 1994-95. Among the top 1000 manufacturing firms in 1987-88 listed in *The Times 1000*, 468 were identified as UK controlled. Of these 468 firms, 237 are further classifiable as manufacturing enterprises. The rest of the 468 firms were in various services and non-manufacturing activities. From the list of 237 manufacturing firms which had gone into receivership or liquidation were excluded

from the sample and some firms were excluded because they were under government control for a part of the sample period. Firms were also excluded from the sample if they were successfully taken over in the first year of the study as we are using panel data techniques.

The variables considered in the analysis fall into four groups. The four variable groups are:

(a) Corporate governance change variables like board turnover, CEO change and hostile takeovers which also represents a comprehensive overhaul of top management;

(b) Financial variables which represent the 'focal points' for communication between managers and shareholders;

(c) Corporate governance characteristics or board variables and shareholding characteristics, e.g., like block shareholding characteristics, etc., which affect the governance function of the shareholders;

(d) The final group of variables can be termed as control variables, like age and tenure of the CEO, etc., used to improve the sensitivity of the estimated influences of performance and governance characteristics on the various forms of corporate governance changes;

We will be making use of variables from each of these groups. There can be two levels of interpretation that can be attributed to the estimates. We can interpret the estimates within the conceptual framework of corporate governance proposed in Chapter 3; the Hypotheses set up in section two of this chapter and section three of Chapter 6. Previous studies have given justification for the individual governance

attributes, but no attempt has been made in the literature to interpret these results in the context of an overall conception of corporate governance. Alternatively we can also draw inferences by examining the significance of the coefficients of the individual variables in line with principal and agents analysis of corporate governance. The significance of the individual variable estimates based on UK data can be interpreted in light of earlier studies for a better understanding of corporate governance in the United Kingdom.

4.4.3 Dependent Variables

The dependent variable is an indicator of changes in corporate governance. Four measures of changes in corporate governance, i.e., turnover of all directors, turnover of executive directors, CEO change classified as disciplinary and hostile takeovers, are defined with a view to assessing their relationship with financial performance indicators and board characteristics. All forms of governance changes are evaluated using the same data set. The use of the same data set for different types of governance changes allows better judgement on the relevance of different governance mechanisms given their complementarity and substitutability in a particular governance environment. The dependent variables defined are similar to the ones used in Kaplan and Minton (1994); (Kaplan 1994a, 1994b) ; Kang and Shivdesani (1995).

We have a practical problem of identifying the exact reasons for a board level change and thus what can be termed as disciplinary management turnover. Instances of change related with death, illness and age have been excluded. This has been completed on the basis of the details provided about such events in the chairman's and

the directors' reports which form part of the company annual reports. There is an absence of reliable information on whether Board changes are disciplinary or non-disciplinary. In other words we have some difficulty in identifying whether a board change took place because of lack of performance or because the particular board member was hired away for above average performance. Information on this is very hard to obtain and even in much publicised cases is open to speculation in the media. Companies or chief executives do not like to admit that a change is related to lack of satisfactory performance. Some earlier studies have made use of media coverage in the case of CEO changes to classify the changes as a disciplinary or non-disciplinary turnover (Denis and Denis 1995). Given the speculative nature of these reports it is difficult to see how this reduces the margin of error. When measuring change in governance due to the change in CEO we have followed a relatively more objective and consistent criteria for distinguishing between a disciplinary or non-disciplinary turnover by using the subsequent status of the CEO after leaving office (in line with some recent studies). In the literature CEO change is defined as disciplinary or non-standard if the CEO remains on the board, but not as non-executive chairman, or leaves the board (Kang and Shivdasani 1995; Kaplan 1994b). Further, the use of CEO age and tenure as control variables has allowed for a further refinement of the distinction between a disciplinary and non-disciplinary or routine turnover.

There is very little basis for introducing such refinements when the measure of governance change is the turnover of executive and non-executive directors as we seldom come across firm-specific information relating to such board changes. However, this measure of board turnover is a ratio and not an absolute number. It will

be reasonable to assume that every board will have a fair distribution of directors with different levels of abilities. Hence a mean level of turnover will reflect the differential abilities of good or bad directors. A change in the percentage of directors resulting from bad performance can reasonably be construed to be associated with disciplining.

We further refine the interpretation of the turnover of executive and all directors by making use of a CEO change dummy as an explanatory variable. The board may be seen as the creature of the chief executive. So, we use a dummy variable CEOCH for the year before, after and during the year of the CEO change. If the dummy turns out to be significant and has a positive sign it will show that turnover of directors is associated with CEO change.

Explicitly, our four measures of change in corporate governance are:

1. Non-standard CEO change (CEO):

Following Kang and Shivdasani (1995) CEO change is defined as disciplinary or non-standard if the CEO remains on the board but not as non-executive chairman or leaves the board. In UK firms there is no consistent designation of the CEO. At times they are also referred to as the MD. However, in our data a MD is not considered to be the CEO if the board has an executive chairman. CEO changes resulting from illness, retirement or deaths, as indicated in the annual reports are excluded from instances of CEO changes. It is possible that some of the departure attributed to ill health may actually be disciplinary. Kang and Shivdasani (1995) compare their estimates with an alternative definition of non-routine turnover defining it to include all cases of CEO

turnover where the product does not become chairman of the board. Similar results are obtained with their approach although the coefficients are less precisely estimated. We have therefore used the definition as used by Kang and Shivdasani (1995) in their study.

2 and 3. Turnover of Executive Directors (CED) and Directors (CD)

The percentage of the directors in the previous accounting year who are no longer directors in the present accounting year is used to measure the turnover of all directors (CD). Similarly in the case of executive directors turnover is again measured as the percentage of all executive directors in previous accounting year who are no longer executive directors in the current accounting year (CED). Changes in the board composition resulting from a non-executive director becoming an executive director are excluded from instances of change in all directors. Such changes are not treated as disciplinary. As in the case of the change in the CEO, instances of death, illness and retirement as reported in the annual reports are excluded from the calculation of CD and CED.

Data on the above variables (1, 2 and 3) was gathered from the Stock Exchange Directory (various volumes) for the years 1988/89 to 1994/95. These directories list the board members by name with their designation on the board of the firm. Further, information regarding the board has been collected from the annual reports of the companies. This is available on CD-ROM (Laser-D) for the last three years. Data prior to that has been obtained from the microfiches of the Annual Reports available from Company House.

4. Takeover (TO)

TO is measured as a dichotomous variable taking the value 1 in the event of a hostile takeover bid, successful or not, in a sample year, and the value 0 otherwise. A large percentage of the top management team is replaced subsequent to a takeover. This is irrespective of whether the tender offer is friendly, hostile or successful or unsuccessful (Walsh, 1988; Franks and Mayer, 1996). Thus takeovers represent a severe threat to the firm-specific managerial human capital. It is possible that takeovers take place for synergistic reasons (Weisbach, 1993). The general perception of the literature on takeovers is that hostile takeovers are disciplinary while friendly takeovers are synergistic (Davis and Stout, 1992). Following Shivdasani (1993) we define a takeover as hostile if the incumbent management initially resisted the tender offer. For the fixed effects logit and the random effects probit models TO as a dichotomous measure for hostile takeovers is used. It will take a value 1 if the firm was subject to a hostile tender offer and 0 otherwise.

The data on takeover is compiled from the information contained from the publication: *Mergers and Takeovers by Extel.* The publication gives a broad categorisation of takeovers in terms of whether resisted, successful or unsuccessful. This allowed for a refined compilation of takeover figures. If a firm is successfully taken over it disappears from the sample for the future years of the sample period.

4.4.4 Independent Variables

Independent variables used in the study can be classified in terms of three categories, viz., financial ratios, attributes of corporate governance, and refining or control variables.

1. Financial Ratios

There is evidence from surveys of methods used by investment analysts that there is a predominant focus on financial statement analysis or fundamental analysis in the evaluation of firms for investment purposes (Arnold and Moizer, 1984; Pike, Meerjanssen and Chadwick, 1993). An important constituent of financial statement analysis is financial ratios analysis. Financial ratios by themselves cannot be the complete basis for evaluating a firm's performance. The complex and multiple attributes of the modern corporate environment cannot be summarised by these simple ratios. The analysts who examine these ratios to assess firm performance and decide on their investment strategy are well aware of the limited information content of these ratios. These ratios are helpful in focusing the analysis on key aspects of firm performance and in conjunction with other aspects of market information, give the analysts useful clues to the appropriate questions about the firms prospects and past performance. In this sense because of the universality of their information and simplicity these financial ratios can be interpreted as 'focal points'. The selection of financial ratios for this analysis can be based on a number of considerations. Previous studies have selected financial ratios on the basis of their prior usage in the relevant literature. In the context of the present study we have used those ratios, which can be,

best expected to reflect managerial effort. Given their interpretation as 'focal points' another consideration in the choice of the variables has been their relative popularity with financial analysts and practitioners. The two performance indicators or focal points based on financial ratios used in the present study are:

Returns on capital employed (ROCE)

Returns on capital employed have been used as a performance measure.

Forms of this financial ratio have been used in earlier studies to reflect the short-term profitability of the firm (Weisbach, 1988). The use of this measure supplements the use of stock market data in explaining changes in top management. Stock prices reflect the present discounted value of the expected future cash flows of the company. As the stock prices will incorporate the possibility of a firing of a bad CEO or a board it is logical to argue that the stock price of a firm with a bad CEO will be higher if the CEO is likely to be fired as compared to a situation when the CEO has a lifetime guarantee over the job. Thus in effect the stock prices by themselves will underestimate the role of such a focal point in explaining corporate governance changes. This is why it is worthwhile to use earnings data along with stock prices data (ABNOR), to evaluate governance changes as a consequence of performance of the firm.

Annual abnormal stock market returns (ABNOR)

Annual abnormal returns is defined as the performance of the share price over the past one year relative to the market as a whole. This is the most popular of the performance measures used in the assessment of managerial effort (Franks and Mayer 1996;

Kaplan 1994a; Kaplan 1994b Kang and Shivdasani, 1995; Weisbach, 1988), the understanding being that abnormal annual returns as opposed to annual returns will be a key factor in the movement of funds between various investment possibilities. It can be taken as the marginal value, which affects the investors' decisions in their effort to maximise their wealth.

The accounting definitions for these ratios (ROCE and ABNOR) are provided in Appendix 1 to this paper. The data has been collected from two databases

(i) DATASTREAM and

(ii) London Business School, Risk Measurement Service.

The latter is the source for the annual abnormal returns on stocks data. Two versions of the above ratios have been used in the study. One version is a one year lag measure and the other is a two year average of the one year lags. To get a better assessment of managerial effort the financial ratios are formulated in terms of their levels and changes in their levels and industry adjusted level measures. We have defined the level measures in Appendix 1. We compute the performance indicators for level changes by subtracting the performance as in equations 1 and 2, that is year (t-1), from the performance indicators of the firm for year (t-2). It is possible that in the managerial labour market, firms employ what they can afford and the cost of managerial human capital is a reflection of its quality. As a consequence firms effect governance changes only when their expectations are not met and not on the basis of absolute considerations of performance or industry adjusted performance indicators. Thus the managerial effort will be evaluated with respect to their own effort or with

respect to the managerial capital that has been affordable by the firm in the past. To account for industry related effects the values are also adjusted to the mean levels of the financial ratios for the industry group at the four digit SIC level. In cases where a particular SIC industry at 4 digits does not have at least 3 firms in the sample that industry is merged with its three digit firms closest to its original 4 digit classification, to compute the industry adjusted financial ratios. Thus the following versions of the financial ratios with one year and two year lags are used in the study:

(a) Level measures

(b) Changes in level measures

(c) Industry adjusted level measures

2. Corporate Governance Variables

Two groups of variables are used in studies based on secondary data to denote corporate governance characteristics. The two groups of variables are:

(a) Board characteristics; and

(b) Block shareholdings.

The governance characteristics have antecedents in the literature and have been interpreted individually in studies on corporate governance. The role of the board is seen as a forum where the representatives of the shareholders and the managers interact. Different perspectives of the board of directors have been proposed (Zahra and Pearce II; 1989). The role of the board is to reduce the problem of information asymmetry in the monitoring of the management. The effectiveness with which this function is carried out will depend on power relations in the board. In the studies

based on secondary data the power relations and their consequent implications for the monitoring role of the board is a function of board attributes like proportion of non-executive directors on the board, separation of the posts of the CEO and Chairman, etc.

In the present study we interpret the significance of the individual governance characteristics in the context of corporate governance framework proposed in Chapter 3. Power relations for example, will acquire meaning in the context of the argument of opportunistic behaviour by managers. A positive relationship between the percentage of non-executive directors, with the departure of the CEO, or with the change in directors is evidence of the relative power on the board. The corporate governance characteristics used in the study are measured as follows:

(a) Board Characteristics

(i) The size of the board of directors as measured by the number of directors on the board (TB)

(ii) The percentage of non-executive directors on the board (NED/TB)

(iii) A dummy which takes the value 1 if the posts of CEO and chairman are combined, 0 otherwise.

(iv) The percentage of the shares held by the directors of the firm (DSH). A further distinction is made with the help of dummies between firms having director's shareholdings less than 5%, 15%, 30% and in excess of 30%.

We make a distinction between who is also a CEO and a chairman who is an executive chairman with a board member designated as a managing director (MD). The MD is not the CEO in the UK context if there is an executive chairman in the board. We account for this distinction in the duality variable. If the chairman is an executive chairman and there is a MD on the board we treat the existence of an executive chairman as a duality case (SP1). If the chairman is a CEO we treat this as the conventional duality case (SP2).

(b) Block Shareholdings

The block shareholdings or the institutional shareholdings are measured as the percentage of ordinary shares in excess of 3% held by the investors other than directors (ISH). The block shareholders are further distinguished by dummies in terms of less than 15%, 30%, 45% and in excess of 45%.

The data on corporate governance variables is collected from the Stock Exchange Directory published annually. Data was collected for the accounting years 1988-89 to 1994-95.

3. Control variables

Three control variables are used in the study. Similar control variables have been used in some of the studies cited in Table 2.2 in Chapter 2 (e.g. see Shivdasani, 1993). Two of these relate only to the Chief Executive Officer. The third relates to the effect of size of the firm on governance changes. It is possible that governance changes in large companies may be different from governance changes in smaller firms. This will

suppress the effect of independent variables on governance changes. It is also possible that CEOs of large corporations may not be dispensable, in line with the Penrosian argument of a limited management pool available to manage large corporations. Age has been associated with the standing of the Chief Executive in the firm and hypothesised to reduce the likelihood of CEO replacement (Jensen and Murphy, 1990). The tenure of the CEO can also be interpreted to reflect the standing of the top office in the firm.

The control variables are defined as:

(i)The age of the CEO starting from the sample observation period (AGE).

(ii) The number of years the incumbent CEO has been in job for each year of the sample period (TEN);

(iii) The market capitalisation of the firm for each year of the sample period (MCAP).

The data on the first two variables were collected by contacting the individual firms by telephone and requesting the information on their present/earlier CEO. Some gaps in the compilation of CEO age remained. We tried to fill this gap by going through publications like the Corporate Register and by consulting the annual reports of earlier years. Still, we could not track down the age/tenure of 2-3% of the executives. For these CEOs the average value of the AGE and TEN variables have been used. The data on MCAP has been obtained from the London Business School, Risk Measurement Service.

4.5 Conclusion

The discussion in the previous sections we have specified the hypotheses and discussed the estimation technique. The variables used in the study have also been identified and the measures have been specified. For a summary of variables, see appendix 2 of this chapter. In the next two chapters we discuss the panel data estimates of the variables affecting corporate governance changes in the firms belonging to manufacturing and authorised financial institutions sectors.

The empirical evaluation in its content is not very different from the conventional analysis of corporate governance undertaken in the principal and agents literature. However, the contribution of the empirical exercise is not limited to additional evidence on corporate governance, for the case of the United Kingdom. Empirical studies of corporate governance have largely evaluated structure performance relationships. To quote a meta-analytic review of empirical studies on board composition, leadership structure and financial performance:

> As indicated in prior sections, we are not optimistic that further research in the general areas of board composition/financial performance and board leadership structure/financial performance would be fruitful. Also, the evidence would not seem to provide much confidence in further examinations of the moderating influence of those relationships. (Dalton, Daily, Ellstrand and Johnson, 1998; 284).

Further they conclude,

> At the heart of the discussion and debate regarding suggested board composition configurations and board leadership structures is the view one adopts regarding managerial motivations. (op cit:285)

The examination of managerial motivations and the study of corporate governance as a process is being suggested as the way forward in empirical studies. The interpretation of the empirical findings in the context of the framework proposed in Chapter 3 shows why the conduct of corporate governance and its implications for managerial motivations is an important issue in corporate governance.

Appendix 1 to Chapter 4

Measures of Financial Ratios

Return on Capital Employed

This is item 707 in Datastream and is defined as the ratio of following items:

$$\frac{153+157}{322+309-344-928}$$

Where,

153 = Total interest charges
157 = Pre-tax profits including associates
309 = Borrowings repayable within one year
322 = Sum of all non-current liabilities
344 = All intangibles like R&D intangibles etc.
928 = Future income tax benefits

Annual Abnormal Returns

This is the performance of the share over the past year relative to the market as a whole. It is equal to the difference between the actual return on the share and the percentage return available over the same period from an investment in a diversified portfolio with the same beta. Where beta measures the sensitivity of the share to market moves. A share with a beta of 1.0 tends to perform in line with the index and a beta of 1.2 tends to change by 1.2 percent for each 1 percent move in the index.

Appendix 2

VARIABLES	Description	Sources
Annual turnover of all directors	Annual turnover of all directors excluding CEO changes. Percentage of the directors in the previous accounting year who are no longer directors in the present accounting year is the turnover of all directors.	Data was gathered from the Official Stock Exchange Directory (various volumes) for the years 1988 to 1994. These directories list the board members by name and designation.
Annual turnover of executive directors	Annual turnover of executive directors excluding CEO changes. Executive directors turnover is again measured as the percentage of all executive directors in the previous accounting year who are no longer the executive director in the current accounting year..	
Change in chief executive	Dummy = 1 if 'disciplinary' change in CEO in a given year. A CEO is either an executive chairman or a managing director or a chief executive when the chairman is a non-executive member of the board. CEO change is defined as disciplinary or non-standard if the CEO remains on the board but not as chairman or leaves the board,	
Hostile takeover bid	Dummy = 1 if hostile bid to takeover the firm	The data on takeover is complied from the information contained in the publication, Mergers and Takeovers. The publication gives a broad categorisation of the takeover in terms of whether it was resisted, successful or unsuccessful. This allowed for a refined compilation of takeover figures.
Returns on Capital employed	Return on capital employed (See Appendix 1)	The data on returns on capital employed has been collected from DATASTREAM
Abnormal returns on shares	Annual abnormal return (See Appendix 1)	The data on abnormal returns on shares has been collected from the London Business School, Risk Measurement Service.
CEO change dummy	Dummy = 1 for year (-1,0,+1) of CEO change	
Board Size	Total number of directors on board	Official Stock Exchange Directory (various volumes) for the years 1988 to 1994. ----
Non-executive directors (%)	Percentage of non-executive directors on board	
Directors shareholdings (%)	Director's block (>3%) shareholdings	
Institutional shareholdings (%)	Institutional block (>3%) shareholdings	
Executive Chair	Dummy = 1 if Chairman is executive chairman	
CEO-chair	Dummy = 1 if Chairman and CEO are the same person	
Age of CEO	Age of the CEO	Company annual reports /Directory of the Institute of Directors/telephonic contact
Number of years as CEO	Number of years as CEO	
Market capitalisation	Market capitalisation of the Firm	London Business School, Risk Measurement Service

CHAPTER 5

CORPORATE GOVERNANCE IN LARGE MANUFACTURING FIRMS IN THE UK

5.1 Introduction

In this chapter we discuss the panel data estimates of the hypotheses detailed above on the factors affecting governance changes in large manufacturing firms in UK. The assessment takes place in light of the earlier studies discussed in Chapter 2 and the conceptual framework of the corporate governance structure proposed in Chapter 3. The justification for the use of panel data techniques and the variable definitions has been provided in Chapter 4. The major hypotheses to be evaluated in light of the empirical estimates have been specified in section 4.2 of Chapter 4. The present chapter is divided into five sections. Section 2 lists the steps involved in the estimation process and the specification of the models to be estimated. In Sections 3 and 4 we discuss the data characteristics and evaluate the hypotheses in light of the estimated models. Section 5 summarises the principal conclusions of the chapter.

5.2 Estimation

Several alternatives have been suggested for the choice of econometric methodology (Gerrard, 1995). In the textbook or the average economic regression approach economic theory provides the specification of the deterministic component of the econometric model to be estimated. Alternative variables and alternative functional forms are tried to extend or correctly specify the initial model in general terms. Econometrics is used to illustrate the theories derived independently. The modelling strategy is described as specific-to-general as the initial model is extended. The other modelling strategy is where economic theory and empirical evidence interact to arrive at a good empirical way. The economic structure is not required to be fully determined before starting the estimation. The theoretical framework is not precisely identified and the econometric evaluation is an attempt to arrive at a more correct picture of the economic structure. This econometric method is termed as the general to the specific method. For the evaluation of corporate governance the use of the general to the specific method is appropriate. There is a broad conception that board attributes and corporate performance are related. Top management turnover with its associated risks to managerial human capital will be related to corporate performance and board structure. The selection of variables and their predicted signs is partly explained by the conception of the board and its role in monitoring. The choice of variables is also justified by the previous empirical work in this area. We have also experimented with alternative functional forms. Most of the results are based on a linear form but we also used a semilog polynomial form in some regression equations involving the CD and the CED dependent variables.

We estimate the following relationship to evaluate top management turnover

$$\text{Top management turnover} = \phi(P_{it}, G_{it}, C_{it}) + \nu_i + \omega_t + \xi_{it}$$

Top management turnover is taken as either the annual turnover of all directors; or the annual turnover of executive directors; CEO change and hostile takeover bid. P_{it}, represents the financial performance measures. G_{it} are the board attributes identified in chapter 4. One of the board attributes, board size takes a log form. The choice is based on the relative significance of the simple board size and the log of board size for the management turnover variable. The results are the basis of empirical inferences regarding the effect of board size for management turnover. The Director block shareholdings are also included in the regression equation to reflect findings of their effect on top management turnover in previous empirical work.[1] Finally C_{it} represents the control variables (i.e. age of the CEO, tenure of the CEO and the market capitalisation of the firm) of which sometimes the size variable is used in log form depending upon its empirical significance. ν_i is the firm-specific error component or sources of variation in governance changes that are specific to the firm. ω_t is the period specific error component or time effects that reflect the impact of policy or macroeconomic developments on governance changes over a period of time. Finally,

[1] These issues are examined further in the paragraphs below. The motivation behind splitting of the sample on the basis of key governance characteristics and evaluation of the stability of the factors explaining top management turnover is also motivated by the general to the specific methodology. For example, the splitting of the sample on the basis of mean level of non-executive directors in the complete sample is motivated by the understanding that greater proportion of non-executive directors and the on the board should lead to greater monitoring and an increased sensitivity of top management turnover to performance changes. Subsequently the suggestion has been made (backed up evidence from previous empirical studies e.g. Weisbach, 1988) that monitoring levels by non-executive directors can also be a function of the performance of the firm. These suggestions illustrate the validity of the general to the specific econometric methodology and will be used to further refine the estimates of the empirical work presented in this chapter.

ξ_{it} is the pure error term. The equation is estimated using panel data techniques discussed in Chapter 4.

Four forms of governance changes have been evaluated for their dependence on financial performance and corporate governance variables. In addition, control variables have been used to refine the sensitivity of the estimated relationships. The format for reporting the results will be the same for all the four forms of governance changes. For each of the dependent variables we report the full model incorporating all the variables. The only choice here is between the log and the absolute form of two of the independent variables; MCAP (market capitalisation as a measure of size) and TB (board size). This choice is made on the basis of the relative significance of the t-values and the overall fit of the estimated equations. If the log value is preferred then it indicates a convex relationship between the dependent variable and the MCAP and TB variable(s). For example a negative relationship between governance change and Log of TB suggests that governance changes change at a decreasing rate as the Board size increases.

In the case of the director's and institutional block shareholdings, we use continuous measures of the shareholding and the square of the block shareholdings. The square of block shareholdings has been used as it was noted that when the block shareholdings were disaggregated by using dummies for various percentages of block shareholdings there were instances of sign reversal in their impact on governance changes. These sign reversals are consistently present in some governance changes and are at times significant.

In order to understand the impact of the DSH and ISH variables at a disaggregated level and the financial performance indicators, we report F tests or Wald tests to assess the significance of these variables for governance changes. Directors and institutional block shareholdings have been further disaggregated into four groups as described in Chapter 4 Section 4.4.4. The F Tests or the Wald tests have also been reported for six sets of financial performance variables. In addition elasticity estimates have been used to indicate the quantitative impact on governance changes as reflected by the CD and CED variables.

The discussion of the complete sample is supplemented by estimates on subsamples. From table 2.2 we observe previous studies have reported significant interaction effects of the independent variables on top management turnover. For example, Weisbach (1988) found that performance measures were more highly correlated with CEO turnover in outsider dominated boards. We account for these interaction effects in a more general form across all the variables included in the study by splitting the sample on the basis of key governance characteristics that have been found to significantly affect top management turnover. The motivation behind the splitting up of the complete sample into subsamples has been the debate on corporate governance. The individual subsample estimates are not reported but characteristic differences between subsample estimates and the complete sample estimates have been incorporated in the discussion on individual governance change variables. The subsample estimates have been carried out in the case of the CD, CED and the CEO governance change variables, in the same format as in the complete sample case. In

the case of hostile takeovers we do not report subsample estimates, as the instances of hostile takeovers in individual subsamples are often too low to allow for meaningful interpretation of the estimated results. Thus the complete sample has been split up on the basis of the following characteristics:

1. CEO Duality
2. Change in CEO
3. Above and below complete sample mean directors block shareholdings
4. Above and below complete sample mean institutional block shareholdings
5. Above and below complete sample mean market capitalisation
6. Above and below complete sample mean non-executive directors on the board
7. Whether the firm has been the subject of a hostile takeover.

A complete table of variable definitions is provided in Appendix 2 of Chapter 4. For binary dependent variables CEO and TO logit/probit estimation incorporating panel data have been carried out. In the case of CEO and TO the independent variable CEOCH is dropped and two control variables AGE (age) and TEN (tenure) have been incorporated in the equation. The CEOCH dummy is relevant for the turnover of the board as it is possible that board turnover may be significantly related to CEO changes. The AGE and TEN variable are only relevant for the CEO dependent variable as they measure the age and the tenure of the incumbent CEO respectively.

The models were estimated using LIMDEP econometric software. The program output for CD and CED gives estimates of the group effects and the period effects for

the fixed effects, and the random effects, models. Group effects relate to the firm specific effects and the period effects relate to the variations over the period of the sample. A number of test statistics for choosing the appropriate model and diagnostic checks for individual coefficients and the explanatory power of the estimated equation and the size of the group and period effects are also provided as part of the program output. The Likelihood Ratio Test and the F-Test statistics allows us to choose between a two factor model incorporating group and period effects and a one way factor model incorporating group effects only. Similarly, the Likelihood Ratio Test and the F-Test statistics show whether the group effects are significant in the models with dependent variables CD and CED. We also have available R^2 values for the various variable groups. The choice between random effects and fixed effects model is made with the help of the LM and the Hausman test statistics. A number of statistical tests are used for deciding on the appropriate model and also for assessing the role of the group effects and the other variables in explaining governance changes. In addition the t statistics allow for the selection of significant variables.

In the case of the dichotomous variables CEO and TO, the choice between probit and logit models is based on á priori considerations for estimating the random effects or the fixed effects models respectively. This has been discussed in Chapter 4. For the dichotomous variables existence of significant group affects is determined with the help of Hausman test statistics.

The variables CD and CED are bounded between 0- 100 %. It is possible that the predicted values from our assumed linear relationships are not bounded between 0 and

100. Linearity may be a local approximation of what might be a very non-linear relationship. An examination of the predicted values shows that only 13 predicted values of CD and 24 predicted values of CED are below 0 out of 1200 observations and none exceed the boundary limit of 100. Thus the assumed linearity although theoretically a problem is not a practical problem of any significance. We feel justified in imposing the specification of a linear form. [2]

5.3 Data Characteristics

Table 5.1A gives the basic characteristics of the sample firms. The average turnover of all directors and executive directors is 13.55% and 14.58% respectively. The mean ROCE of the firms is 19.3%. The sample companies on average performed better (a positive ABNOR) than other firms in the same group. The average size of the board in the sample is 7.35. The average percentage of non-executive directors is 38.69%. The mean insider block shareholdings (in excess of 3%) stood at 9.17%. The mean institutional block share holding (in excess of 3%) was 28.8%. In 59 % of the cases the chairman was also an executive member of the board. In 36% of the cases the CEO was also the chairman of the board. The average tenure of the CEO was 7.90 years and the average age was 53.13 years. Table 5.1B shows the distribution of firms each year.

[2] Eeconometric texts (e.g. Studensmund 1997) suggest the assigning of the boundary extreme values (0 and 100) to all estimated values below the 0 and above the value of 100, respectively. The signs and general significance of the estimated values remain unaffected by the unboundedness of the estimated (forecast) values.

Table 5.1A
DESCRIPTIVE STATISTICS
MANUFACTURING FIRMS

Variable	Mean	Std. Dev.	Skew.	Kurt.	Minimum	Maximum	Cases
Change in chief executive (1/0)	0.10	0.30	2.70	8.40	0.00	1.00	1200
Annual turnover of executive directors (%)	14.58	20.02	1.60	5.90	0.00	100.00	1200
Annual turnover of all directors (%)	13.55	16.24	1.70	7.30	0.00	100.00	1200
Hostile takeover bid (1/0)	0.05	0.21	4.30	19.80	0.00	1.00	1200
Board Size (No.)	7.35	2.34	0.70	4.20	2.00	20.00	1200
Non-executive directors (%)	38.69	16.83	-0.40	3.20	0.00	100.00	1200
Directors block shareholdings (%)	9.17	16.46	2.00	6.30	0.00	78.45	1200
Institutional block shareholdings (%)	28.80	18.86	0.40	2.80	0.00	87.26	1200
Executive chairman (1/0)	0.59	0.49	-0.40	1.10	0.00	1.00	1200
Chairman is CEO (1/0)	0.36	0.48	0.60	1.30	0.00	1.00	1200
Age of CEO (Years)	53.13	6.02	-0.10	4.20	32.00	72.00	1200
Number of years as CEO (Years)	7.90	5.55	2.00	8.20	1.00	34.00	1200
Market capitalisation (£ in millions)	263.57	636.25	7.50	83.70	1.00	9689.00	1200
Returns on Capital employed (ROCE) in year t-1 (%)	19.30	12.58	0.70	10.30	-56.80	95.90	1200
Abnormal returns on shares (ABNOR) in year t-1 (%)	0.15	45.32	2.20	17.90	-132.00	462.00	1200
Number of Firms	**218**						

Table 5.1B MANUFACTURING FIRMS	
YEARWISE DISTRIBUTION OF NUMBER OF FIRMS	
YEAR	NUMBER OF FIRMS
1989	218
1990	218
1991	203
1992	193
1993	187
1994	181
TOTAL	1200

TABLE 5.2
MANUFACTURING FIRMS
CORRELATION MATRIX
COMPLETE SAMPLE

	CEO	CED	CD	TO	TB	NEDTB	DSH	ISH	SP1	SP2	AGE	TEN	MCAP	RCOE	ABNOR
Change in chief executive(CEO)	1.00														
Annual turnover of executive directors (CED)	0.47	1.00													
Annual turnover of all directors (CD))	0.38	0.81	1.00												
Hostile takeover bid (TO)	0.05	0.02	0.07	1.00											
Board size (TB)	-0.04	-0.09	-0.14	0.01	1.00										
Non-executive directors (%) (NEDTB)	0.10	0.19	0.12	-0.01	0.13	1.00									
Directors block shareholdings (%) (DSH)	-0.05	-0.06	-0.04	-0.01	-0.23	-0.25	1.00								
Institutional block shareholdings (%) (ISH)	0.06	0.04	0.08	0.06	-0.20	0.09	-0.21	1.00							
Executive chairman (SP1)	-0.16	-0.12	-0.05	0.05	-0.03	-0.31	0.18	-0.11	1.00						
Chairman is CEO (SP2)	-0.13	-0.09	-0.06	-0.01	-0.15	-0.19	0.22	-0.09	0.51	1.00					
Age of CEO (AGE)	-0.04	-0.04	-0.06	-0.02	0.27	-0.04	-0.07	-0.05	0.21	-0.03	1.00				
Number of years as CEO (TEN)	-0.13	-0.14	-0.10	0.02	-0.02	-0.10	0.17	-0.06	0.26	0.17	0.33	1.00			
Market capitalisation (MCAP)	-0.03	-0.03	-0.03	-0.02	0.52	0.11	-0.19	-0.27	0.06	-0.02	0.26	0.03	1.00		
Returns on capital employed in year t-1 (ROCE)	-0.10	-0.15	-0.15	-0.05	0.01	-0.12	-0.02	-0.17	0.07	0.03	0.05	0.02	0.07	1.00	
Abnormal returns on shares in year t-1 (ABNOR)	-0.07	-0.15	-0.13	-0.04	-0.02	0.00	-0.01	0.08	0.01	-0.02	0.05	0.02	0.04	-0.02	1.00

Correlations in excess of |0.06| are significant at 5%.

Table 5.2 gives the correlation matrix of the variables used in the study. The characteristics of the data set are interpreted in conjunction with the t tables for the independence of means of the various subsamples drawn from the complete sample. The t tables are reported in the Appendix of the thesis. Some preliminary inferences that can be drawn about the complete data set from the correlation matrix are detailed below. Changes in CEO and turnover of executive and all directors are significantly correlated. Executive chairmen and CEOs also functioning as chairmen are less likely to be replaced. The proportion of non-executive directors and CEO, CD and CED are positively and significantly correlated. This gives substance to the argument that non-executive directors are an important influence on bringing about governance changes. Tenure of the CEO has a negative and significant association with changes in executive and all directors. This reinforces the perception that the top management's association with the company is contingent upon the continuation of the incumbent CEO. Larger boards have significantly more non-executive directors on them and they are less likely to have a CEO and the chairman as the same person. These CEOs are significantly younger and have a longer tenure. Boards with larger directors' or insider block shareholdings have smaller boards with smaller percentages of non-executive directors. Large values of insider block shareholdings appear to have a disincentive effect on institutional shareholdings. Non-executive directors are positively and significantly associated with institutional shareholdings. Institutional shareholdings are positively associated with positive abnormal returns and negatively associated with returns on capital employed. There is also an inverse association between institutional shareholdings and the chairman being an executive director of

the board or the CEO also being the chairman of the board. Returns on capital employed have a delayed positive association to abnormal returns. Only 2-year moving averages show a significant and positive association with abnormal returns.

Comparison of independence of means of subsamples

The tables reporting the t values testing for independence of means are reported in the appendix at the end of the thesis.

When we split the sample into two subsamples one comprising firms which experienced a change in the CEO during the sample period and the other comprising firms which did not undergo a change in the CEO, we find that the t values of the means of the two subsamples differ in a number of ways. Firms, which witnessed a change in CEO, had a significantly higher turnover of executive directors and all directors. They had smaller boards and a larger percentage of non-executive directors. Firms associated with a CEO change had a lower mean of director block shareholdings but a significantly higher mean value of institutional block shareholdings. There was a significantly lower likelihood of the CEOs holding dual positions, with the CEOs being younger and with a shorter tenure in the subsample of firms experiencing a change in the CEO. Firms, which witnessed a change in CEO, had a significantly lower level of performance as interpreted in terms of most of the performance indicators used in the study.

On comparing the subsample of firms subject to a hostile takeover with the subsample of firms not subject to a hostile takeover we find that CEOs holding dual positions on

the board are less likely to be the targets of hostile bids. However, firms subject to a hostile bid have significantly lower mean values of ROCE and current, industry adjusted and two year moving averages of ABNOR.

Subsamples of firms having greater and lesser than the average value of market capitalisation for the complete sample differ in a number of respects. Firms with above market capitalisation have significantly larger boards. They also have significantly lower levels of directors and institutional block shareholdings. When we disssaggregate these shareholdings into block shareholdings we find that while directors block shareholdings upto 5% are significantly and positively associated with above market capitalisation the same are negative and significant beyond 5% block shareholdings. In the case of institutional shareholdings, size, as measured by MCAP, has a positive and significant association with above average market capitalisation at 15% and 30% block levels but the association becomes significantly negative at levels of 45% and beyond. The CEOs of above average market capitalisation firms are older, have a shorter tenure and are more likely not to hold dual positions of CEO and chairman of the board. The larger than average market capitalisation firms are also likely to have significantly above average ROCE, DROCE and DAROCE (returns on capital employed measures). Only in the case of DABNOR or the industry adjusted abnormal returns do they seem to perform better than firms with market capitalisation below the mean of the complete sample.

On comparing the subsamples of above and below average block shareholdings of directors we find that firms with above average directors shareholdings are less likely

to replace their CEO. These CEOs have longer tenures and the turnover of executive directors will be significantly less. They also have significantly smaller boards with lower percentage of non-executive directors. Institutional block shareholdings are also significantly less for firms having above average block shareholdings. Such firms are significantly more likely to have chairmen who are either executive chairmen or who are also the chief executive officers of the company. Firms with above average directors' shareholdings are significantly smaller. There is no significant difference in the financial performance indicators between the two subsamples of firms.

When we split the sample of firms on the criterion of CEO duality we find that when Chairmen are either executive chairmen or are CEOs. the two subsamples are different in a number of respects. Duality in the top position on the Board has been the subject of much interest in the literature (Boyd, 1995; Rechner and Dalton, 1991). Duality has been associated with better performance as it gives the firm a clear direction and other positive leadership attributes (Cochran Wood and Jones, 1985; Vance, 1964). However, duality has also been associated with ineffective governance and hostile takeovers (Morck, Shleifer and Vishny, 1988b). We find evidence in support of both these perceptions on CEO duality. Boards characterised by CEO duality are less likely to replace their CEO and have a lower turnover of executive directors. They also have significantly smaller boards and a smaller proportion of non-executive directors. Director block shareholdings are positively and significantly associated with CEO duality. Institutional block shareholdings are inversely and significantly associated with CEO duality. Chairmen who are also CEOs are significantly older, and have a

longer tenure. Such firms are also significantly smaller. Performance measures based on ROCE are significantly higher for firms with boards characterised by CEO duality.

When we compare boards with above average and below average proportions of non-executive directors we find that boards with above average non-executive directors have a significantly higher executive directors turnover. Such boards are significantly larger, have a smaller percentage of director block shareholdings but a larger mean value of institutional block shareholdings. On boards with above average percentage of non-executive directors the instances of CEO duality, that is CEOs being chairmen or executive members of the board are significantly less. Above average representation of non-executive directors will be positively associated with market capitalisation. However, there is no consistently significant difference between the two subsamples in terms of various performance indicators.

Finally, we compare the subsamples of firms having greater and less than average institutional block shareholdings. Firms with greater than average institutional block shareholdings are more likely to replace their CEO, and are less likely to be taken over. They also had significantly smaller boards and a smaller mean value of directors' shareholdings. The CEOs of firms with greater than average institutional block shareholdings are less likely to hold dual positions, they are younger and have a significantly shorter tenure. Various performance measures based on ROCE, viz., DROCE, DAROCE and AROCE are significantly lower for firms with greater than average institutional shareholdings.

5.4 Discussion of the Estimates

Eight different equations have been estimated for each of the dependent variables. The first six equations incorporate various formulations of the two performance indicators. The corporate governance characteristics remain the same in the six equations. In the first equation the performance variables are for one year prior to the year in which the corporate governance characteristics and governance changes are measured. The understanding being that governance changes are effected with a one year lag and corporate governance attributes affect governance changes contemporaneously. In the second equation the performance variables are 2-year moving averages of performance indicators with 1-year lags. The understanding being that governance changes might also be the result of assessment of managerial effort over a longer period. Equations three and four define performance indicators as in the first two equations but the values are adjusted by subtracting the mean performance of the group to which the individual firms belong from the firm performance indicators. Thus they reflect industry-adjusted levels of performance. Similarly, for the fifth and sixth equations we compute the performance indicators by subtracting the performance as in the first two equations, that is year (t-1), from the performance indicators of the firm for year (t-2). It is possible that in the managerial labour market, firms employ what they can afford and the cost of managerial human capital is a reflection of its quality. As a consequence firms effect governance changes only when their expectations are not met and not on the basis of absolute considerations of performance or industry adjusted performance indicators. Thus the managerial effort will be evaluated with respect to their own effort or with respect to the managerial capital that has been affordable by the firm in the past. For equations 2 to 6 we report

only the F or the Wald statistics testing the significance of the two performance variables in each equation. We report the full equation estimates for equations 1 only.

When we disaggregate the block shareholdings for the directors and the institutional shareholders, using dummies for various levels of block shareholdings, observed instances of sign reversal in the t statistics testing for independence of means. We test the significance of these block shareholdings at levels of block shareholdings defined in Chapter 4 by estimating equations seven and eight. The performance measures used are as in equation 1 and 2. The estimates give us an idea of the significance of block shareholdings in effecting governance changes. We report the F or the Wald statistics to assess the significance of these dummies.

Turnover of all Directors (CD)

Table 5.3 to 5.6 relates to the annual turnover of all directors (CD). From Table 5.4 we observe that changes in all directors are significantly and negatively dependent on financial performance. The F tests for the combined significance of financial performance indicators are significant. However, the partial elasticities as shown in Table 5.4 are extremely low. Thus the performance indicators matter but play a very small role in explaining the turnover of all directors. In the subsample estimates there are some interesting results. For the firms in which the CEO changed during the sample period the F statistics for performance indicators ROCE and ABNOR; DROCE and DABNOR are not significant at 10%, in explaining the changes in all the directors. The F values were also not significant at 10%, for the majority of the

TABLE 5.3

MANUFACTURING FIRMS

Dep. variable: Annual turnover of all directors

Independent variables	Variables affecting percentage change in all directors (Fixed Effects)
Returns on capital employed (ROCE) in year (t-1)	-0.0892
	(-1.573)
Abnormal returns on shares (ABNOR) in year (t-1)	-0.0273*
	(-2.423)
Change in CEOin year (t-1) and (t-2)	8.8056**
	(6.745)
Log of Board Size	-62.183**
	(-8.962)
Non-executive directors (%)	0.0126
	(0.252)
Directors block shareholdings (%)	0.6442**
	(3.721)
Square of directors block shareholdings (%)	-0.0070**
	(-2.634)
Institutional block shareholdings (%)	0.0450
	(-0.500)
Square of Institutional block shareholdings (%)	0.0009
	(0.730)
Log of market capitalisation	-5.1878†
	(-2.184)
Executive chairman	0.0010
	(0.00)
Chairman is CEO	-2.0456
	(-0.1169)
R^2	0.35
F Test	2.29**
[d.f.]	(229,970)
Test Statistics	R^2
Group Effects only (2)	0.23
X- Variables only(3)	0.22
X & Group Effects only(4)	0.34
X, Group & Time Effects only(5)	0.35
Hypotheses Tests	F Test
Group Effects	1.79**
(d.f. =217)	(217,2.93)
Time Effects	1.42
(d.f. =217)	(5,969)
	Random Effects Model
LM Vs. (3)	0.34
(d.f.=1)	0.56
Fixed Vs. Random Effects (Hausman)	66.40**
(d.f.)	(12)
Number of Firms	218
Number of observations	1200

t-values are in parentheses

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡$p< 0.10$;

TABLE 5.4

MANUFACTURING FIRMS

Impact of financial performance on annual turnover of all directors

Dep. variable annual turnover of all directors

Financial performance var.iables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previous years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed (ROCE)	-0.0892 (-1.373)	-0.0121 (-0.189)	-0.0861 (-1.323)	-0.0162 (-0.252)	-0.1215* (-2.416)	-0.1084 (-1.411)
PARTIAL ELASTICITY	-0.1270	-0.0176	-0.0001	-0.0000	0.12138	0.00623
Abnormal returns on shares (ABNOR)i	-0.0273* (-2.423)	-0.0589** (-3.279)	-0.0266* (-2.367)	-0.0591** (-3.298)	-0.0020 (-0.280)	-0.0358** (-2.651)
PARTIAL ELASTICITY	-0.0003	-0.0009	0.0529	0.0000	-0.00014	-0.1103
F Test D.F.	3.46† (2, 970)	5.50** (2, 970)	3.30† (2,970)	5.52** (2, 970)	2.91** (2, 970)	4.11† (2, 970)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.5 **MANUFACTURING FIRMS**	
Significance of director block shareholdings for the annual turnover of all directors	
Dep. variable: Annual turnover of all directors	
DIRECTORS BLOCK SHAREHOLDINGS.	
≤ 5%	-13.539** (-3.973)
≤ 15 % > 5 %	-10.071** (-2.724)
≤ 30% > 15%	-6.877† (-1.902)
> 30 %	-3.2280 (-0.811)
F Test D.F.	4.30** (4, 967)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.6 **MANUFACTURING FIRMS**	
Significance of institutional block shareholdings for the annual turnover of all directors	
Dep. variable: Annual turnover of all directors	
INSTITUTIONAL BLOCK SHAREHOLDINGS	
≤ 15%	15.580† (22019)
≤ 30% > 15 %	15.902† (2.073)
≤ 45% > 30%	17.721† (2.301)
>45%	18..921* (2.420)
F Test D.F.	2.18‡ (4, 967)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

performance indicators in the estimates of the subsamples having above average institutional shareholdings and below average level of non-executive directors. In the subsample estimates the performance indicators reflecting the change in 'own' performance viz., OROCE, OABNOR OAROCE, OAABNOR, do not emerge as significant factors (F values not significant at 10%), explaining governance changes as measured by CD in subsamples where: (i) there is no CEO duality; (ii) there has been a change in the CEO during the sample period; (iii) the mean level of institutional shareholding is less than the mean of the complete sample; (iv) the mean level of director shareholding is greater than the mean of the complete sample; and finally, (v) where the mean proportion of non-executive directors on the Board is less than the sample mean.

CD is significantly and inversely related to changes in Board size measured by Log of TB. We tested both Log of TB and TB and chose Log of TB. Both the coefficient and the t value for Log of TB were higher suggesting a decline in turnover at a decreasing rate with the increase in board size. The elasticity measure of - 4.5891 suggests a significant negative impact on CD of Log of TB. This is consistent with the understanding of the literature that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993). This relationship between changes in all directors and Log of TB continues to have validity for all subsample estimates.

The influence of directors block shareholdings (DSH) on changes in all directors is interesting. We also take the square of the DSH, DSHSQ as we had some indications

of sign reversal from the dummy variables used for various levels of DSH. We find both DSH and DSHSQ to be significant CD is positively influenced by the DSH variable. DSHSQ has an inverse influence with CD changes, thus indicating that at higher levels of DSH the influence of DSH on CD changes to an inverse relationship. In the subsample estimates the relationship between DSH and CD is significant and positive in all the subsamples except in the case of those firms which were not subject to a hostile bid during the sample period. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX) we find that DSH5, DSH15, DSH30 significantly and negatively influences changes in all directors. The F value testing for the significance of all these levels of DSH on CD is significant. The evidence is supports the hypotheses on the role of inside directors and the block shareholdings by Jensen and Meckling (1976); Fama and Jensen (1983) and Rosenstein and Wyatt (1997). At higher levels the interests of the block shareholdings support the entrenchment of directors. The confusing evidence of disaggregated block shareholdings of directors suggests that the levels of disaggregation are arbitrary and do not capture the overall tendencies in the data.

Institutional block shareholdings (ISH) have no significant influence on CD in either the complete sample estimates or in any of the subsample estimates. However, when we disaggregate the ISH variable in terms of levels of block shareholdings (ISH15, ISH30, ISH45, ISHMAX) we find that the disaggregated levels of ISH have a significant and positive impact on the turnover of all directors. The F statistics measuring for the impact of these variables on the CD variable is also significant at 10%. SP1 (Chairman is an Executive Chairman) or SP2 (Chairman is also the CEO)

do not have a significant effect on the annual turnover of all directors. However, in the estimates in the subsample where the CEO has changed during the sample period, the variable SP2 has a significant and inverse impact on changes in the CD variable. The size of the firm as measured by the Log of market capitalisation (MCAP) is significant and inversely influences changes in the CD. CEOCH or the dummy variable associated with change in the CEO is an important influence on the turnover of all directors. Board changes are more closely aligned with CEO changes than any other variable used in the study.

We have evaluated the significance of individual variables. This provides us with the basis for the evaluation of the hypotheses proposed in Section 4.2 of Chapter 4. From Table 5.3 we find that financial performance indicators are important in explaining the turnover of all directors. However, the partial elasticity measures are extremely low. This provides evidence in support of hypotheses 1 and 2. Hypothesis 1 states that top management turnover will be inversely related to financial performance indicators and more specifically financial performance indicators.

Institutional shareholdings measured as a continuous variable ISH and ISHSQ do not influence CD significantly. However, at the disaggregated level ISH has a significant and positive influence in effecting turnover of all directors as measured by CD. LOGTB has a significant and negative influence on CD. As cited above, the literature suggests that larger boards are dysfunctional and monitor the incumbent management less effectively (Jensen, 1993). Thus weaker boards, reflecting a poorer ability and willingness to monitor the incumbent management have an inverse relationship with

the turnover of all directors. Thus we have evidence in support of hypothesis 3B and limited evidence in support of hypothesis 3D that state top management turnover will be inversely related to board size and positively related institutional block shareholdings respectively. We do not find evidence in support of 3A and hypothesis 3C that predict that top management turnover will be inversely related to board duality and positively related to the proportion of non-executive directors respectively.

Tables 5.3 and 5.5 provide evidence on the role of directors block shareholdings. The evidence on DSH and DSHSQ is not straightforward to interpret. The disaggregated levels of block shareholdings show an inverse and significant relationship between CD changes and directors block shareholdings. However, DSH has a positive and significant impact on CD. Thus block shareholders among directors will monitor the management. Thus there is mixed evidence in support of hypothesis 4 which states top management turnover will be positively related to the size of director block shareholdings.

The significance of the CEOCH variable shows that board changes are closely related to CEO changes. This can be either interpreted as an expression of collective responsibility or that all power is derived from the CEO. The size of the CEOCH coefficient reflects on the poor accountability in governance change. The size of the group effects shows the extent of the unexplained but systematic variation in control changes. We also find that the group effects, or firm-specific influences, are marginally larger than the financial performance and governance characteristics taken

together, in explaining the turnover of all directors as measured by CD. Group effects inter alia, reflect unobservable firm specific information.

Turnover of Executive Directors (CED)

The estimates for the dependent variable CED, i.e., the turnover in executive directors are presented in Tables 5.7 to 5.12. The results are broadly similar to the CD variable. As in the case of the CD variable changes in executive directors are significantly influenced by financial performance. The F tests for the combined significance of financial performance indicators are significant for all the performance indicators, From Table 5.8 it can be seen that as in the case of CD, the partial elasticities are extremely low. The performance indicators are significant but have a small impact on the turnover of executive directors. In the subsample estimates the subsample of firms in which the CEO changed during the sample period the F statistics for performance indicators ROCE and ABNOR DROCE and DABNOR are not significant at 10% in explaining the changes in executive directors. The F values are also not significant at 10% for most of the performance indicators in the estimates of the subsamples having above average institutional shareholdings and below average level of non-executive directors. The performance indicators do not emerge as significant (F values not significant at 10%), in explaining governance changes as measured by CED in subsamples where (i) there is no CEO duality (ii) there has been a change in the CEO during the sample period and (iii) where the mean proportion of non-executive directors on the Board is less than the whole sample mean.

As in the case of the CD variable CED is inversely related to the Log of Board size (TB). Log of TB is preferred over TB as a measure of board size as the coefficient and the t value for Log of TB were higher suggesting a decline in turnover at a decreasing rate with an increase in board size. The significant and negative impact on CED of the Log of TB measured by the elasticity of board size –3.7871 is consistent with the understanding that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993). The subsample estimates also show similar results for Log of TB.

Directors block shareholdings (DSH) has positive and significant on turnover of executive directors. DSHSQ is also significant however, DSHSQ has an inverse and significant association with CED turnover thus indicating that at higher levels of DSH the influence of DSH on CED changes to an inverse relationship. The positive and significant effect of DSH for lower values of DSH suggests monitoring of incumbent management by directors. In the subsample estimates the relationship between DSH and CED is significant and positive in a majority of the subsamples. However, DSH does not have a significant influence on CED in the subsamples without CEO duality, the firm has not been subject to a hostile takeover bid and where the subsample mean of non-executive directors on the Board is less than the mean of the complete sample. On disaggregating DSH into various levels (DSH5, DSH15, DSH30 and DSHMAX) only DSH5 emerges as significant and has a negative influence on the turnover of executive directors. The F value testing for the significance of these levels of DSH on CED is not significant in the subsample estimates.

As in the case of the CD variable, institutional block shareholdings (ISH) is not significant in explaining changes in CED in neither the complete sample estimates nor in any of the subsample estimates. On disaggregating the ISH variable in terms of levels of block shareholdings (ISH15, ISH30, ISH45, ISHMAX) we find that the disaggregated levels of ISH15, ISH30 and ISH45 is a significant and has a positive influence on the turnover of executive directors. The F statistics measuring for the impact of these variables on the CED variable, unlike in the case of the CD variable is, not significant. SP1 (Chairman is an Executive Chairman) has a significant and negative influence on CED. However, SP2 (Chairman is also the CEO) does not have a significant role in explaining the turnover of executive directors. In the estimates based on the subsamples we find that SP1 has consistent negative influence on changes in executive directors except in the subsample of firms which have not been the subject of a hostile bid. SP2 fails to emerge as significant in any of the subsample estimates.

The size of the firm as measured by the Log of market capitalisation (MCAP) is not significant in its influence on CED. The absence of a significant influence of the size variable on the turnover of executive directors suggests that the influence of MCAP on CD is more likely a consequence of board composition. Larger firms have significantly larger boards and also a larger percentage of non-executive directors on the Board. Hence it is possible that there will be a significant inverse relationship between CD and MCAP but not between CED and MCAP. As in the case of the turnover of all directors, the CEOCH or the dummy variable associated with change in

TABLE 5.7
MANUFACTURING FIRMS
Dep. variable: Annual turnover of executive directors

Independent variables	Variables affecting percentage change in all directors (Fixed Effects)
Returns on capital employed (ROCE) in year (t-1)	-0.16859† (-2.253)
Abnormal returns on shares (ABNOR) in year (t-1)	-0.0352* (-2.562)
Change in CEOin year (t-1) and (t-2)	14.312** (6.964)
Log of Board Size	-55.217** (-6.552)
Non-executive directors (%)	0.28845** (4.608)
Directors block shareholdings (%)	0.61473** (2.886)
Square of directors block shareholdings (%)	-0.0074** (-2.272)
Institutional block shareholdings (%)	0.0440 (0.343)
Square of Institutional block shareholdings (%)	-0.0010 (-0.648)
Log of market capitalisation	-3.4675 (-1.094)
Executive chairman	-6.2051† (-2.271)
Chairman is CEO	--0.9015 (-0.412)
Constant	57.10** (5.613)
R^2	0.37
F Test [d.f.]	2.48** (235,964)
Test Statistics	R^2
Group Effects only (2)	0.22
X- Variables only(3)	0.18
X & Group Effects only(4)	0.36
X, Group & Time Effects only(5)	0.38
Hypotheses Tests	F Test
4 Vs. (3) (d.f. =217)	1.10 (217,973)
5 Vs. (4) (d.f. =217)	3.27** (5,967)
	Random Effects Model
LM Vs. (3) (d.f.=1)	5.13 (2) 0.07
Fixed Vs. random Effects (Hausman) (d.f.)	56.76** (12)
Number of Firms Number of observations	218 1200

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.8

MANUFACTURING FIRMS

Impact of financial performance on annual turnover of executive directors

Dep. variable annual turnover of executive directors

Financial performance variables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previous years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed (ROCE)	-0.16859† -2.253)	-0.0501 (-0.592)	-0.16330† (-2.191)	-0.0672† (-2.189)	-0.1709** (-2.771)	-0.1037 (-1.085)
PARTIAL ELASTICITY	-0.2231	-0.034	-0.0017	-0.0002	-0.0109	-0.0095
Abnormal returns on shares (ABNOR)i	-0.0352* (-2.552)	-0.0312** (-3.701)	-0.0341* (-2.475)	-0.0307† (-2.189)	-0.0004 (-0.053)	-0.0418* (-2.486)
PARTIAL ELASTICITY	-0.0003	-0.0004	-0.0023	-0.0004	-0.00002	-0.0028
F Test D.F.	4.76** (2.965)	6.84** (2, 965)	4.52* (2, 965)	2.41‡ (2, 965)	3.87† (2, 965)	3.47† (2, 965)

t-values are in parentheses

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡$p< 0.10$;

TABLE 5.9 **MANUFACTURING FIRMS**	
Significance of director block shareholdings for annual turnover of executive directors	
Dep. variable: Annual turnover of executive directors	
DIRECTORS BLOCK SHAREHOLDINGS.	
≤ 5%	-7.0613‡ (-1.691)
≤ 15 % > 5 %	-3.562 (-0.808)
≤ 30% > 15%	-0.9575 (-0.217)
> 30 %	1.2620 (0.260)
F Test D.F.	1.17 (4.962)

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.10 **MANUFACTURING FIRMS**	
Significance of institutional block shareholdings for annual turnover of executive directors	
Dep. variable: Annual turnover of executive directors	
INSTITUTIONAL BLOCK SHAREHOLDINGS.	
≤ 15%	15.341‡ (1.612)
≤ 30% > 15 %	15.931‡ (1.698)
≤ 45% > 30%	16.066‡ (1.710)
>45%	18.082 (1.898
F Test D.F.	1.04 (4,962)

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

Table 5.11
MANUFACTURING FIRMS

YEARWISE DISTRIBUTION OF NON-EXECUTIVE DIRECTORS

YEAR	NEDTB
1989	35.44
1990	35.68
1991	38.02
1992	39.85
1993	41.45
1994	42.81

Table 5.12
MANUFACTURING FIRMS

YEARWISE DISTRIBUTION OF DUAL APPOINTMENTS

YEAR	SP1	SP2
1989	141	86
1990	140	86
1991	122	81
1992	109	66
1993	101	60
1994	94	52

the CEO is an important influence on the turnover of executive directors. Board changes thus are more closely aligned with CEO changes. This result is valid for all the subsample estimates.

The proportion of non-executive directors on the Board (NEDTB) has a positive and significant influence on the turnover of all executive directors (partial elasticity 0.7654). The direction of the influence and significance is consistent for all the subsample estimates except for the subsample estimate where the mean NEDTB is less than the mean NEDTB of the complete sample. The significance of the NEDTB in explaining the turnover of executive directors suggests that non-executive directors are a countervailing influence on the power of the incumbent management. The countervailing influence of the non-executive directors can be the result of their human capital concerns or an outcome of the incentive effects of director block shareholdings (Weisbach, 1988; Jensen, 1993).

In Table 5.8 we observe a consistently negative association between financial performance indicators or focal points and CED. The significance of stock market indicators based on ABNOR (or abnormal returns) is consistently negative and significant (except OABNOR). Thus Hypothesis 1 is substantiated by evidence presented in Table 5.8. However, the partial elasticities of both performance indicators are quite low. These focal points are inversely related to governance changes but their impact on governance changes is quite small. This is evidence in support of Hypothesis 2. The evidence on DSH is stronger and consistent in comparison to the CD variable. DSH has a positive and significant influence on the turnover of all

directors. At the disaggregated level only DSH5 is significant and has a negative influence on CED. This is evidence in support of hypothesis 4.

Institutional shareholdings measured as a continuous variable ISH and ISHSQ do not influence CED significantly. However, at the disaggregated level ISH has a significant and positive influence in effecting turnover of executive directors as measured by CED. LOGTB has a significant and negative influence on CED. As cited above the literature suggests that larger boards are dysfunctional and monitor the incumbent management less effectively (Yermack, 1996). Thus weaker boards reflecting a poorer ability and willingness to monitor the incumbent management have a lower turnover of executive directors. The significance of the CEOCH suggests that the continuation of the incumbent CEO is the important explanatory variable in explaining turnover of executive directors.

Further insights into the nature of the power relationships within the Board are possible from the evaluation of the turnover of executive directors. The presence of a chairman who is an executive chairman significantly reduces the turnover of executive directors. We do not find the traditional conception of CEO duality where the Chairman is also the CEO, to have any impact on the turnover of executive directors. The proportion of non-executive directors on the Board has also been found to have a positive and significant influence on the turnover of executive directors. Thus they are a countervailing influence on the power of the incumbent management.

In the case of the CED variable we find evidence in support of hypothesis 3B, 3C and limited evidence in support of 3A and 3D. As in the case of the CD variable Table 5.7 shows that the group effects or firm-specific influences, are larger than the financial performance and governance characteristics taken together, in explaining the turnover of executive directors (CED).

The panel data analysis of turnover of executive directors displays significant time effects. That is the explanatory variables have a significant differential impact on the dependent variable CED over the sample period. The Cadbury Committee on corporate governance submitted its report in 1992. As shown in Tables 5.11 and 5.12 we observe a decline in SP1 and SP2 and a rise in the proportion of non-executive directors across the years. This can be a possible explanation for the significant time/period effects in the estimates. The significant period effects are found in all the subsample estimates except for the subsample of firms where the CEO did not change during the sample period and for the subsample of firms having non-executive directors less than the mean value of NEDTB for the complete sample.

Change in CEO (CEO)

The size and significance of the CEOCH coefficient shows that the CEO is the crucial governance change variable in the corporate governance of firms. The estimates using the dependent variable CEO, i.e., the change in the CEO, are presented in Tables 5.13 to 5.17. The findings are broadly consistent with previous studies on the likelihood of CEO replacement (Conyon, 1998; Cosh and Hughes, 1997). We find statistically significant evidence that stock prices react favourably to announcement of CEO

TABLE 5.13
MANUFACTURING FIRMS
Likelihood of CEO change
Logit Fixed Effects; All variables

Independent variables	All variables
Returns on capital employed (ROCE) in year (t-1)	0.0045
	(0.330)
Abnormal returns on shares (ABNOR) in year (t-1)	-0.0032
	(1.175)
Log of Board Size	-4.7010**
	(2.719)
Non-executive directors (%)	0.0086
	(0.714)
Directors block shareholdings (%)	0.1098†
	(2.324)
Square of directors block shareholdings (%)	-0.00009
	(-1.244)
Institutional block shareholdings (%)	0.0118
	(0.504)
Square of Institutional block shareholdings (%)	-0.00019
	(-0.587)
Log of market capitalisation	-0.8036
	(-1.392)
Executive chairman	-2.2436**
	(-3.877)
Chairman is CEO	-0.4906
	(-1.194)
Age of CEO	-0.0247
	(-0.629)
Number of years as CEO	-0.0225
	(-0.487)
LL	-156.23
HAUSMAN	15.16
Number of Firms	218
Number of observations	1200

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.14

MANUFACTURING FIRMS

Impact of financial performance on likelihood of CEO Change

Dependent variable:: Change in CEO

Financial performance variables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previous years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed	0.0045 (0.380)	-0.03471† (1.944)	0.00388 (0.286)	0.03332‡ (1.864)	-0.0224‡ (-1.858)	0.01269 (0.632)
Abnormal returns on shares	-0.0032 (-1.175)	-0.0069 (-1.347)	-0.00329 (-1.176)	-0.0070 (-1.362)	-0.00119 (-0.675)	-0.00727† (-2.109)
WALD (2)	1.75	6.23†	1.70	5.94†	3.70	5.26‡

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

Table 5.15
MANUFACTURING FIRMS
PERFORMANCE INDICATORS AND CEO CHANGE

PERFORMANCE MEASURES	MEAN (0 Yrs)	MEAN (- 1 Yr)	MEAN (+ 1 Yr)	MEAN (+2 Yrs)
Returns on Capital employed ROCE, 1 yr. lag	15.38	19.1605	12.8963	14.5443
t-value		(-2.61)	(1.19)	(0.46)
Returns on Capital employed DROCE1 yr. lag,industry adjusted	-3.6907	-0.0318	15.847	-4.1923
t-value		(-2.55)	(1.24)	(0.29)
Returns on Capital employed OROCE, Change with respect to previous years performance	-3.5139	-0.0111	-3.3889	2.4658
t-value		(-2.94)	(-0.07)	(-3.01)
Abnormal returns on shares ABNOR, 1 yr. lag	-10.2924	-16.1975	13.7089	7.0833
t-value		(-0.86)	(-2.82)	(-2.14)
Abnormal returns on shares DABNOR, 1 yr. lag,industry adjusted,	-10.8664	-16.9993	12.8221	6.4152
t-value		(0.88)	(-2.82)	(-2.15)
Abnormal returns on shares OABNOR, Change with respect to previous years performance	3.3032	-10.5309	29.8608	-10.6833
t-value		(-1.65)	(-2.69)	(1.20)
Returns on Capital employed AROCE, 1 yr. lag with 2 yr. moving average	16.9818	19.2637	--	13.3114
t-value		(-1.74)	--	(1.93)
Returns on Capital employed DAROCE, 1 yr. lag with 2 yr. moving average, industry adjusted.	-2.6819	-0.3811	--	-5.9807
t-value		(-1.78)	--	(1.96)
Returns on Capital employed OAROCE, Change with respect to previos years performance, 2 yr. moving average, industry adjusted	-1.4226	0.192	--	-0.3693
t-value		(-1.82)	--	(-0.99)
Abnormal returns on shares AABNOR, 1 yr. lag with 2 yr. moving average	-12.0776	-10.9321	--	12.425
t-value		(-0.26)	--	(-4.32)
Abnormal returns on shares DAABNOR, 1 yr. lag with 2 yr. moving average, industry adjusted	-12.1811	-10.8239	--	12.4638
t-value		(-0.29)	--	(-4.14)
Abnormal returns on shares OAABNOR, Change with respect to previos years performance, 2 yr. moving average, industry adjusted	-5.2091	-7.2305	--	14.5167
t-value		-0.42	--	(-3.60)

TABLE 5.16 **MANUFACTURING FIRMS**	
Significance of directors block shareholdings for the likelihood of CEO change	
Dependent variable:: Change in CEO	
DIRECTORS BLOCK SHAREHOLDINGS.	
≤ 5%	-0.87344 (-1.114)
≤ 15 % > 5 %	0.66916 (0.731)
≤ 30% > 15%	-0.04294 (-0.046)
> 30 %	1.9061 (1.441)
Wald (4)	8.32‡

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.17 **MANUFACTURING FIRMS**	
Significance of institutional block shareholdings for likelihood of CEO change	
Dependent variable:: Change in CEO	
INSTITUTIONAL BLOCK SHAREHOLDINGS.	
≤ 15%	11.589 (0.065)
≤ 30% > 15 %	11.903 (0.067)
≤ 45% > 30%	11.636 (0.066)
>45%	12.009 (0.068)
Wald (4)	1.58 (0.81)

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

replacement. However, we do not find that non-executive directors increase the likelihood of CEO change. In the full regression model, reported in Table 5.13, changes in CEO are not significantly dependent on the financial performance indicators. Wald tests for the significance of financial performance indicators are however, significant for AROCE, AABNOR, DAROCE and DAABNOR, OAROCE and OAABNOR. As shown in Table 5.15 the logit fixed effects estimates using these performance indicators suggests that the likelihood of CEO replacement increase if these performance indicators show a downward movement. The marginal effects of these performance indicators on the CEO change cannot be computed in the fixed effect logit estimates (Greene, 1997). In the subsample estimates there are some interesting results. In the subsample of firms in which the mean director block shareholdings is less than the mean of the complete sample the Wald statistics for performance indicators AROCE and AABNOR; DAROCE and DAABNOR are significant at 10% in explaining the changes in CEO. The Wald statistics were not significant at 10% for the majority of the performance indicators in the estimates of the other subsamples. Table 5.15 evaluates the ability of the governance structure to replace poorly performing CEOs with better CEOs. In Table 5.15 we compare the financial performance means 1-year before, 1-year after and 2-year after CEO change with the performance means of the year of the CEO change. The firms, which underwent a change in CEO, were having a significantly higher ROCE, DROCE and OROCE means (t- values significant at 5 %). and a significantly higher AROCE, DAROCE and OAROCE mean values (t-values significant at 10%). in the year prior to the replacement of the CEO. Thus the punishment for bad performance in the current year was swift. The stock market reacted favourably to these CEO

replacements. Mean values of stock market performance indicators, viz., ABNOR, DABNOR, and OABNOR were significantly higher at 5% in the year following replacement. In the second year following replacement of the CEO, the stock market continued to respond favourably with AABNOR and OAABNOR continuing to be significantly higher in comparison to their corresponding values in the year of the CEO change. OROCE was also higher at 5 % in the year 2 of the replacement of the CEO. However, AROCE and DAROCE were significantly different in the year 2 following CEO replacement with t values significant at 5 %. In sum Table 5.15 gives a poor account of the ability of the governance structure to replace poorly performing CEOs with better CEOs. The financial performance indicators response to a CEO change is similar to the effects on share prices subsequent to a tender offer.

The likelihood of CEO replacement is significantly and inversely related to Board size measured by Log of TB. We tested out both Log of TB and TB and chose Log of TB. Both the coefficient and the t value for Log of TB were higher suggesting a decline in the likelihood of CEO replacement at a decreasing rate with the increase in board size. This is consistent with the understanding of the literature that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993). Larger Boards are thus less likely to replace their CEOs. This inverse relationship between the likelihood of a CEO change and Log of TB is valid for all subsample estimates.

The influence of directors block shareholdings (DSH) on the likelihood of CEO change is positive and significant. We also take the square of the DSH, DSHSQ as we

had some indications of sign reversal from the dummy variables used for various levels of DSH, However, we find only DSH to be significant. Thus there is no inverse influence of DSHQ on the likelihood of CEO turnover, indicating that at higher levels of DSH the relationship between CEO and DSH does not change to an inverse relationship. In the subsample estimates the relationship between DSH and CEO is significant and positive in subsamples where (i) the firm has not been subject to a hostile takeover bid (ii) the mean market capitalisation is less than the mean market capitalisation of the complete sample and (iii) where the subsample mean of institutional block shareholdings is less than the mean of the complete sample. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX) none of the dummy coefficients are significant. The Wald statistics testing for the significance of these levels of DSH on CEO is significant only for the complete sample and not significant for any of the subsample estimates. The evidence on the role of directors' block shareholdings is more consistent with monitoring by inside directors in possession of firm specific information (Jensen and Meckling, 1976; Fama and Jensen, 1983 and Rosenstein and Wyatt; 1997) and does not support the findings of the Morck, Shleifer and Vishny (1988a) on entrenchment.

Institutional block shareholdings (ISH) do not emerge as significant in explaining changes in CEO in either the complete sample estimates or in any of the subsample estimates. When we disaggregate the ISH variable in terms of levels of block shareholdings (ISH15, ISH30, ISH45, ISHMAX) we find that at the disaggregated level none of the coefficients are significant in their influence on the CEO variable. SP1 (Chairman is an Executive Chairman) has a significant and negative influence on

the likelihood of a change in the CEO. However, SP2 (Chairman is also the CEO) does not have a significant role in explaining governance changes as reflected by the CEO variable. In the estimates based on the subsamples we find that SP1 has consistent negative influence on the likelihood of CEO replacement. SP2 fails to emerge as significant in any of the subsample estimates.

The size of the firm as measured by the Log of market capitalisation (MCAP) is not significant in its influence on change in CEO. Thus MCAP is significant in its influence only on CD but not on CED or CEO. The proportion of non-executive directors on the Board (NEDTB) is not significant in its influence on the likelihood of CEO change.

We have evaluated the significance of individual variables. The logit fixed effects estimates suggest that there are sizeable firm specific effects on the dependent variable, which are unobservable. The Hausman test statistics is large and significant. The analysis again underscores the importance of firm specific information in explaining governance changes. The corporate governance characteristics, which emerge as significant in explaining governance change reflected by CEO, are LOGTB, DSH, and SP1. The LOG TB and SP1 variables reflect the relative power of the incumbent management vis-à-vis shareholders. The variables LOGTB, DSH, and SP1, which emerge as significant, suggest that the likelihood of CEO replacement is largely the outcome of the Board attributes. Out of the six sets of performance indicators three emerge as significant and have a negative influence on the likelihood of CEO change as shown in Table 5.12. Thus we have mixed evidence in support of

hypothesis 1 that the top management turnover is inversely related to financial performance indicators. We cannot provide direct evidence for hypothesis 2 that regarding the impact of financial performance indicators on top management turnover because marginal effects cannot be computed for fixed effects logit models.

DSH has a positive and significant impact on the CEO variable. As in the case of the CD and CED variables this is indicative of monitoring by directors who have block shareholdings in the firm. LOGTB has a significant and negative influence on the likelihood of CEO change. As cited above the literature suggests that larger boards are dysfunctional and monitor the incumbent management less effectively (Jensen, 1993). Thus weaker Boards reflect a poorer ability and willingness to monitor the incumbent CEO. The presence of a chairman who is an executive chairman significantly reduces the likelihood of CEO replacement. We do not find the traditional conception of CEO duality where the Chairman is also the CEO to have any impact on the CEO variable. The ambiguity that surrounds the likelihood of CEO change is not only reflected by the Hausman statistic suggesting significant fixed effects but also by the related evidence on CEOs and performance as presented in Table 5.15.

Hostile takeover Bids (TO)

The logit fixed effect estimates using the dependent variable TO i.e., the occurrence of a hostile takeover bid, are presented in Tables 5.18 to 5.21. We do not report subsample estimates for the TO governance change variable, as the number of hostile takeovers in individual subsamples is often too small to allow for meaningful interpretation of results. The tables evaluate the ability of the market for corporate

TABLE 5.18

MANUFACTURING FIRMS

Likelihood of Hostile Takeover (TO)

Logit Fixed Effects; All variables

Independent variables	All variables
Returns on capital employed (ROCE) in year (t-1)	-0.04915
	(-1.420)
Abnormal returns on shares (ABNOR) in year (t-1)	-0.00039
	(-0.079)
Log of Board Size	-8.3031†
	(-2.287)
Non-executive directors (%)	0.05474†
	(2.249)
Directors block shareholdings (%)	0.00650
	(0.095)
Square of directors block shareholdings (%)	-0.00062
	(-0.615)
Institutional block shareholdings (%)	-0.063190
	(-1.546)
Square of Institutional block shareholdings (%)	0.00011
	(0.194)
Log of market capitalisation	0.52624
	(0.416)
Executive chairman	2.3807†
	(1.900)
Chairman is CEO	0.42822
	(0.623)
Age of CEO	0.23168
	((1.014)
Number of years as CEO	0.32233
	(1.374)
LL	-51.08
HAUSMAN	11.29
	(1)
Number of Firms	218
Number of observations	1200

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.19

MANUFACTURING FIRMS

Impact of financial performance on likelihood of hostile takeover bid

Dependent variable:: Hostile Takeover Bid (TO)

Financial performance variables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previous years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed	-0.04915 (-1.4207)	-0.01204 (-0.282)	-0.05147 (-1.466)	-0.00556 (-0.125)	-0.04194 (-1555)	-0.04446 (0.986)
Abnormal returns on shares	-0.00039 (0.079)	-0.00171 (-0.195)	-0.00057 (-0.113)	-0.00145 (-0.165)	0.00098 (0.305)	-0.00604 (1.027)
WALD (2)	2.02	0.10	2.15	0.04	2.47	1.98

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.20 **MANUFACTURING FIRMS**	
Significance of directors block shareholdings for the likelihood of hostile takeover bid	
Dependent variable:: Hostile takeover bid (TO)	
DIRECTORS BLOCK SHAREHOLDINGS .	
≤ 5%	2.8074‡ (1.849)
≤ 15 % > 5 %	3.0208‡ (1.6391)
≤ 30% > 15%	1.6287 (1.232)
> 30 %	0.82616 (0.464)
Wald (4)	3.99

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 5.21 **MANUFACTURING FIRMS**	
Significance of institutional block shareholdings for the likelihood of hostile takeover bid	
Dependent variable:: Hostile takeover bid (TO)	
INSTITUTIONAL BLOCK SHAREHOLDINGS.	
≤ 15%	11.611 (0.067)
≤ 30% > 15 %	11.956 (0.069)
≤ 45% > 30%	11.727 (0.068)
>45%	12.099 (0.070)
Wald (4)	3.30

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

control to function as the ultimate governance mechanism. The understanding is that the market for corporate control is one in which alternative management teams compete for the right to manage corporate assets. The team, which promises the highest returns to the shareholders, wins the right to manage the corporate asset until another management team promises higher returns to shareholders. The process continues independent of the volition of the incumbent management team (Jensen, 1988). We have seen in Chapter 2 Section 2.5, that subsequent to a hostile takeover bid nearly the entire incumbent management team is replaced. In this sense hostile takeovers are a governance mechanism as they lead to control changes. As reported in Table 5.18 and 5.19, we can observe that financial performance indicators do not significantly influence hostile takeover bids. The Wald statistics to test for the significance of financial performance indicators are not significant in explaining the likelihood of a hostile takeover bid. This is consistent with previous empirical studies on UK firms (Franks and Mayer, 1996).

The likelihood of a hostile takeover bid is significantly decreased by an increase in the Board size measured by Log of TB. Log of TB has been chosen over TB as both the coefficient and the t value for Log of TB were higher. This indicates that a decline in the likelihood of a hostile takeover bid at a decreasing rate with the increase in board size. The influence of directors block shareholdings (DSH) on the likelihood of a hostile bid is not significant. The square of the DSH, DSHSQ to test for indications of sign reversal of the influence of DSH, is also not significant. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX) we find that only the coefficients of DSH5 and DSH15 are significant and positively

associated with the likelihood of a hostile takeover bid. However, the Wald statistics testing for the combined significance of these levels of DSH on the TO variable is not significant.

Similar results hold for the influence of institutional block shareholdings. When we disaggregate the ISH variable in terms of levels of block shareholdings (ISH15, ISH30, ISH45, ISHMAX) we find that at the disaggregated level none of the disaggregated dummies are significant.

The size of the firm as measured by the Log of market capitalisation (MCAP) is not significant in the likelihood of TO. We do not find evidence to support the view that it is the smaller firms which are more subject to a hostile takeover as has been suggested in the literature (Singh, 1975). The proportion of non-executive directors on the board (NEDTB) decreases the likelihood of a hostile takeover bid. The presence of an executive chairman on the board also increases the likelihood of a hostile takeover bid.

The significant and large Hausman test statistics show that there are there are sizeable firm specific effects in the logit estimates for the likelihood of a hostile takeover bid TO. Firm specific effects reflect the 'corporate culture' of the firm. The interpretation of 'corporate culture' of the firm depends on organisation specific norms and customs (Kreps, 1988). The 'corporate culture' cannot be deciphered through arms length exchange of information as embodied in financial information flows. LOGTB, NEDTB and SP1 are significant in their influence on. The variables NEDTB and SP1

reflect the relative power of the incumbent management vis-à-vis shareholders. These variables which emerge as significant suggests that the likelihood of a hostile tender bid largely the outcome of the Board attributes. The significance and influence of SP1 variable reflect the relative power of the incumbent management. Thus if the chairman is also an executive chairman then we have seen from the estimates of the governance change variables CED and CEO that the incumbent management is more difficult to change. The estimates on the TO variable suggest that the presence of an entrenched management reflected by a chairman who is also an executive member of the board will increase the likelihood of a hostile takeover bid. This is consistent with work on UK mergers which shows that if the CEO is also the chairman the likelihood of hostile bid increases (Weir, 1997).

The percentage of non-executive directors on the board has a significant and positive influence on the turnover of executive directors. In the case of the TO variable we find further evidence to support the view that non-executive directors monitor the executive management. The likelihood of a hostile takeover is inversely related to the proportion of non-executive directors on the board. The evidence on the role of non-executive directors is mixed. A study of US firms did not find any significant influence of outside directors on the likelihood of a hostile take-over (Shivdasani, 1993). In the US study unaffiliated outside directors who have significant ownership and additional directorships lower the likelihood of hostile bids. This is taken as evidence in support of the hypothesis that outside directors contribute to internal governance. However, a study of UK mergers found that acquired firms are likely to have fewer non-executive directors (Weir, 1997).

The evidence on the effectiveness of the market for corporate control in disciplining the incumbent management and ensuring the realisation of shareholder wealth maximisation is mixed. We find no evidence of hostile takeovers as a governance mechanism for underperforming management, as measured by financial performance indicators. However, we do find evidence to support the view that the market for corporate control functions as a countervailing power to the authority of incumbent management. The likelihood of a hostile takeover is inversely related to the proportion of non-executive directors on the board but positively and significantly related to the chairman of the board being an executive chairman. The evidence can be interpreted to imply that the market for corporate control as a court of last resort and plays an important role in protecting shareholders when the corporations internal governance mechanisms are rather ineffective (Jensen, 1988).

5.5 Conclusion

Financial performance indicators based on returns on capital employed and abnormal stock market returns (ABNOR) significantly and negatively influences the CD and CED variables. The findings are similar to earlier studies on US and Japanese firms (Kaplan, 1994b; Kaplan and Minton, 1994; Kang and Shivdasani, 1995). However, the partial elasticities of these performance indicators are extremely low and thus have a very small impact on CD and CED. This is evidence in support of Hypotheses 1 and 2 that focal points will be significant but will have a very small influence on the governance change variables. The significance of the performance indicators for the likelihood of CEO replacement is less clear. and does not exist for the TO variable.

Thus there is limited evidence in support of hypothesis 1 for the CEO variable and the estimates of the TO variable do not support hypothesis 1.

Hermalin and Weisbach (1998) make six predictions on the basis of their model, which they assert are consistent with the existing evidence from the empirical studies. On the basis of the study of UK firms we are in a position to comment on three of their predictions. The three predictions are:

1. A CEO who performs poorly is more likely to be replaced than the one who performs well
2. CEO turnover is more sensitive top performance when the board is independent.
3. Accounting measures of performance are better predictors of management turnover than poor performance.

From Tables 5.1, 5.4 and from the subsample estimates of the six formulations of accounting and stock market based performance indicators we find that there is a poor association of the likelihood of CEO replacement with company performance. We split the sample into two on the basis of the mean value of the proportion of non-executive directors. We do not find any association between the likelihood of CEO replacement in the subsample having above average proportion of non-executive directors. It is possible that the effectiveness of the non-executive directors is dependent on the level of their share interests (Fama and Jensen, 1983; Hart, 1995; Weisbach, 1988). We have not examined the relationship between the share interests of non-executive directors and the likelihood of CEO turnover. However, we do have evidence that directors' block shareholdings do increase the likelihood of CEO

replacement. In the relative effectiveness of accounting and stock market based performance measures, Tables 5.4, 5.8 and 5.14 clearly show that in the case of the CD and the CED variables the stock market based performance variables are consistently better predictors of top management turnover. In the case of the CEO variable where the link between the likelihood of turnover is weak two of the accounting based performance measures are significant at 10% (DARCOE, ORCOE) and one is significant at 5% (ARCOE).

Directors block shareholdings and the percentage of non-executive directors on the board have a positive influence on turnovers represented by the CD, CED and CEO variables. This supports the hypothesis (Jensen and Meckling, 1976; Fama and Jensen, 1983 and Rosenstein and Wyatt; 1997) that monitoring is positively related to the volume of unstructured communication or firm specific information. In the case of the CD and the CED variables the significance and negative sign of the square of directors block shareholdings is evidence that at higher levels of directors block shareholdings supports entrenchment of directors as found by (Morck, Shleifer and Vishny, 1988a).

Hypotheses 43, 3B, 3C and 3D relate to the power relations within the board and the ambiguity that surrounds governance changes. The set of variables which emerge as significant and the direction of their influence suggest that governance changes represented by CD and CED are largely explained by the incidence of CEO change. The CEOCH dummy has a significant and inverse influence in explaining the behaviour of CD and CED variables. The other characteristic relating to the Chairman

being an executive chairman (SP1) has a similar influence on CD and CED. We are not sure what leads to the replacement of the CEO. Some of the financial performance indicators have an inverse relationship with CEO replacement. Further, the analysis suggests that underperformance of CEOs is followed by a replacement but the succession does not lead to significantly better performance even though the stock market welcomes the replacement with higher share prices in a manner, which resembles the stock market response to hostile takeovers. However, we do know that large boards and executive chairman reduce the likelihood of a CEO replacement. Director block shareholdings however increase the likelihood of a CEO replacement.

The results above show that the variables used in structure performance studies examining principal agent relationships in corporate governance change do not explain as much of the turnover of all directors (CD) and executive directors (CED), as do the group effects. There are important unobservable firm specific attributes that explain these turnovers. The size of the firm specific effects is also significant for the likelihoods of CEO replacement and tender offers (TO). This is consistent with the view that deliberation between shareholders and managers will be critical for effective corporate governance as the firm fixed effects will be unobservable using arms length exchange of information represented by financial performance indicators. The conceptual framework emphasises the importance of the conduct of corporate governance.

Evaluation of hostile takeovers adds to the picture of ambiguity. Financial underperformance does not lead to hostile takeover bids. The likelihood of hostile

takeovers increases with an executive chairman and declines with large boards and a larger percentage of non-executive directors on the boards. In the independence of means tests we find that larger boards have significantly higher percentage of non-executive directors. The literature suggests that large boards will be less effective in monitoring the incumbent management. The association of larger boards with larger percentage of non-executive directors (NEDTB) and the inverse association of NEDTB with the TO variable and a positive association with the CED variable suggests that the role of board size and NEDTB needs to be further investigated. This makes it difficult to judge the true significance of percentage of non-executive directors on the board. The estimates highlight the significance of the power relations within the board and the ambiguity that surrounds governance changes in corporate governance.

CHAPTER 6

CORPORATE GOVERNANCE IN AUTHORISED FINANCIAL INSTITUTIONS IN THE UK

6.1 Introduction

The chapter examines the corporate governance of financial institutions in the United Kingdom that are authorised by the Bank of England and hence are under its regulatory control.[1] The business of banking has undergone considerable changes over the last decade (Kaufman and Mote, 1996). Dramatic episodes both in UK and abroad have demonstrated that failures of banks have not been the fallout of the proclivity of shareholders for higher returns but the considerable discretion and variation in risk preferences demonstrated by managerial decisions. A possible reason why these episodes have been dramatic and little cognisance has been given to early warning signals has been the lack of a suitable governance framework. With the globalisation of the financial services industry the scope for excessive use of managerial discretion has increased. The complexities of international markets with banks operating in many countries have made the task of shareholder monitoring extremely difficult. The

[1] Under the 1987 Banking Act no one may take deposits from the public, as part of a deposit taking business, without authorisation from the Bank of England. In order to be and remain authorised, an institution has to satisfy the Bank of England that it has adequate capital and liquidity, a realistic business plan, adequate systems and controls, provisions for bad debts, and that its business is carried on with integrity and skill and in a prudent manner. Its directors, managers and controllers have to be 'fit and proper' for the positions they hold. The title bank is reserved under the Act for those authorised institutions with more than £5 million of capital.

response of the regulators has been to strengthen the mechanisms of internal governance, (e.g. the increase in the disclosure requirements for large exposures) and to emphasise a greater use of information technology.[2] These developments will increase the ability of regulatory authorities to monitor banks and other firms in the financial sector. However, this approach does not recognise the possibility of agency problems between the shareholders and managers. It remains relevant to ask whether regulation primarily motivated by concerns for systemic stability independent of shareholder management accountability will serve the current requirement.

The corporate governance of banks is a complex issue. It has been argued that the legal and regulatory framework in which the banks operate makes the governance mechanism of hostile takeovers ineffective as a method of corporate governance (Prowse, 1997a; 1997b). Thus, governance issues in banks have to be discussed in an environment where the management has a considerably reduced threat perception from the market for corporate control (MCC). This however, is not the only implication of the role of the central bank in the corporate governance of banks. The central bank replaces the conventional goal of corporate governance, shareholder wealth maximisation, with concerns for depositor's security and the stability of the financial system. The aim of the regulation is not the maximisation of shareholders'

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[2] This is evident from a perusal of the latest round of evaluation of the supervision and surveillance of the Bank of England , see Arthur Anderson (1996) report on supervision and surveillance, and the Bank of England (1996) response to it; also see Hall, 1997). This thinking is also reflected in the latest policy initiative of the current UK government. The creation of a 'super regulator', the Financial Services Authority is based on the understanding that centralisation of information flows will make decision-making more effective given the latest developments in information technology. The Chairman of the Federal Reserve Board in his address in 1996 emphasised the need to develop more sophisticated and quantified internal control practices making use of the development in the area of information technology (Greenspan, 1996).

wealth but minimising the probability of failure of the banks (Prowse, 1997a; Greenspan, 1996). There are a few studies on the functioning of corporate governance mechanisms in banks. These studies exclusively based on US data examine the role of takeovers (Allen and Cabenoyan, 1991; Baradwaj, Fraser and Furtado, 1990; Brickley and James, 1987); compensation mechanisms (Haye, 1997); deposit insurance (Billet, Garfinkel and O'Neal, 1998; Gorton and Rosen, 1995); board duality (Pi and Timme, 1993); ownership (Glassman and Rhoades, 1979) and top management turnover (Prowse, 1997a) in the corporate governance of banks. Researchers are also increasingly interested in how corporate governance mechanisms in general vary in different legal and regulatory environments. There is a growing realisation that the corporate governance of banks has important differences in comparison to firms belonging to other sectors (Subrahmanyan, Rangan and Rosenstein, 1997). This chapter provides empirical evidence on the corporate governance mechanisms in banks and also compares the findings with corporate governance in the manufacturing sector in the United Kingdom.

The chapter is divided into six sections. In the second section we examine the regulatory framework and its implications for the corporate governance of banks. This forms the basis for the formulation of the major hypotheses for empirical evaluation. Section three specifies the methodology for the empirical estimation. Section four describes the variable measures and data sources used in the empirical evaluation. Section five presents the empirical estimates. Section six provides a summary and directions for further research.

6.2. Corporate Governance of Authorised Financial Institutions

The nature of the governance problem in banks cannot be understood independent of the institutional context. The regulatory framework has significant implications for the corporate governance of banks.

6.2.1 The Market for Corporate Control

A large percentage of the top management team is replaced subsequent to a takeover. This is irrespective of whether the tender offer is friendly, hostile, successful or unsuccessful (Walsh, 1988; Franks and Mayer, 1996). Thus takeovers represent a severe threat to the firm-specific managerial human capital. It is possible that takeovers take place for synergistic reasons (Weisbach, 1993). There is a growing realisation in the banking industry that the harmonisation and globalisation of the international financial market will require synergistic mergers and acquisitions to fully realise economies of scale and scope (Forbes and Molyneux, 1994). The general perception of the literature on takeovers is that hostile takeovers are disciplinary while friendly takeovers are synergistic (Davis and Stout, 1992). The Bank of England is not favourably disposed towards the MCC in its role as the ultimate disciplining mechanism of the incumbent management in banks.[3]

[3] The last major pronouncement (reaffirmed as the current position of the Bank's in a letter by the supervision and surveillance unit) we have had on the MCC was in 1987 (*Bank of England Quarterly Bulletin*, August, 1987). In this pronouncement the Governor of Bank of England states that in principle the Bank is not averse to ownership changes in banks. However, takeovers should be for synergistic reasons. Ownership changes, as an outcome of hostile takeovers to replace underperforming management is not to be encouraged. The pronouncement specifically mentions that the Bank of England will not look favourably at tender offers, which put banks into play. Restructuring transactions subsequent to hostile take-overs which might involve selling-off unremunerative lines of business will also not be favourably looked upon. The pronouncement also states that though not averse to foreign ownership in principle the Bank of England would like to keep a strong and continuing British presence in the UK banking system.

In banks, in addition to the various statutory and non-statutory bodies overseeing take-over activities and ownership changes, the Bank of England has specific and detailed responsibility for approving ownership changes and take-overs. The approvals depend on what the Bank considers to be 'fit and proper' for the conduct of business by the banks. Finally, governance changes leading to the transfer of control to foreign investors can be vetoed by the Treasury if it feels that they would affect the 'Britishness' of the financial institutions, or if it does not meet considerations of reciprocity in the takeover provisions of the countries to which the investors belong (Hall, 1993).

The Bank of England has elaborate concerns with regard to the identity of the shareholders/controllers of banks. The Bank of England has to be informed if any group or person intends to acquire shares in a bank incorporated in the UK. The Banking Act of 1987 gives the Bank of England specific rights to accept/reject changes in 'controllers' of banks. A 'controller' in a bank is defined as an institution or a person holding shares of a bank under whose directions the directors of the banks are accustomed to act. To be a 'controller' the criterion of 'fit and proper' has to be satisfied in the perception of the Bank of England. In the interpretation of the 'fit and proper' criterion a key consideration is the likely or actual impact on the interests of the depositors and potential depositors. The criterion is interpreted according to the circumstances of the individual cases and the position held by the 'controller'. The standards of the criterion increase with the level of control, that is the level of shareholdings. In judging the fitness criterion the Bank of England takes a cumulative approach. Thus the Bank may decide that a person does not fulfil the criterion on the

basis of several instances of conduct, which taken individually may not lead to that conclusion.

Subsequent to 1987 the definition of controllers has changed in a number of ways. The net effect of these changes is that the requirement to report changes in the ownership of shares now covers smaller levels of ownership and a wider class of shares. In 1992 the definition of controllers was extended to include the holding of non-voting shares. The threshold level of becoming a controller has been brought down to 10% of shareholding from 15%. A new category of 'controllers' called 'parent controllers' has also been defined. A 'parent controller' is a 'controller' of the bank by virtue of being a major shareholder in another institution of which the bank is a subsidiary. The Bank of England also has power over existing shareholders by disallowing continuation of a person as a shareholder or it may impose restrictions on the rights attached to specified shares.

The consideration of contagion also limits the scope of ownership changes. There are informal guidelines, practices and understandings between the Bank of England and government departments like the Department of Trade and Industry which are motivated by the desire to limit the scope for interlocking ownership of banks and non-bank financial institutions. The risks associated with connected lending and cross-contamination is sought to be minimised (Hall, 1993). Considerations of contagion become particularly relevant in the case of 'parent controllers'. The Bank of England is guided by considerations that possible inappropriate conduct by the

holding company or a member of the group of companies may damage confidence in the bank.

6.2.2. Substitution Hypothesis

As mentioned in Chapter 2 Jensen (1993) identifies the following governance mechanisms that may be used to solve the agency problems arising out of the separation of ownership from control.

a. Capital markets

b. Legal/political/regulatory systems

c. Product and Factor markets

d. Internal governance systems headed by the board of directors

The MCC is greatly constrained in its working in the case of banks. The product and factor markets have a limited role because of the market structure being an oligopoly. In the UK a few large banks called clearing banks control most of the business in the industry. This leaves the internal governance systems with the major share of the responsibility for the governance of the banks. An important prediction of the literature on corporate governance is that internal governance mechanisms reflected in a strong and independent board will emerge if the MCC is weak (Fama and Jensen, 1983; Williamson, 1983). This hypothesis has been termed as the substitution hypothesis. A stronger board will emerge, as the benefits of such a board will increase with an ineffective MCC. The validity of this hypothesis in the literature has been ascertained by examining the proportion of outside directors on the board. The understanding being that a greater proportion of outside directors will be the characteristic of effective boards when the MCC is weak (Brickley and James, 1987;

Mayers, Shivadasani and Smith, 1997). However, a greater percentage of outside directors on the boards of banks and 'mutuals' may not be a reflection of effective boards. Baysinger and Zardkoohi (1986) and Booth and Tehranian (1993) find that in regulated environments non-executive directors will be appointed for their public relations role and not a monitoring role as hypothesised.

The substitution hypothesis cannot be evaluated independent of the institutional context of the regulation of banks. The goal of shareholder wealth maximisation is not the motivation behind the regulation of banks. Therefore the regulator is not a substitute for the role of the MCC as in other sectors like manufacturing. Thus it is a simplification to predict strong and effective internal governance mechanisms if the MCC is weak or ineffective. The aim of the regulatory agencies is not maximising the wealth of shareholders but minimising the probability of failure (Prowse 1997a). The goal of regulatory intervention that is maintaining the stability of the individual banks and the financial system, is a threshold objective. The operational goal of the threshold objective translates into a concern for the security of depositors' funds. Effectiveness of internal mechanisms will be emphasised by regulators because of their concern for depositors' funds. The effectiveness of governance mechanisms will be a function of this threshold objective and not of the continuum of shareholder wealth maximisation.

Banks, given the nature of their business, are opaque institutions (Davies, 1995). Information about a bank's decisions and its dealings with its depositors and borrowers are confidential and privy to the institution. The primary concern of

regulators as illustrated by the statement of the heads of two of the major central banks has been the position of the depositors amongst the various stakeholders of the banks identified above[4]. The claims of the depositors can be diluted because of the nature of the deposit contract, which prevents priority ranking being given to current depositors over new and future depositors. The 'first-come-first-served' nature of the deposit contract threatens the stability of the financial system as it increases the possibility of bank runs and 'fire sales' by banks, given the opacity of their business decisions. Deposit insurance is a measure used by the regulators to engender confidence among deposit holders and impart a degree of stability to the financial system by minimising the alleged advantages of the 'first-come-first-served' nature of deposit contracts in times of lower depositors' confidence in a bank. However, regulators are equally conscious of the moral hazard problem of deposit insurance. Gorton and Rosen (1996) and Billet, Garfinkel and O'Neal (1998) show that it might induce greater risk taking by banks and thus may further contribute to the dilution of the deposit contract

In the case of banks the property rights of depositors have been the focus of all regulatory intervention. The regulators aim to reduce the risk to the depositors and the threat of instability of the financial system by placing a number of restrictions on the property rights of shareholders. Ownership changes are subject to a number of ex ante

[4] In a speech the Chairman of the Board of Governors of the Federal Reserve System stated that the genesis of regulatory intervention lies in the historical experience of the effects on the real economy of the disruptions of the financial markets and bank failures (Greenspan, 1996). In a speech to the City bankers and merchants the Governor of Bank of England described the objectives of supervision and regulation as the setting of minimum prudential standards so as to reduce the risk of failure in each individual bank, primarily in the interest of protecting depositors. The overall goal being to preserve systemic stability (*Bank of England of Quarterly Bulletin*, August, 1997). These statements give us an idea of the motivations behind regulatory intervention in banks.

controls. Also, the risk profile of shareholders is linked with any attempt to dilute the deposit contract by linking deposit insurance premiums to risk and by incorporating capital adequacy requirements. The risk weighted capital adequacy requirement implies that larger risk activities require a larger proportion of shareholder funds and a smaller share of depositor's funds. Large depositors have also been given a share of the responsibility for monitoring the activities of banks by limiting deposit insurance to 90% of the deposit value for deposits up to £20,000. However, it is possible that they use their position for monitoring the activities of the banks to gather advance information and implementing the 'first-come-first-served' principle of the deposit contract to their advantage.

In the banks the agency problems between the shareholders and managers have been ignored by the regulators even when it is recognised that the business activities of banks are opaque and shareholders, like depositors, will have only limited information about managerial decisions. For example, the implicit assumption of the risk weighted capital adequacy requirement is that by increasing the share of equity capital, riskier decisions will reflect the risk profile of the shareholders. A possible explanation for not making a distinction between managers and shareholders can be the risk associated with managerial human capital. As in the case of manufacturing managerial human capital continues to have a high degree of firm-specificity. This human capital risk is non-diversifiable while shareholders can easily diversify their risk by holding the shares of a number of banks in their portfolio. Therefore it is possible that managers will be more risk averse than shareholders. This could be a possible explanation why regulators perceive a lower level of threat from managers to

shareholders' funds and hence choose to ignore the agency problem between managers and shareholders. The risk perceived by the managerial human capital is increased by the restrictions imposed by the regulators on the choice and selection of managers.[5]

These aspects of regulatory intervention will affect the effectiveness of internal governance mechanisms. For example, the requirement of capital adequacy can have the effect of reducing the management share in equity capital thus reducing the control of the incumbent management in board decisions. It can also introduce larger outside interest in equity capital. The escalating level of evaluation of large controllers by the Bank of England makes it more likely that large shareholdings will play the role of effective monitors in the banking sector. The regulatory framework imposes limitations in terms of the available management pool and the working of the managerial labour market. This limitation on the available management pool can have the effect of limiting the options in terms of internal governance changes (Subramanyan, Ranjan and Rosenstein, 1997).

6.2.3 Hypotheses

On the basis of the discussion relating to bank regulation the following hypotheses are proposed for empirical evaluation. The discussion shows that the MCC is ineffective

[5] Section 16 of the Banking Act of 1987 lays down requirements expected from a person likely to be appointed as a director, chief executive, managing directors and managers of banks. The Bank of England has to be informed and approval sought before a person can be appointed to these levels. The assessment of the person is based on skills, soundness of judgement in the specific context of the designated job. The person should have had experience in line with the job and be in possession of appropriate qualifications and training. Previous conduct of the person, as in the case of controllers, is

in the banking sector. Further, the regulatory authority is not a substitute for the MCC as its objective for regulation are different. The regulatory authority is more concerned with the possibility of financial instability that may be caused by bank failures and is not motivated by the objective of shareholder wealth maximisation. The objective of regulatory intervention is to achieve this threshold objective and not a maximising objective such as shareholder wealth maximisation, as in conventional corporate governance. To achieve this objective the regulatory authorities like the Bank of England seek to make internal governance mechanisms more effective. However, this is not the outcome of the conventional substitution hypothesis. The possible effectiveness of the internal mechanisms is the outcome of measures like the capital adequacy requirement, which seek to reduce the risk faced by depositors by increasing the exposure of shareholders to managerial decisions. The regulators concerns do not display cognisance of agency problems between shareholders and managers. The regulatory institution has to approve the appointment of managers and the changes in ownership. The motivation behind these appointments is effective boards in the interest of depositors' security. In light of these arguments we propose the following hypotheses for empirical evaluation:

Hypothesis 1.

Top management turnover will not be significantly associated with financial performance indicators and more specifically stock market based performance indicators.

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assessed in a cumulative fashion.

Given the involvement of the regulatory body in the appointment of directors provisions like the risk weighted capital adequacy requirement and the approval of ownership changes we formulate the following hypotheses regarding non-executive directors and block shareholdings by directors and institutional shareholders.

Hypothesis 2A

Top management turnover will be positively related to the proportion of non-executive directors.

Hypothesis 2B

Top management turnover will be positively related to institutional block shareholdings.

6.3 Data Characteristics

The data-sets comprises the complete list of 44 quoted and UK controlled authorised financial institutions listed in the February, 1989 issue of the *Bank of England Quarterly Bulletin.* Data on financial performance is for the years 1987-88 to 1994-95. Data on corporate governance has been collected for the period 1989-90 to 1994-95. Table 1 gives the basic characteristics of the sample firms. The average turnover of all directors and executive directors is 12.99% and 14.19% respectively. The mean

Table 6.1
AUTHORISED INSTITUTIONS
DESCRIPTIVE STATISTICS

Variable	Mean	Std. Dev.	Skew.	Kurt.	Minimum	Maximum	Cases
Change in chief executive(1/0)	0.13	0.34	2.20	5.80	0.00	1.00	253
Annual turnover of executive directors (%)	14.19	18.93	1.60	5.60	0.00	100.00	253
Annual turnover of all directors(%)	12.99	13.22	1.20	4.70	0.00	75.00	253
Hostile takeover bid(1/0)	0.02	0.13	7.70	61.00	0.00	1.00	253
Board Size (No.)	11.88	6.03	1.00	3.40	3.00	35.00	253
Non-executive directors (%)	41.61	21.35	-0.30	2.40	0.00	100.00	253
Directors block shareholdings (%)	8.00	14.97	1.80	5.20	0.00	56.34	253
Institutional block shareholdings (%)	26.14	21.34	0.60	2.50	0.00	86.30	253
Executive chairman (1/0)	0.58	0.49	-0.30	1.10	0.00	1.00	253
Chairman is CEO(1/0)	0.12	0.33	2.30	6.30	0.00	1.00	253
Age of CEO (Years)	57.56	7.67	0.80	5.20	42.00	84.00	253
Number of years as CEO (Years)	7.08	4.14	0.90	3.70	0.00	20.00	253
Market capitalisation ((£ in millions)	1346.35	2627.54	2.80	11.00	1.80	14797.00	253
Returns on Capital employed (ROCE) in year t-1 (%)	10.46	13.55	-1.30	19.30	-81.97	78.22	253
Abnormal returns on shares (ABNOR) in year t-1(%)	2.69	38.55	2.10	13.30	-89.00	241.00	253
Number of Firms	44						

TABLE 6.2
AUTHORISED INSTITUTIONS
CORRELATION MATRIX
COMPLETE SAMPLE

	CEO	CED	CD	TB	NEDTB	DSH	ISH	SP1	SP2	AGE	TEN	MCAP	RCOE	ABNOR
Change in chief executive(CEO)	1.00													
Annual turnover of executive directors (CED)	0.50	1.00												
Annual turnover of all directors (CD))	0.44	0.79	1.00											
Board size (TB)	0.05	0.03	0.01	1.00										
Non-executive directors (%) (NEDTB)	0.24	0.34	0.28	0.15	1.00									
Directors block shareholdings (%) (DSH)	-0.12	-0.13	-0.19	-0.31	-0.24	1.00								
Institutional block shareholdings (%) (ISH)	0.01	0.08	0.07	-0.32	0.27	-0.11	1.00							
Executive chairman (SP1)	-0.15	-0.18	-0.12	0.08	-0.25	0.00	-0.15	1.00						
Chairman is CEO (SP2)	0.07	0.09	0.04	0.01	0.05	0.10	0.07	-0.44	1.00					
Age of CEO (AGE)	0.09	0.12	0.08	0.11	0.11	0.17	-0.06	0.24	-0.03	1.00				
Number of years as CEO (TEN)	0.11	-0.04	-0.04	-0.21	-0.10	-0.08	0.06	0.24	-0.20	0.27	1.00			
Market capitalisation (MCAP)	0.01	0.05	0.07	0.40	0.05	-0.24	-0.41	-0.01	0.06	0.11	0.01	1.00		
Returns on capital employed in year t-1 (ROCE)	0.00	-0.01	-0.01	-0.05	-0.14	0.14	-0.03	-0.06	0.27	0.01	0.11	0.02	1.00	
Abnormal returns on shares in year t-1 (ABNOR)	0.05	0.01	-0.02	0.06	0.03	-0.03	-0.16	0.04	-0.04	0.02	0.06	0.09	0.09	1.00

Correlations in excess of ¦ 0.06¦ are significant at 5%.

ROCE of the firms being 10.46%. The average size of the board in the sample is 11.88. The average percentage of non-executive directors is 41.69%. The mean insider block shareholdings (in excess of 3%) stood at 8:00%. The mean institutional block share holding was (in excess of 3%) 26.14%. In 58% of the cases the chairman was also an executive member of the board. In 12% of the cases the CEO was also the chairman of the board. The average tenure of the CEO was 7.08 years and the average age was 57.56 years.

Table 2 gives the correlation matrix of the variables used in the study. The characteristics of the data set are interpreted in conjunction with the t tables for the independence of means of the various subsamples drawn from the complete sample. The t tables are reported in the Appendix at the end of the thesis. Some preliminary inferences that can be drawn about the complete data set from the correlation matrix are detailed below. Changes in CEO and turnover of executive and all directors are significantly correlated. Executive chairmen and CEOs also functioning as chairman are less likely to be replaced. The proportion of non-executive directors and CEO, CD and CED are positively and significantly correlated. This gives substance to the argument that non-executive directors are an important influence on bringing about governance changes. Larger boards have significantly more non-executive directors on them and they are more likely to have a CEO and the chairman as the same person. These CEOs are significantly younger and have a longer tenure. Larger firms as measured by market capitalisation are more likely to have larger boards. Boards with larger directors' or insider block shareholdings have smaller boards with smaller percentages of non-executive directors. Large values of insider block shareholdings

appear to have a disincentive effect on institutional shareholdings. Non-executive directors are positively and significantly associated with institutional shareholdings. Institutional shareholdings are positively associated with positive abnormal returns and negatively associated with returns on capital employed. There is also an inverse association between the institutional shareholdings and the chairman being an executive director of the board or the CEO also being the chairman of the board. Returns on capital employed have a delayed positive impact on abnormal returns. Only 2-year moving averages show a significant and positive association with abnormal returns.

Comparison of independence of means of subsamples

The tables reporting the t values testing for independence of means are reported in the appendix at the end of the thesis.

When we split the sample into two subsamples one comprising firms which experienced a change in the CEO during the sample period and the other comprising firms which did not undergo a change in the CEO, we find that the t values of the means of the two subsamples differ in a number of ways. Firms, which witnessed a change in CEO, had a significantly higher turnover of executive directors and all directors. They also had larger boards and a larger percentage of non-executive directors. Firms associated with a CEO change had a lower mean of director block shareholdings and a significantly lower mean value of institutional block shareholdings. A disaggregation of the block shareholdings suggests that in AFIs or banks that underwent a CEO change there were significantly less instances of

DSHMAX and significantly more firms where directors had block shareholdings within the DSH5 range. There was a significantly higher likelihood of the CEOs holding dual positions and with a shorter tenure in the subsample of firms experiencing a change in the CEO. AFIs that witnessed a change in CEO were no different in financial performance.

Subsamples of firms having greater and lesser than the average value of market capitalisation for the complete sample differ in a number of respects. Firms with above market capitalisation have significantly larger boards. The larger firms had significantly larger proportions (nearly 50%) of non-executive directors on the Board. They also have significantly lower level of directors and institutional block shareholdings. A break-up of these shareholdings suggests that while directors block shareholdings up to 5% are significantly and positively associated with above market capitalisation the same are negatively related and significant beyond the 5% block shareholding level. In the case of institutional shareholdings there is a positive and significant association with above average market capitalisation at 15% block level only and the association is significantly negative for ISHMAX. The CEOs of above average market capitalisation firms are older, have a shorter tenure and are more likely to be executive chairmen than hold the dual positions of chief executive and chairman of the board. The larger firms as measured by market capitalisation are no different from smaller AFIs in terms of financial performance.

On comparing the subsamples of firms based on above and below average block shareholdings of directors, we find that firms with above average directors

shareholdings are no different in terms of their association with the governance change variables CD, CED and CEO in terms of the percentage of non-executive directors on the Board. Institutionally block shareholdings are significantly less for firms having above average block shareholdings of directors only at the ISH30 level. There is no indication that such AFIs are significantly more likely to have chairmen who are either executive chairmen or who are also the chief executive officers of the company. Firms with above average directors' shareholdings are significantly smaller. There is no significant difference in the financial performance indicators between the two subsamples of firms. Firms with above average directors' shareholdings have significantly older CEOs who hold the office for a shorter period.

When we split the subsample of firms on the criterion of CEO duality we find that when Chairmen are either executive chairmen or are CEOs the two subsamples are different in a number of respects. Duality in the top position on the Board has been subject of much interest in the literature (Boyd, 1995; Rechner and Dalton, 1991). Duality has been associated with better performance as it gives the firm a clear direction and other positive leadership attributes (Cochran Wood and Jones, 1985; Vance, 1964). However, duality has also been associated with ineffective governance and hostile takeovers (Morck, Shleifer and Vishny, 1988b). We find evidence in support of both these perceptions on CEO duality. However, unlike in the case of manufacturing firms we find that in the case of AFIs, duality on the board does not affect the likelihood of CEO replacement. There is no significant difference between the two subsamples in terms of their Board sizes. However, there is significant difference between the two in terms of the percentage of non-executive directors on

the Boards. Firms with CEO duality will have significantly lower proportion of non-executive directors on the Board. Director block shareholdings at the 15% level is negatively and significantly associated with CEO duality but at the 30% level is positively and significantly associated with CEO duality. Institutional block shareholdings will be inversely and significantly associated with CEO duality. Chairmen who are also CEOs will be significantly older, with a longer tenure. Such firms will also be significantly smaller. Board duality has no effect on performance measures based on ROCE and ABNOR .

When we compare boards with above average and below average proportions of non-executive directors we find that boards with above average non-executive directors have a significantly higher governance change as measured by CD, CED and CEO variables. Such boards are significantly larger have a smaller percentage of director block shareholdings but a larger mean value of institutional block shareholdings. On boards with above average percentage of non-executive directors the instances of CEO duality, that is CEOs being chairmen or executive members of the board are significantly less. Above average representation of non-executive directors will be associated with market capitalisation. Firms with an above average sample of non-executive directors will have a significantly lower likelihood of having an executive chairman and the tenure of the CEO is significantly shorter. In terms of various performance indicators we find that AFIs with an above average proportion of on-executive directors have a significantly lower ROCE, DROCE, AROCE, DAROCE, AABNOR, DAABNOR.

Finally we compare the subsamples of firms having greater and less than average institutional block shareholdings. Firms with greater than average institutional block shareholdings are not significantly associated with the likelihood of CEO change. They have significantly smaller boards and a larger proportion of non-executive directors on the Boards. They also have a smaller mean value of directors' shareholdings. At the disaggregated level of block shareholdings firms having above average institutional shareholding are positively associated with DSH15 and inversely associated with DSHMAX.

6.4 Discussion of the Estimates

The estimation methodology is similar to the one used in the case of manufacturing firms discussed in Section 5.2 of Chapter 5.

Turnover of all Directors (CD)

Tables 6.3 to 6.6 show that changes in all directors are not significantly dependent on financial performance. The F tests for the combined significance of financial performance indicators are also not significant. Returns on capital employed and annual abnormal returns do not explain the turnover of all directors. In the subsample estimates there is no consistent and significant influence of financial performance on the turnover of all directors. The F values were also not significant, for the financial performance indicators in the estimates of the subsamples.

CD is inversely and significantly influenced by Board size measured by the Log of TB. We tested both Log of TB and TB and chose Log of TB. Both the coefficient and

the t value for Log of TB were higher suggesting a decline in turnover at a decreasing rate with the increase in board size. The elasticity measure of - 4.1468 suggests a significant negative impact on CD of Log of TB. This is consistent with the understanding of the literature that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993; Yermack, 1996). This relationship between changes in all directors and Log of TB continues to have validity for all subsample estimates. The impact on directors block shareholdings (DSH) on turnover of all directors is not significant. The square of the DSH, DSHSQ is not significant. Thus there is no sign reversal in the significance of the directors shareholdings. This result is valid for all the subsample estimates. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX) we find that none of the dummy coefficients and the F statistics testing for the significance of all these levels of DSH on CD are significant. For institutional block shareholdings (ISH) we have similar results for the complete sample and the subsample levels. SP1 has a significant and negative influence on the turnover of all directors, except in the subsamples where the CEO has not changed and where the mean level of the non-executive directors on the Board is more than the mean of the complete sample. SP2 (chairman is also the CEO) significantly reduces the turnover of all directors. In the subsamples estimates, the influence of SP2 on CD is not clear. It reduces the turnover significantly only in the subsamples where the mean NEDTB and the mean ISH is more than the complete sample and the mean MCAP is less than the mean MCAP of the complete sample.

TABLE 6.3 AUTHORISED INSTITUTIONS Dep. variable: Annual turnover of all directors	
Independent variables	Variables affecting percentage change in all directors (Fixed Effects)
Returns on capital employed (ROCE) in year (t-1)	0.0669 (0.890)
Abnormal returns on shares (ABNOR) in year (t-1)	-0.01652 (-0.0809)
Change in CEOin year (t-1) and (t-2)	7.0036** (3.168)
Log of Board Size	-53.868** (-3.741)
Non-executive directors (%)	0.04616 (0.432)
Directors block shareholdings (%)	-0.02856 (0.868)
Square of directors block shareholdings (%)	--0.000006 (-0.0071)
Institutional block shareholdings (%)	-0.08832 (-0.489)
Square of Institutional block shareholdings (%)	0.00113 (0.461)
Market capitalisation	-0.00183‡ (-1.744)
Executive chairman	-10.639** (-2.694)
Chairman is CEO	-12.573** (-2.419)
R^2	0.44
F Test [d.f.]	2.85** (55,197)
	Test Statistics R^2
Group Effects only (2)	0.31
X- Variables only(3)	0.22
X & Group Effects only(4)	0.44
X, Group & Time Effects only(5)	0.46
	Hypotheses Tests F Test
Group Effects (d.f. =217)	1.75** (43,196)
Time Effects (d.f. =217)	1.285 (5,194)
	Random Effects Model
LM Vs. (3) (d.f.=1)	0.29 (1)
Fixed Vs. Random Effects (Hausman) (d.f.)	28.54** (12)
Number of Firms Number of observations	44 254

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.4

AUTHORISED INSTITUTIONS

Impact of financial performance on annual turnover of all directors

Dep. variable annual turnover of all directors

Financial performance var.iables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previos years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed (ROCE)	0.06695 (0.890)	-0.00725 (-0.057)	0.10401 (1.254)	0.09065 (0.618)	0.06737 (1.342)	0.07220 (0.721) 0.47
Abnormal returns on shares (ABNOR)i	-0.01652 (-0.801)	-0.02399 (-0.871)	-0.01438 (-0.870)	-0.02256 (-0.854)	-0.00146 (-0.118)	-0.02730 (-1.109) 0.26
F Test *D.F.*	0.36 (2,197)	0.39 (2,197)	1.17 (2,197)	0.50 (2,197)	0.91 (2,197)	0.79 (2,197)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.5 AUTHORISED INSTITUTIONS	
Significance of director block shareholdings for annual turnover of all directors	
Dep. variable: Annual turnover of all directors	
DIRECTORS BLOCK SHAREHOLDINGS.	
≤ 5%	-1.3382 (-0. 327)
≤ 15 % > 5 %	0.019853 (1.572)
≤ 30% > 15%	5.2867 (1.119)
> 30 %	5.5607 (1.161)
F Test D.F.	1.09 (4,190)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.6 AUTHORISED INSTITUTIONS	
Significance of institutional block shareholdings for annual turnover of all directors	
Dep. variable: Annual turnover of all directors	
INSTITUTIONAL BLOCK SHAREHOLDINGS.	
≤ 15%	5.97 (0.889)
≤ 30% > 15 %	1.3733 (0.213)
≤ 45% > 30%	-0.21209 (0.034)
>45%	2.4523 (0.410)
F Test D.F.	0.97 (4,195)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

The size of the firm as measured by market capitalisation (MCAP) is a significant influence and reduces the turnover of all directors except in the subsample where the mean MCAP is less than the mean MCAP of the complete sample.

CEOCH or the dummy variable associated with change in the CEO is an important influence on the turnover of all directors. Board changes are more closely aligned with CEO changes than any other variable used in the study. We have evaluated the significance of individual variables. This provides us with the basis for the evaluation of the hypotheses proposed in section three. None of the financial performance indicators have a significant influence in explaining turnover of all directors. This reflects the objectives of the regulatory body overseeing governance changes and supports hypothesis 2. In Table 4 we observe no significant influence of financial performance indicators based on ROCE and ABNOR on CD.

The corporate governance characteristics that emerge as significant in explaining governance changes measured by CD are CEOCH, LOGTB, MCAP, SP1 and SP2. The variables LOGTB, SP1 and SP2 reflect the relative power of the incumbent management vis-à-vis shareholders. LOGTB has a significant and negative influence on CD. As cited above the literature suggests that larger boards are dysfunctional and monitor the incumbent management less effectively (Yermack, 1996). Thus weaker Boards reflecting a poorer ability and willingness to monitor the incumbent management have an inverse relationship with the turnover of all directors. The negative influence of board attribute variables SP1 and SP2 provide further evidence on the close link between CEO replacement and turnover of all directors. Thus power

relationships in explaining board changes are important. Thus we find that there is evidence to support the hypotheses 2A and 2B. Block shareholdings and non-executive directors do not emerge as countervailing powers to the authority of the incumbent management.

Turnover of Executive Directors (CED)

The estimates for the factors explaining the turnover of executive directors are presented in Tables 6.7 to 6.12. Turnover of executive directors are also not significantly related to financial performance. The F tests for the combined influence of financial performance indicators are not significant for any of the performance indicators. Thus performance does not play a role in explaining the turnover of executive directors. As in the case of annual turnover of all directors none of the performance indicators emerge as significant in explaining the turnover of executive directors in any of the subsample estimates.

CED is inversely and significantly related to Board size measured by Log of TB and the board size elasticity is -2.5784. Thus there is a large impact on CED of Log of TB. Our empirical estimates also support the view that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993; Yermack, 1996). This relationship between changes in executive directors and Log of TB is valid for all subsample estimates except when the mean of the subsample for directors and institutional block shareholdings is less than the mean of the complete sample and where the mean non-executive directors on the board is higher than the mean non-executive directorship of the complete sample.

Directors block shareholdings (DSH) does not significantly affect the turnover of executive directors in both the complete and subsample estimates. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX), none of the dummy coefficients are significant in explaining the turnover of executive directors. The F value testing for the significance of these levels of DSH on CED is also not significant. Institutional block shareholdings (ISH) do not emerge as significant in explaining changes in CED in either the complete sample estimates or in any of the subsample estimates. At the disaggregated levels the institutional shareholdings ISH15, ISH30, ISH45 and ISHMAX have a significant and negative impact on the turnover of executive directors. The F statistics measuring for impact of these variables on the CED variable is significant. This result is valid for all the subsample estimates. SP1 (Chairman is an Executive Chairman) has a significant and negative influence on CED. However, SP2 (Chairman is also the CEO) does not have a significant role in explaining governance changes. In the estimates based on the subsamples we find that SP1 has consistent negative influence on the turnover in executive directors except in the subsample of firms where the CEO changed during the sample period and where the mean institutional block shareholding is higher than the sample mean. SP2 fails to emerge as significant in any of the subsample estimates. The size of the firm as measured by market capitalisation (MCAP) is significant in its influence in reducing the annual turnover of executive directors.

As in the case of the turnover of all directors' board changes thus are closely aligned with CEO changes. The CEOCH or the dummy variable associated with change in the

TABLE 6.7
AUTHORISED INSTITUTIONS
Dep. variable: Annual turnover of executive directors

Independent variables	Variables affecting percentage change in all directors (Fixed Effects)
Returns on capital employed (ROCE) in year (t-1)	0.11674
	(1.088)
Abnormal returns on shares (ABNOR) in year (t-1)	0.00268
	(0.091)
Change in CEOin year (t-1) and (t-2)	9.2845**
	(2.944)
Log of Board Size	-36.588‡
	(1.801)
Non-executive directors (%)	0.43614**
	(2.860)
Directors block shareholdings (%)	-0.15894
	(-0.267)
Square of directors block shareholdings (%)	-0.00138
	(-0.119)
Institutional block shareholdings (%)	0.00785
	(0.030)
Square of Institutional block shareholdings (%)	-0.0002
	(-0.057)
Market capitalisation	-0.00279‡
	(-1.869)
Executive chairman	-16.195**
	(-2.875)
Chairman is CEO	-11.792
	(1.590)
R^2	0.45
F Test	2.89**
[d.f.]	(55,197)
	Test Statistics
	R^2
Group Effects only (2)	0.29
X- Variables only(3)	0.22
X & Group Effects only(4)	0.45
X, Group & Time Effects only(5)	0.47
	Hypotheses Tests
	F Test
4 Vs. (3)	1.891**
(d.f. =217)	(43,198)
5 Vs. (4)	1.76
(d.f. =217)	(5,194)
	Random Effects Model
LM Vs. (3)	1.84
(d.f.=1)	(1)
Fixed Vs. random Effects (Hausman)	24.14*
(d.f.)	(12)
Number of Firms	44
Number of observations	254

t-values are in parentheses
** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡$p< 0.10$;

TABLE 6.8

AUTHORISED INSTITUTIONS

Impact of financial performance on annual turnover of executive directors

Dep. variable annual turnover of executive directors

Financial performance variables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previos years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed (ROCE)	0.11674 (1.088)	0.00359 (0.20)	0.11189 ((0.943)	-0.05859 (-0.280)	0.09587 (1.340)	0.18999 (1.331)
Abnormal returns on shares (ABNOR)i	0.00268 (0.091)	0.02199 (0.559)	0.13540 (0.572)	0.03972 (1.054)	-0.00444 (-0.252)	-0.00625 (-0.178)
F Test D.F.	0.60 (2, 197)	0.16 (2, 197)	0.60 (2,197)	0.56 (2, 197)	0.95 (2, 197)	0.88 (2, 197)

t-values are in parentheses

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡$p< 0.10$;

TABLE 6.9 AUTHORISED INSTITUTIONS	
Significance of directors block shareholdings on annual turnover of executive directors	
Dep. variable: Annual turnover of executive directors	
DIRECTORS BLOCK SHAREHOLDINGSr.	
≤ 5%	-0.15078 (-0.026)
≤ 15 % > 5 %	0.02087 (1.147)
≤ 30% > 15%	0.3576 *((0.053)*
> 30 %	-0.27878 (-0.040)
F Test D.F.	0.33 (4, 195)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.10 AUTHORISED INSTITUTIONS	
Significance of institutional block shareholdings on annual turnover of executive directors	
Dep. variable: Annual turnover of executive directors	
INSTITUTIONAL BLOCK SHAREHOLDINGSr.	
≤ 15%	-21.641† (-2.309)
≤ 30% > 15 %	-28.449** (-3.167)
≤ 45% > 30%	24.566** (2.864)
>45%	-25.3131** (-3.039)
F Test D.F.	3.26* (4, 195)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.11
AUTHORISED INSTITUTIONS
NON-EXECUTIVE DIRECTORS ON THE BOARD

YEARS	MEAN VALUE OF NON-EXECUTIVE DIRECTORS
1989	37.92
1990	39.05
1991	41.63
1992	43.37
1993	42.83
1994	45.40

TABLE 6.12
AUTHORISED INSTITUTIONS
INSTANCES OF CEO DUALITY

YEARS	SP1	SP2
1989	28	6
1990	27	6
1991	26	7
1992	23	6
1993	23	3
1994	21	3

CEO is an important influence on the annual turnover of executive directors. This result is valid for all the subsample estimates. The proportion of non-executive directors on the Board (NEDTB) has a positive and significant influence on the turnover of all executive directors (elasticity 1.2788). The direction of the influence and significance is the same for all the subsample estimates. There can be several alternative explanations for this finding on non-executive directors. The appointment(s) of the non-executive directors have to be approved by the bank of England. From the human capital perspective, it has been argued that non-executive directors need to signal their expertise and hence will monitor the executive management (Fama and Jensen, 1983). Non-executive directors may have the necessary incentive to monitor if they have sufficient financial involvement in the firm (Fama and Jensen, 1983; Hart, 1995; Weisbach, 1988). Baysinger and Zardkoohi (1986) and Booth and Tehranian (1993) finding that in regulated environments non-executive directors will be appointed for their 'public relations 'role can also be a possible explanation for this finding on non-executive directors. Thus non-executive directors in regulated environments where important consideration is given to the appropriateness of the person will lead to greater emphasis being given to their public relations role and lesser emphasis being given to their monitoring responsibilities.

The estimates provide us with the basis for the evaluation of the hypotheses set up in section three. As in the case of the CD variable we find that none of the financial performance indicators have a significant influence in explaining turnover of the executive directors. This reflects the objectives of the regulatory body overseeing governance changes. This supports hypothesis 1.

CEOCH, LOGTB, NEDTB and SP1 emerge as significant in explaining the turnover of executive directors. LOGTB has a significant and negative influence on CED. The presence of a chairman who is an executive chairman significantly reduces the turnover of executive directors. We do not find the traditional conception of CEO duality where the Chairman is also the CEO to have any impact on the turnover of executive directors. Institutional shareholdings measured as a continuous variable ISH and ISHSQ do not influence CED significantly. However, at the disaggregated level ISH has a significant and negative influence in effecting turnover of all directors as measured by CED. We find that the proportion of non-executive directors does have a positive influence on the turnover of executive directors. Thus non-executive directors are a countervailing influence on the power of the incumbent management. This could reflect the effectiveness of the supervisory regime in appointing independent directors to the board and supports hypothesis 2A. There is limited evidence in support of hypothesis 2B. Institutional shareholdings are significant in their influence on the annual turnover of executive directors only when we disaggregate the institutional shareholdings in terms of ISH15, ISH30, ISH45 and ISHMAX.

Change in CEO (CEO)

The estimates using the CEO dependent variable are based on logit binomial model. The logit fixed effects model could not be estimated as the model failed to converge. The random effects probit model does not indicate the existence of random effects as ρ is less than 0.001 and the estimates are unchanged from the probit estimates (Greene, 1997).

The estimates for the change in the CEO are reported in Tables 6.13 to 6.17. In the full regression model, reported in Table 6.13, changes in CEO are not significantly dependent on the financial performance indicators. Wald tests for the significance of financial performance indicators are not, significant for any of the performance indicators. As shown in Table 6.13 the logit effects estimates using these performance indicators suggest that the likelihood of CEO replacement is not affected by these indicators. In the subsample estimates measures based on ABNOR emerge as significant in some of the subsamples. The Wald statistics are significant in the subsamples where the mean of block shareholdings of directors and market capitalisation is less than the complete sample mean. In the Table 6.15 we compare the financial performance. This evaluates the ability of the governance structure to replace poorly performing CEOs with better CEOs. There is no significant difference in performance means 1-year before, 1-year after and 2-year after CEO change with the performance means of the year of the CEO change. We also find that none of the financial performance indicators have a significant influence in explaining turnover of CEOs. As in the case of the CD and the CED variable, this reflects the objectives of the regulatory body overseeing governance changes.

The influence of directors block shareholdings (DSH) on the likelihood of CEO change is not significant. In the subsample estimates DSH has no influence on the likelihood of CEO replacement. When DSH is disaggregated into various levels (DSH5, DSH15, DSH30 and DSHMAX) only DSHMAX increases the likelihood of CEO replacement significantly. The Wald statistics testing for the significance of

TABLE 6.13
AUTHORISED INSTITUTIONS
Likelihood of CEO change
All variables

Independent variables	All variables
Returns on capital employed (ROCE) in year (t-1)	-0.00239
	(-0.293)
Abnormal returns on shares (ABNOR) in year (t-1)	0.00389
	(1.545)
Board Size	0.05945†
	(2.026)
Non-executive directors (%)	0.02939**
	(3.722)
Directors block shareholdings (%)	0.00079
	(0.016)
Square of directors block shareholdings (%)	-0.00173
	(-01.434)
Institutional block shareholdings (%)	-0.03108‡
	(-1.777)
Square of Institutional block shareholdings (%)	0.00007
	(0.341)
Log of market capitalisation	-0.89250**
	(-3.845)
Executive chairman	-0.038521
	(-1.432)
Chairman is CEO	0.070824‡
	(1.805)
Age of CEO	-0.01173
	(1.025)
Number of years as CEO	0.08257**
	(2.727)
LL	-78.03
Res LL	-97.96
χ^2	39.85**
	(12)
Number of Firms	44
Number of observations	254

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.14

AUTHORISED INSTITUTIONS

Impact of financial performance on likelihood of CEO change

Dependent variable:: Change in CEO

Financial performance variables	Model 1 1 yr. lag (ROCE, ABNOR)	Model 2 1 yr. lag with 2 yr. moving average (AROCE, AABNOR)	Model 3 1 yr. lag,industry adjusted (DROCE; DABNOR)	Model 4 1 yr. lag with 2 yr. moving average, industry adjusted (DAROCE, DAABNOR)	Model 5 Change with respect to previous years performance (OROCE; OABNOR)	Model 6 Change with respect to previos years performance 2 yr. moving average, industry adjusted (OAROCE; OABNOR)
Returns on Capital employed	-0.002391 (-0.293) 0.76	-0.02191 (-2.074)† 0.03	0.00687 (0.710) 0.47	-0.01095 (-0.827) 0.40	0.0115 (0.659) 0.50	0.01544 (1.065) 0.28
Abnormal returns on shares	0.00389 (1.545) 0.12	0.00984 (1.031) 0.30	0.00199 (0.897) 0.36	0.0002 (0.005) 0.99	0.00292 (1.328) 0.18	0.00517 (1.291) 0.19
WALD (2)	2.44 (2)	4.80‡ (2)	1.29 (2)	0.72 (2)	2.60 (2)	3.65 (2)

t-values are in parentheses

** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

Table 6.15
AUTHORISED INSTITUTIONS PERFORMANCE INDICATORS AND CEO CHANGE

PERFORMANCE MEASURES	MEAN (0 Yrs)	MEAN (- 1 Yr)	MEAN (+ 1 Yr)	MEAN (+2 Yrs)
Returns on Capital employed ROCE, 1 yr. lag	10.4127	2.4616	7.8364	12.008
t-value		(-1.32)	(-0.59)	(0.31
Returns on Capital employed DROCE1 yr. lag,industry adjusted	1.1538	5.6766	-1.924	9.331
t-value		(-1.34)	(-0.65)	-0.59
Returns on Capital employed OROCE, Change with respect to previous years performance	7.4512	-3.5326	-2.4459	1.3499
t-value		-1.39	(-1.39)	(-0.64)
Abnormal returns on shares ABNOR, 1 yr. lag	5.2	-6.7391	1.9048	19.4286
t-value		(-0.91)	(-0.19)	(-0.81)
Abnormal returns on shares DABNOR, 1 yr. lag,industry adjusted,	3.4	-8.1304	-7.2381	22.5
t-value		(0.88)	(-0.52)	(-1)
Abnormal returns on shares OABNOR, Change with respect to previous years performance	9.8333	1.6087	13.619	52.043
t-value		(-0.55)	-0.18	(-1.1)
Returns on Capital employed AROCE, 1 yr. lag with 2 yr. moving average	6.712	4.357	--	11.3338
t-value		(-0.52)	--	(-1.38)
Returns on Capital employed DAROCE, 1 yr. lag with 2 yr. moving average, industry adjusted.	-2.3393	-5.1302	--	2.72
t-value		(-0.85)	--	-1.85
Returns on Capital employed OAROCE, Change with respect to previos years performance, 2 yr. moving average, industry adjusted	2.0162	-3.1267	--	3.197
t-value		(-1.55)	--	(-0.66)
Abnormal returns on shares AABNOR, 1 yr. lag with 2 yr. moving average	-2.7167	-7.6522	--	3.4643
t-value		(-0.72)	--	-0.63
Abnormal returns on shares DAABNOR, 1 yr. lag with 2 yr. moving average, industry adjusted	-4.9	-8	--	0.0714
t-value		(-0.51)	--	-0.55
Abnormal returns on shares OAABNOR, Change with respect to previos years performance, 2 yr. moving average, industry adjusted	7.55	-0.587	--	31.605
t-value		(-0.99)	--	-0.56

TABLE 6.16 **AUTHORISED INSTITUTIONS**	
Significance of directors block shareholdings for likelihood of CEO change	
Dependent variable:: Change in CEO	
DIRECTORS BLOCK SHAREHOLDINGS.	
≤ 5%	-0.6144 (-0.015)
≤ 15 % > 5 %	0.00230 (0.200)
≤ 30% > 15%	-0.02088 (-0.043)
> 30 %	-1.7162* (2.448)
Wald (4)	6.30 (4)

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

TABLE 6.17 **AUTHORISED INSTITUTIONS**	
Significance of institutional block shareholdings for likelihood of CEO change	
Dependent variable:: Change in CEO	
INSTITUTIONAL BLOCK SHAREHOLDINGS.	
≤ 15%	-2.5307† (2.294)
≤ 30% > 15 %	-3.3270** (-3.012)
≤ 45% > 30%	-3.3562** (3.059)
>45%	-3.5805** (-3.430)
Wald (4)	18.49** (4) 0.00

t-values are in parentheses
** p < 0.0001 ; * p < 0.01 ; † p<0.05 ; ‡p< 0.10;

these levels of DSH on CEO are not significant either for the complete sample or for the subsample estimates. Institutional block shareholdings (ISH) is significant and reduces the likelihood of CEO change in the complete sample estimates. The square of the ISH variable ISHSQ however, fails to emerge as significant thus suggesting that the likelihood of CEO change does not change with the level of institutional block shareholdings. In the subsample estimates the institutional block shareholding is significant where the mean director block shareholding is less than the mean of the complete subsample. When we disaggregate the ISH variable in terms of levels of block shareholdings (ISH15, ISH30, ISH45, ISHMAX) we find that at the disaggregated level all the dummy coefficients are significant in reducing the likelihood of CEO replacement. The Wald statistics is also significant for the disaggregated level of institutional block shareholdings. The proportion of non-executive directors on the Board (NEDTB) is also significant and increases the likelihood of CEO change. The direction and significance of the MCAP and NEDTB are valid for all the subsample estimates.

Board size measured by TB is inversely related to the replacement of the CEO. We tried out both Log of TB and TB and chose TB. Both the coefficient and the t value of TB were higher. Larger Boards are thus less likely to replace their CEOs. This inverse relationship between the likelihood of a CEO change and Log of TB is valid for all subsample estimates. This is in conformity with the literature that larger boards become dysfunctional and are easier to control (Lipton and Lorsch, 1992; Jensen, 1993; Yermack, 1996).

SP1 (Chairman is an Executive Chairman) does not have a significant and negative influence on the likelihood of a change in the CEO. However, SP2 (Chairman is also the CEO) does have a significant role in explaining governance changes as reflected by the CEO variable. It has the effect of increasing the likelihood of CEO replacement suggesting that Chairman who are also CEOs are more stringently observed, probably by the regulatory bodies. In the estimates based on the subsamples we find that SP1 has a consistent negative influence on the likelihood of CEO replacement except in the subsample where the mean NEDTB is higher than the mean of the complete sample. SP2 fails to emerge as significant in any of the subsample estimates.

The size of the firm as measured by the Log of market capitalisation (MCAP) is significant in its influence in decreasing the likelihood of CEO change. Tenure of the CEO is significant and increases the likelihood of CEO change. This is explained by the average age of CEOs in AFIs being 57.56 as opposed to 53.13 in the case of manufacturing firms.

It has not been possible to estimate the significance of the fixed effects. However, inference can be drawn regarding the role of the firm specific attributes which are unobservable using secondary data (Thompson, 1997). The χ^2 statistic is significant at 00.001 percent level of significance. However, their overall explanatory power in explaining the likelihood of CEO change is low. The likelihood ratio index used to assess the goodness of fit yields the value of 0.2085. Thus there are important unobservable firm-specific attributes which influences the likelihood of CEO replacement which are not captured by the secondary data analysis.

Financial performance indicators do not affect the likelihood of CEO change. This supports hypothesis 1 that states that financial performance indicators and more specifically stock market based performance indicators will not be significantly associated with top management turnover. The evidence in support of hypothesis 2A and 2B that state that top management turnover will be positively associated with the proportion of non-executive directors and the level of institutional block shareholdings is mixed. Increase in block shareholdings has the effect of reducing the likelihood of CEO change while the proportion of non-executive directors on the board increases the likelihood. The corporate governance characteristics, which emerge as significant in explaining control change reflected by CEO, are TB, NEDTB, ISH, and SP2 suggests that the likelihood of CEO replacement is largely the outcome of the Board attributes. ISH has a negative and significant impact on the CEO variable. This is an interesting result suggesting that institutional block shareholdings function as insiders in support of the incumbent CEO reducing the likelihood of its CEO replacement. The presence of a chairman who is a CEO, however, significantly increases the likelihood of CEO replacement. Non-executive directors however, are a countervailing power to the incumbent CEO and increase the likelihood of CEO replacement.

6.5 Comparison of Estimates of the AFI and the Manufacturing Sectors

In this section we compare the attributes of the governance mechanisms. The comparison is based on the empirical analysis of the manufacturing firms and the

authorised financial institutions in the United Kingdom, carried out in this and the previous chapter.

Data Characteristics

The annual turnover of executive and all directors is similar in the case of manufacturing firms and the AFIs. However, turnover of CEOs in AFIs is 13% as compared to 10% in the case of manufacturing firms. Instances of hostile take-over bid are far lower, at 2% in AFIs as compared to 5% in manufacturing. AFI boards are larger, the average size being 11.88 as compared to 7.35 of manufacturing firms. The AFI boards have on average more non-executive directors (41.61%) as compared to manufacturing firms (38.69%). Instances of dual appointments are far higher in manufacturing firms when compared to AFIs. In only 12% of the cases we find dual appointments in AFIs as compared to 36% in the case of manufacturing firms. The CEOs in AFIs are older (57.56) years in comparison to manufacturing (53.13) years.

Comparison of independence of means of subsamples

Manufacturing firms, which had a change in the CEO in the sample period, were significantly smaller while in AFIs the firms were significantly larger as measured by market capitalisation. Institutional block shareholding in the manufacturing firms which underwent a CEO change was significantly larger as compared to AFIs where the institutional block shareholding was significantly smaller. Instances of CEO duality were significantly higher in AFIs, which underwent a CEO change. In comparison instances of dual appointment were significantly lower in manufacturing firms which underwent a CEO change. In manufacturing firms characterised by CEO

duality the annual turnover of all directors and executive directors was significantly lower. No such significant difference is observed in the case of AFIs. Firms with mean institutional block shareholding above the sample mean are less likely to have duality in the chairman CEO appointments. No such significant difference is observed in the case of AFIs.

Estimates

Turnover of All Directors (CD)

Financial performance indicators do not influence the turnover of all directors in the AFIs but they have a significant negative influence on the turnover of all directors in the case of manufacturing firms. CEOCH and LOGTB have a similar influence on the CD variable. In the case of manufacturing firms the size variable is LOG of MCAP suggesting that turnover of all directors declines at a decreasing rate with increasing MCAP. In AFIs the turnover of all directors declines with increasing MCAP at a constant rate. Directors block shareholdings influence the CD positively in the case of manufacturing firms. However, they have no influence on the CD variable in the case of AFIs. The SP1 and SP2 duality variables in the case of AFIs significantly reduce the turnover of all the directors. These two variables have no such influence in the case of the manufacturing firms. At the disaggregated level of directors block shareholdings both DSH5, DSH15, DSH30, DSHMAX have significant negative influence on the CD variable in the case of manufacturing firms but we observe no such influence in the case of AFIs. For institutional block shareholdings ISH15, ISH30, ISH45, ISHMAX, have a positive and significant influence on the governance change variable CD but have no significant impact on the CD variable in AFIs.

Turnover of Executive Directors (CED)

Financial performance indicators do not influence the turnover of executive directors in the AFIs but they have a significant negative influence on the turnover of all directors in the case of manufacturing firms. CEOCH, NEDTB and LOGTB have a similar influence on the CED variable in both groups of firms. In the case of manufacturing firms the size variable is LOG of MCAP suggesting that turnover of executive directors declines at a decreasing rate with increasing MCAP. In AFIs the turnover of executive directors declines with increasing MCAP at a constant rate. Directors block shareholdings influence the CED positively in the case of manufacturing firms. However, they have no influence on the CED variable in the case of AFIs. The turnover of the executive directors is significantly reduced by the SP1 and SP2 duality variables in the case of manufacturing firms but only SP2 influence the CED variable in AFIs. At the disaggregated level of directors block shareholdings DSH5, DSH15, DSH30, DSHMAX have no significant influence on the CED variable in the case of manufacturing firms and AFIs. For institutional block shareholdings ISH15, ISH30, ISH45, ISHMAX again have no significant influence on the governance change variable CED in manufacturing but have a significant negative impact on the CED variable in the case AFIs. This shows that institutional shareholders function as insiders in the turnover of executive directors in AFIs. The proportion of non-executive directors on the Board increases significantly the turnover of executive directors, as in the case of manufacturing firms. However, the impact of non-executive directors in the case of AFIs is much larger with an elasticity of 1.2788 as compared to 0.7654 in manufacturing firms. This reflects the greater effectiveness

of non-executive directors in AFIs. In the estimates involving the CED governance change variable in AFIs we do not observe any period or time effects as in manufacturing. From Tables 5.11,6.11, 5.12 and 6.12, we observe a similar decline in SP1 and SP2 and a rise in the proportion of non-executive directors across the sample period in AFIs and in manufacturing.

Change in CEO (CEO)

The estimates for the CEO dependent variable are based on Logit analysis in AFIs and not on Logit fixed effects analysis as in the case of manufacturing. The AFIs had similar data characteristics except that instances of duality where the chairman is also the CEO were fewer, only 12% as compared to 36% in the case of manufacturing. In AFIs the financial performance indicators are not a significant influence on the likelihood of CEO replacement. We observe that in manufacturing three of the performance indicators significantly affect the likelihood of CEO replacement. The performance indicators suggest that there is little correspondence between performance before and after CEO change in AFIs. We find the stock market responds significantly and positively to CEO replacement in manufacturing firms. The board size variable, which affects the likelihood of CEO replacement in the case of AFIs, is TB and not Log of TB as in manufacturing. This suggests that the likelihood of CEO replacement is not affected by the increase of board size in AFIs as was observed in manufacturing. There are important differences between manufacturing and AFIs in the role of block shareholdings. In manufacturing, directors block shareholding significantly increase the likelihood of CEO replacement. In the AFIs the directors block shareholdings have no significant role; however, the institutional shareholdings

function as insiders and significantly reduce the likelihood of CEO replacement of the incumbent CEO. At the disaggregated level of directors block shareholdings DSH5, DSH15, DSH30, DSHMAX have a significant influence on the CEO variable in the case of manufacturing firms but not for AFIs. For institutional block shareholdings ISH15, ISH30, ISH45, ISHMAX again have no significant influence on the governance change variable CEO in manufacturing but have a significant negative impact on the CEO variable in the case AFIs. The size variable is insignificant in manufacturing but the Log of MCAP significantly reduces the likelihood of CEO replacement. There are important differences in terms of the role of the duality variables. SP1 has a significant role in reducing the likelihood of CEO replacement in the case of manufacturing firms but this does not emerge as a significant variable in the case of the AFI firms. However, the role of the SP2 variable in AFIs is interesting. SP2 has the effect of increasing the likelihood of CEO replacement suggesting that they are more likely to be held accountable in AFIs.

6.6 Conclusion

From the estimates it is clear that financial performance indicators based on returns on capital employed and abnormal stock market returns have no influence on the governance change variables. Thus the evidence supports hypothesis 1. As shown in section 2 the institutional context of banks implies that the working of the market for corporate control is severely constrained by the regulatory environment. The regulatory structure does not aim for shareholder wealth maximisation but minimising the probability of individual bank failure and wider systemic failure of the financial system.

Hypothesis 2 relates to the role of non-executive directors and institutional block shareholder in ensuring the accountability of top management. The evidence here for banks is mixed. The proportion of non-executive directors on the board increases the annual turnover of executive directors and the likelihood of CEO change. The institutional block shareholdings are insignificant in their influence on the annual turnover of all directors and executive directors. However, the institutional block shareholders reduce the likelihood of CEO change. Barclay and Holderness (1989) also find that the objective of large shareholders and small shareholders may not be similar and large shareholders may gain by functioning as insiders. Thus the institutional block shareholders have an insider role in corporate governance change in banks. Measures like the risk weighted capital adequacy requirement do not appear to induce greater monitoring of incumbent management CEO by large shareholders. This is significant as CEO change has important implications for changes in top management.

In light of the weak MCC in the banking sector the expectation is that the regulatory authorities will work towards effective internal corporate governance mechanisms. The lack of significant association of various financial performance indicators with disciplinary changes in top management is expected. The goal of the regulator is not shareholder wealth maximisation. However, we do expect that the board attributes over which the Bank of England exercises close control, such as the appointment of directors and the changes in ownership, will have larger role in disciplining top management. The estimates however, suggest that directors and institutional block

shareholdings do not have a significant role in the annual turnover of all directors and executive directors and function as insiders and reduce the likelihood of CEO change. We expect non-executive directors, to be more effective in disciplining top management in banks in comparison to the manufacturing sector. From the human capital perspective, it has been argued that non-executive directors need to signal their expertise and hence will monitor the executive management (Fama and Jensen, 1983). We expect this to be the case given the role of the Bank of England in their appointment. We find that non-executive directors increase the likelihood of CEO change. In the manufacturing sector the non-executive directors did not influence the likelihood of CEO change.

The set of variables, which emerge as significant and the direction of their influence suggest that governance changes are significantly influenced by board attributes, which reflect the power of the incumbent management. Board turnover as reflected by the annual turnover of all directors and executive directors are consistently a function of CEO change. The CEO change dummy has a significant and positive influence in explaining the annual turnover of all directors and executive directors. The other characteristic reflecting the role of power relations on the board relates to board duality. In the estimates board duality reduce the possibility for disciplining of top management. The role of block shareholdings suggests that internal governance mechanisms are ineffective and not more effective given the restraints on the working of the market for corporate control. The institutional block shareholdings are in fact pro management and reduce the likelihood of replacement of the incumbent CEO. A

possible explanation for this could be the close links between institutional investors and banks.

Dewatripont and Tirole (1994) define the governance objective in banks as a choice between a risky 'continue' and a conservative 'stop' action. When performance is good control should stay with shareholders. Regulators should stay away from getting involved in the governance of banks. Shareholders will however have a passive involvement in the governance of banks. They attribute the passivity of shareholders to their limited liability. However, the limited liability does not lead to shareholders being passive in the corporate governance of manufacturing firms. The discussion in section 2 shows that their passivity can be attributed to the near absence of the market for corporate control and the opacity of the business decisions in banks. According to Dewatripont and Tirole (1994) the regulators will intervene only when performance is poor. This is the 'stop' action when the incumbent management will not be allowed to continue. The threshold for this change in control can be instigated by a minimum solvency requirement. Our discussion of the regulatory environment shows that this dichotomy does not mirror practice. The Bank of England has close involvement in changes in the top management and ownership. Further the bank has extensive and regular informal consultations with individual banks. However, the primary motivation of the regulator is the threshold concern of depositor's security and systemic stability. The empirical analysis presented in this article shows that there is a poor correspondence between governance change and performance. Internal governance mechanisms like the institutional bloc shareholders in fact reduce the likelihood of governance changes.

Further research is needed to identify measures that will reduce shareholder passivity in what Dewatripont and Tirole (1994) characterise as the 'cóntinue' phase of the corporate governance of banks. Flannery (1998) in a review of US empirical evidence on the use of market information in the prudential regulation of banks concludes that market investors can take on greater responsibility of the corporate governance of financial services firms. Measures that will ensure a greater role for market forces in this phase and a reduction in the passivity of shareholders need to be identified. Further research into the role of non-executive directors and institutional investors is needed to understand the factors, which affect the effectiveness of internal governance mechanisms in banks.

CHAPTER 7

CORPORATE GOVERNANCE IN THE UNITED KINGDOM: A REVIEW OF THE FINDINGS OF THE STUDY

7.1 Introduction

In this Chapter we bring together the major arguments and findings of the thesis to form a consistent understanding of corporate governance as a process. In section 7.2 we present the principal arguments of the thesis. In section 7.3 we identify the direction of future work and the operationalisation of the concept of procedural justice in the context of shareholder management relationship.

7.2 Corporate Governance: A review of the discussion

Chapters 2 and section 4.4 of Chapter 4 present a review of the literature. The interest in corporate governance has its origins in the separation of ownership from control. Since the 1980s there has been considerable interest in the link between corporate governance and the competitiveness of firms. The framework for corporate governance provides the context in which managerial decisions are taken. Phrases like 'short-termism' or managerial proclivity for short-term returns in decision making

have come to be closely identified with corporate governance in the literature. In the case of the UK and USA the emphasis on financial information flows in corporate governance is held as a factor behind the alleged short term decision horizons of managers. However, as discussed in Chapter 2, recent empirical studies have shown that in the case of Japanese managers financial information flows have similar relevance. The difficulty with the focus on financial information flows is that the effects on competitiveness are seen to follow from the signalling mechanism, the stock market, rather than the institutional structure of corporate governance.

Chapter 3 provides a conceptual framework for the analysis of corporate governance. Incomplete contracts between shareholders and managers provide the justification for the use of governance mechanisms. However, the interpretation of incomplete contracts in corporate governance needs to be extended to incomplete contracts, which, Schwartz (1992) describes as strongly non-contractible. Contracts between shareholders and managers are not discrete in time; expectations and obligations are added in course of the contract. Termination of a contract is in effect a sanction, a consequence of unfulfilled or changed expectations. There are three possible modes of strategic co-operation between the shareholders and managers. Co-operation between shareholders and managers based on a combination of the justice and decentralised mode of co-operation can provide a basis for the design of a corporate governance structure. In Chapter 3 we show that the pure procedural justice mode can be the only feasible mode of co-operation between managers and shareholders. The other possible basis of strategic co-operation can be the decentralised mode. In the property rights view of the firm the shareholders are likely to adopt a dominant strategy. This will

lead to a breakdown in strategic co-operation between shareholders and managers and an exacerbation of opportunism in shareholder management relationship. Pure procedural justice as a basis for strategic co-operation requires equality in the opportunity in the exchange and influence of messages between the contracting parties. Such an exchange of information can be in terms of structured information like financial reports or it can be in terms unstructured communication or deliberation through for a like the company of board.

In Chapter 5 we examine the relevance of unstructured communication for effective corporate governance in the manufacturing firms in the United Kingdom. Chapter 4 provides the hypotheses, the estimation technique and variable definitions. Relevance of unstructured communication for effective corporate governance is proxied by the role of directors' block shareholdings in top management turnover. The estimation technique also provides an assessment of the role of firm specific factors in top management turnover. Evidence on the role of firm specific heterogeneity will be consistent with the need for deliberation for effective corporate governance.

The market for corporate control is relatively more active in the UK than in any other country. Hostile take-overs are proportionately more frequent in the UK than in the US, the other comparative corporate governance environment. The discussion in section 2.4 suggests the preference for dominant strategy by shareholders in corporate governance in the United Kingdom. This leads us to the second set of empirical issues examined in the thesis. The preference for a dominant strategy by shareholders will lead to the exacerbation of opportunism in corporate governance. Power relation will

be instrumental in top management turnover. Principal agent issues are nested in the evaluation.

The empirical findings in Chapters 5 provide evidence that support the conceptual framework proposed in Chapter 3. Greater insight into the relevance and form of unstructured communication to promote strategic co-operation in the procedural justice mode can be gained by using the framework as a basis for primary data based investigation.

Financial performance indicators based on returns on capital employed (ROCE) and abnormal stock market returns (ABNOR) significantly and negatively influences the CD and CED variables. The findings are similar to earlier studies on US and Japanese firms summarised in Table 2.2 in Chapter 2. However, the partial elasticities of these performance indicators are extremely low and thus have a very small impact on CD and CED. We are not sure what leads to the replacement of the CEO. Some of the financial performance indicators have an inverse relationship with CEO replacement. Further, the analysis suggests that underperformance of CEOs is followed by a replacement but the succession does not lead to a significantly better performance even though the stock market welcomes the replacement with higher share prices in a manner, which resembles the stock market response to hostile takeovers. This is evidence to support the view that focal points will be significant but will have a very small influence on the governance change variables. The significance of the performance indicators for the likelihood of CEO replacement is less clear and the financial performance indicators do not influence the likelihood of TO. This is

consistent with previous empirical work on UK firms (Conyon 1998; Franks and Mayer, 1996). The low elasticity of focal points indicates the limited relevance of structured information for top management accountability.

Directors' block shareholdings and the percentage of non-executive directors on the Board have a positive influence on turnovers represented by the CD and CED variables. Larger director block shareholdings however increase the likelihood of a CEO replacement. The evidence on directors' block shareholdings needs is consistent with the view that directors' represent firm specific 'expert knowledge' (Fama and Jensen1983; Rosenstein and Wyatt, 1997).

The empirical analysis of manufacturing firms in Chapter 5 shows that the conventionally identified variables used to explain corporate governance change do not explain as much of the turnover of all directors (CD) and executive directors (CED), as do the group effects. There are important unobservable firm-specific attributes that explain these turnovers. The size of the firm-specific effects is also significant for the likelihood of CEO replacement and tender offers (TO). The large firm fixed effects are consistent with the need for deliberation between shareholders and board managers will be critical for effective corporate governance as these firm fixed effects are unobservable and cannot be deciphered on the basis of structured communication.

Regarding power relations within the Board, the set of variables which emerge as significant and the direction of their influence suggest that governance changes

represented by CD and CED are largely explained by the incidence of CEO change. The CEOCH dummy has a significant and inverse influence in explaining the behaviour of CD and CED variables. The other characteristic relating to the Chairman being an executive chairman (SP1) has a similar influence on CD and CED. However, we do know that large boards and executive chairman reduce the likelihood of a CEO replacement.

The likelihood of hostile takeovers increases with executive chairman and large boards and declines with the percentage of non-executive directors on the Boards. In the independence of means tests we find that larger boards have a significantly higher percentage of non-executive directors. The literature suggests that large boards will be less effective in monitoring the incumbent management. The association of larger boards with a larger percentage of non-executive directors and the inverse association of NEDTB with the TO variable and a positive association with the CED variable suggests that the non-executive directors are effective as mechanisms for internal governance and reduce the likelihood of the use of the external corporate governance mechanism. This is consistent with the hypothesis of the MCC being the court of last resort (Jensen, 1988).

The empirical analysis of the banks was undertaken as an evaluation of the effects of the working of the MCC for corporate governance. However, the absence of an active MCC is not the only difference between the banks and the manufacturing firms. The nature of the corporate governance problem in banks is very different from that of the manufacturing firms. The regulatory authority like the Bank of England and now the

Financial Services Authority substitute for the role of the MCC in the corporate governance of banks. However, the goal of the regulatory authority in the AFI sector is not shareholder wealth maximisation. The objective of the regulatory authority is the security of the depositors' funds and financial and systemic stability.

Financial performance indicators based on returns on capital employed (ROCE) and abnormal stock market returns (ABNOR) have no influence on the governance change variables CD, CED and CEO variables. Further, the analysis suggests that underperformance of CEOs is followed by a replacement but the succession does not lead to a significantly better financial performance indicator.

The institutional context of banks, elaborated in Section 6.2 suggests that the regulatory environment shapes the working of the market for corporate control. The regulatory structure does not aim for shareholder wealth maximisation but the minimising the probability of individual bank failure and wider systemic failure of the financial system.

Analysis of power relations within the board identifies a set of variables which emerge as significant and the direction of their influence suggest that governance changes are significantly influenced by board attributes which reflect the power of the incumbent management. Board turnover as reflected by the CD and CED governance change variables are consistently a function of CEO change. The CEOCH dummy has a significant and inverse influence in explaining the behaviour of CD and CED variables. The other characteristic relating to the Chairman being an executive

chairman (SP1) has a similar influence on CD and CED. The likelihood of CEO replacement is less clearly understood. From the estimates we observe significant variables which reduce the likelihood of CEO replacement. Large boards and chairman who are also CEOs reduce the likelihood of CEO replacement. The role of block shareholdings suggests that internal governance mechanisms are ineffective and not more effective given the restraints on the working of the market for corporate control. Directors block shareholdings are not a significant influence on any of three measures of internal governance evaluated in the study. The institutional block shareholdings are in fact pro management and reduce the likelihood of replacement of the incumbent CEO. At the disaggregated level we find similar evidence on the role of institutional block shareholdings for the turnover of executive directors. A possible explanation for this can be the close links between banks and institutional investors. The percentage of non-executive directors on the Board, however, is a countervailing influence; it has a positive influence on the turnover of executive directors and increases the likelihood of CEO change.

7.3 Suggestions for future work

The evidence provides the justification for enquiring into the structure of deliberation that will conform to the requirements of strategic co-operation in the procedural justice mode. Similar investigation on procedural justice has been carried out in the context of entrepreneur-investor interactions, the management of innovation teams and headquarters-subsidiary relations in strategic decision-making (Kim and Mauborgne, 1991; Korine, 1997; Sapienza and Korsgaard, 1996). To identify the form and structure of deliberation that will be the basis of strategic co-operation in the

procedural justice mode, an evaluation of managerial and shareholder perceptions will be necessary. This will require identification of what constitutes procedural justice from the point of view of shareholders and managers. As mentioned earlier Kim and Mauborgne (1998) list three requirements for procedural justice in strategic decision procedures, viz., explanation, engagement and clarity of expectations. Primary data gathered from shareholders or managers could be the basis of identification of processes that will constitute a procedurally just perceptions in shareholder management relationships.

Previous research has produced a consistent set of components of procedural justice (Kim and Mauborgne, 1991; Korine, 1997). However, it has also been noted in the literature on procedural justice that different emphasises can be placed on the procedural justice components depending upon the relationship being studied (Tyler and Lind, 1990). In the specific context of shareholder management relationship procedural justice has been interpreted as equality in the opportunity and influence of messages.

To be able to identify the components of procedural justice in corporate governance we follow the research design of the studies by Kim and Mauborgne (1991); Korine (1997). In the first stage an open-ended question is posed to shareholders (like institutions) and managers (executive non-executive directors with and without shareholding interests). The respondents can be asked to recall one incident in their interaction, which they recall as particularly fair or unfair. This interaction can be further specified in the event of top management turnover. They can then be asked to

specify one factor that made it most unfair or fair. In the research design the responses are paraphrased and abstracted into simple statements and reworded in the fair direction by the experimenters. The phrases are then retyped on indexed cards and given to either top managers or to research colleagues. Each participant is asked to classify the simple statements into categories using the Q sort technique (Korine 1997). The categories, which have clusters of statements with 75% overlap, are retained. Thus for a response category to be identified a set of two statements is grouped by atleast 75% of the subjects. If the number of categories is large then the process is repeated this time the overlap requirement being close to 100%. The second list of categories is used to frame a questionnaire, which can then be mailed to a wider group of shareholders and managers. These questionnaires can be related to organisation extra-role behaviour, performance of the firm, long term decisions, board characteristics, board processes. As opposed to strategic decision contexts some of this information can be obtained from secondary sources.

We can also examine the relationship between the transparency of the board and long-term decision behaviour like R&D expenditure. Transparency of the board will be an indication of the equality in the opportunity and influence of messages, a requirement for procedural justice. The level of disclosure relating to executive remuneration, the proportion of non-affiliated directors on the board, existence of board committees will reflect transparency. A positive relationship between transparency and long term decision behaviour measured by expenditure on R&D will show the value of board processes that are procedural justice for long- term decisions

The way forward in corporate governance studies is to identify the structure and basis for deliberation between shareholders and managers. This will provide insights for a corporate governance structure that will reduce the scope for attitudinal opportunism without inducing opportunistic behaviour. Appropriate policy and regulatory response can then be identified for a corporate governance structure that corrects not only for the imbalance of power but is also the basis for superior decision-making.

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APPENDIX

Table A.5.1
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (CHANGE OF CEO)

Variable	NO CHANGE IN CEO MEAN	CHANGE IN CEO MEAN	INDEPENDENCE OF MEANS t-value
Annual turnover of executive directors	9.51	20.18	8.97**
Annual turnover of all directors	9.93	17.54	8.07**
Hostile takeover Bid	0.05	0.04	-0.42
Board size	7.40	7.29	-1.87‡
Non-executive directors (%)	37.10	40.40	2.62*
Directors block shareholdings (%)	11.11	7.03	-3.93**
Directors block shareholdings ≤ 5%	0.59	0.75	5.64**
Directors block shareholdings ≤ 15 % > 5 %	0.17	0.08	-3.7**
Directors block shareholdings ≤ 30% > 15%	0.08	0.07	-0.97
Directors block shareholdings > 30 %	0.14	0.09	-2.92*
Institutional block shareholdings (%)	26.20	31.81	5.8*
Institutional block shareholdings ≤ 15%	0.29	0.24	-2.31†
Institutional block shareholdings ≤ 30% > 15 %	0.33	0.24	-3.69**
Institutional block shareholdings ≤ 45% > 30%	0.24	0.27	1.12
Institutional block shareholdings >45%	0.14	0.26	5.73**
Executive chairman	0.67	0.50	-5.91**
Chairman is CEO	0.4502	0.2545	-7.26**
Age of CEO	53.74	52.46	-3.65**
Number of years as CEO	9.69	5.92	-12.75**
Market capitalisation	318.00	202.35	-3.74**
Returns on capital employed in year t-1	21.85	16.48	-7.66**
Abnormal returns on shares in year t-1	2.73	-2.77	2.23†
Returns on capital employed, 1 yr. lag,industry adjusted	2.50	-2.44	-7.52**
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	2.10	-3.50	-2.27†
Returns on capital employed, 1 yr. lag with 2 yr. moving average	22.33	16.92	-8.16**
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	2.42	-2.58	-8.07**
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	2.90	-3.73	-3.76**
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	2.96	-3.73	-3.66**
Returns on capital employed, Change with respect to previous years performance	-0.98	-0.88	0.18
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.82	-0.73	0.24
Abnormal returns on shares, Change with respect to previous years performance	0.08	1.67	0.46
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.96	-1.06	-0.05

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.5.2
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (HOSTILE TAKEOVER BIDS)

Variable	NO HOSTILE SAMPLE MEAN	HOSTILE SAMPLE MEAN	INDEPENDENCE OF MEANS t-values
Change in chief executive	0.09	0.11	0.90
Annual turnover of executive directors	14.36	15.58	0.80
Annual turnover of all directors	13.09	15.72	1.95†
Board size	7.32	7.51	1.16
Non-executive directors (%)	38.96	37.40	-1.22
Directors block shareholdings (%)	8.94	10.26	1.06
Directors block shareholdings ≤ 5%	0.66	0.66	-0.08
Directors block shareholdings ≤ 15 % > 5 %	0.12	0.17	1.82
Directors block shareholdings ≤ 30% > 15%	0.08	0.05	-1.50
Directors block shareholdings > 30 %	0.12	0.09	-1.50
Institutional block shareholdings (%)	28.98	27.96	-0.66
Institutional block shareholdings ≤ 15%	0.26	0.31	1.49
Institutional block shareholdings ≤ 30% > 15 %	0.28	0.30	0.45
Institutional block shareholdings ≤ 45% > 30%	0.27	0.19	-2.59*
Institutional block shareholdings >45%	0.19	0.20	0.08
Executive chairman	0.58	0.64	1.77‡
Chairman is CEO	0.37	0.30	-2.21†
Age of CEO	53.34	52.14	-3.05*
Number of years as CEO	7.80	8.39	1.7‡
Market capitalisation	270.65	230.22	-1.04
Returns on capital employed in year t-1	19.79	16.97	-2.96*
Abnormal returns on shares in year t-1	1.98	-8.47	-3.04*
Returns on capital employed, 1 yr. lag,industry adjusted	0.30	-0.50	-1.10
Abnormal returns on shares, 1 yr.r. lag,industry adjusted	1.40	-9.62	-3.49**
Returns on capital employed, 1 yr. lag with 2 yr. moving average	20.26	17.43	-3.84**
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	0.19	-0.62	-1.21
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	1.33	-7.55	-3.66**
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	1.17	-6.63	-3.08*
Returns on capital employed, Change with respect to previous years performance	-1.02	-5.33	0.70
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.93	-0.07	1.85
Abnormal returns on shares, Change with respect to previous years performance	1.15	-0.77	-0.43
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.04	-5.99	-2.33*

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.5.3
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (CEO DUALITY)

Variable	NO CEO DUALITY MEAN	CEO DUALITY MEAN	INDEPENDENCE OF MEANS T VALUE
Change in chief executive	0.13	0.08	-2.77*
Annual turnover of executive directors	16.33	13.59	-2.16†
Annual turnover of all directors	14.13	13.22	-0.91
Hostile takeover bids	0.04	0.05	0.88
Board size	7.57	7.23	-2.37†
Non-executive directors (%)	44.34	35.50	-10.01**
Directors block shareholdings (%)	5.01	11.51	7.53**
Directors block shareholdings ≤ 5%	0.77	0.60	-6.38**
Directors block shareholdings ≤ 15 % > 5 %	0.10	0.14	2.31†
Directors block shareholdings ≤ 30% > 15%	0.07	0.08	0.48
Directors block shareholdings > 30 %	0.04	0.16	7.32**
Institutional block shareholdings (%)	30.88	27.63	-2.84*
Institutional block shareholdings ≤ 15%	0.22	0.29	2.89*
Institutional block shareholdings ≤ 30% > 15 %	0.27	0.29	0.56
Institutional block shareholdings ≤ 45% > 30%	0.28	0.24	-1.55
Institutional block shareholdings >45%	0.22	0.18	-1.60
Age of CEO	51.63	53.98	6.47**
Number of years as CEO	6.21	8.85	9.89**
Market capitalisation	215.16	290.90	2.28†
Returns on capital employed in year t-1	17.61	20.25	3.33**
Abnormal returns on shares in year t-1	-1.13	0.87	0.72
Returns on capital employed, 1 yr. lag,industry adjusted	-1.64	1.18	3.8**
Abnormal returns on shares, 1 yr.r. lag,industry adjusted	-2.15	0.39	0.96
Returns on capital employed, 1 yr. lag with 2 yr. moving average	18.16	20.67	3.33**
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	-1.65	1.01	3.8**
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-1.92	0.73	1.34
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-1.71	0.66	1.14
Returns on capital employed, Change with respect to previous years performance	-0.95	-0.92	0.07
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.81	-0.76	0.13
Abnormal returns on shares, Change with respect to previous years performance	1.12	0.65	-0.13
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-1.64	-0.66	0.48

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.5.4
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (DIRECTORS SHAREHOLDINGS)

Variable	LESS THAN COMPLETE SAMPLE MEAN	GREATER THAN COMPLETE SAMPLE MEAN	INDEPENDENCE OF MEANS t-value
Change in chief executive	0.11	0.07	-2.29†
Annual turnover of executive directors	15.38	12.68	-2.16†
Annual turnover of all directors	13.98	12.53	-1.47
Hostile takeover bid	0.05	0.04	-1.09
Board size	7.82	6.24	-12.11**
Non-executive directors (%)	41.51	31.99	-8.56**
Institutional block shareholdings (%)	30.48	24.83	-5.09**
Institutional block shareholdings ≤ 15%	0.24	0.32	2.56*
Institutional block shareholdings ≤ 30% > 15 %	0.27	0.32	1.9‡
Institutional block shareholdings ≤ 45% > 30%	0.27	0.23	-1.42
Institutional block shareholdings >45%	0.22	0.14	-3.48**
Executive chairman	0.53	0.74	7.34**
Chairman is CEO	0.31	0.47	5.18**
Age of CEO	53.34	52.62	-1.88‡
Number of years as CEO	7.33	9.25	5.53**
Market capitalisation	347.78	63.93	-10.81**
Returns on capital employed in year t-1	19.36	19.16	-0.15
Abnormal returns on shares in year t-1	-0.09	0.71	0.28
Returns on capital employed, 1 yr. lag,industry adjusted	0.15	0.19	0.13
Abnormal returns on shares, 1 yr.r. lag,industry adjusted	-0.59	-0.37	0.09
Returns on capital employed, 1 yr. lag with 2 yr. moving average	19.77	19.74	0.02
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	-0.01	0.20	0.31
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-0.57	0.59	0.57
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-0.74	1.11	0.85
Returns on capital employed, Change with respect to previous years performance	-0.93	-0.94	-0.02
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.74	-0.88	-0.31
Abnormal returns on shares, Change with respect to previous years performance	1.13	0.08	-0.25
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.77	-1.58	-0.34

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.5.5
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (INSTITUTIONAL SHAREHOLDINGS)

Variable	LESS THAN COMPLETE SAMPLE MEAN	GREATER THAN COMPLETE SAMPLE MEAN	INDEPENDENCE OF MEANS t value
Change in chief executive	0.08	0.11	2.08†
Annual turnover of executive directors	13.53	15.37	1.60
Annual turnover of all directors	12.53	14.32	1.89‡
Hostile takeover bid	0.06	0.03	-2.24†
Board size	7.94	6.91	-7.45**
Non-executive directors (%)	37.32	39.72	2.44†
Directors block shareholdings (%)	13.65	5.79	-7.81**
Directors block shareholdings ≤ 5%	0.61	0.71	3.53**
Directors block shareholdings ≤ 15 % > 5 %	0.09	0.15	3.57**
Directors block shareholdings ≤ 30% > 15%	0.05	0.09	2.36†
Directors block shareholdings > 30 %	0.22	0.05	-8.58**
Executive chairman	0.65	0.55	-3.47**
Chairman is CEO	0.41	0.32	-3.11*
Age of CEO	54.18	52.34	-5.3**
Number of years as CEO	8.25	7.64	-1.88‡
Market capitalisation	483.00	98.04	-9.5**
Returns on capital employed in year t-1	20.43	18.44	-2.79*
Abnormal returns on shares in year t-1	-1.61	1.47	1.21
Returns on capital employed, 1 yr. lag,industry adjusted	1.25	-0.66	-2.81*
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	-1.91	0.52	0.97
Returns on capital employed, 1 yr. lag with 2 yr. moving average	21.15	18.72	-3.61**
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	1.35	-0.93	-3.55**
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-1.28	0.57	1.03
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-1.55	0.83	1.27
Returns on capital employed, Change with respect to previous years performance	-1.22	-0.72	0.99
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-1.09	-0.55	1.56
Abnormal returns on shares, Change with respect to previous years performance	-0.21	1.59	0.54
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-2.03	-0.24	0.93

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.5.6
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (NON-EXECUTIVE DIRECTORS)

Variable	LESS THAN COMPLETE SAMPLE	GREATER THAN COMPLETE SAMPLE	INDEPENDENCE OF MEANS t - value
Change in chief executive	0.08	0.10	1.12
Annual turnover of executive directors	10.28	15.40	3.63**
Annual turnover of all directors	9.88	14.25	3.5**
Hostile takeover bid	0.04	0.05	0.33
Board size	6.77	7.46	3.87**
Directors block shareholdings (%)	18.47	7.39	-7.38**
Directors block shareholdings ≤ 5%	0.44	0.71	7.17**
Directors block shareholdings ≤ 15 % > 5 %	0.17	0.12	-1.89‡
Directors block shareholdings ≤ 30% > 15%	0.08	0.07	-0.51
Directors block shareholdings > 30 %	0.30	0.08	-6.34**
Institutional block shareholdings (%)	24.71	29.58	3.42**
Institutional block shareholdings ≤ 15%	0.39	0.24	-4.12**
Institutional block shareholdings ≤ 30% > 15 %	0.26	0.29	0.84
Institutional block shareholdings ≤ 45% > 30%	0.20	0.27	2.25†
Institutional block shareholdings >45%	0.16	0.20	1.37
Executive chairman	0.84	0.54	-8.08**
Chairman is CEO	0.61	0.31	-7.89**
Age of CEO	53.75	53.01	-1.76‡
Number of years as CEO	8.51	7.78	-1.9‡
Market capitalisation	139.47	287.35	5.04**
Returns on capital employed in year t-1	20.30	19.10	-1.11
Abnormal returns on shares in year t-1	1.37	-0.09	-0.37
Returns on capital employed, 1 yr. lag,industry adjusted	1.52	-0.10	-1.74‡
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	1.30	-0.88	-0.57
Returns on capital employed, 1 yr. lag with 2 yr. moving average	21.40	19.45	-1.79‡
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	2.06	-0.33	-2.33†
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	0.68	-0.40	-0.45
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-0.09	-0.21	-0.08
Returns on capital employed, Change with respect to previous years performance	-1.84	-0.76	1.53
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-1.81	-0.58	2.54†
Abnormal returns on shares, Change with respect to previous years performance	1.36	0.71	-0.14
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-1.83	-0.85	0.36

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡$p< 0.10$;

Table A.5.7
MANUFACTURING FIRMS
INDEPENDENCE OF MEANS (MARKET CAPITALISATION)

Variable	LESS THAN COMPLETE SAMPLE	GREATER THAN COMPLETE SAMPLE	INDEPENDENCE OF MEANS t - value
Change in chief executive	0.10	0.08	-1.26
Annual turnover of executive directors	14.55	14.69	0.11
Annual turnover of all directors	13.60	13.35	-0.25
Hostile takeover Bid	0.05	0.04	-0.25
Board Size	6.79	9.41	15.42**
Non-executive directors (%)	36.99	44.95	7.84**
Directors block shareholdings (%)	11.60	0.18	-19.58**
Directors block shareholdings ≤ 5%	0.58	0.98	22.79**
Directors block shareholdings ≤ 15 % > 5 %	0.16	0.01	-11.41**
Directors block shareholdings ≤ 30% > 15%	0.09	0.00	-9.91**
Directors block shareholdings > 30 %	0.15	0.00	-12.92**
Institutional block shareholdings (%)	32.11	16.60	-15.35**
Institutional block shareholdings ≤ 15%	0.20	0.51	9.04**
Institutional block shareholdings ≤ 30% > 15 %	0.27	0.34	2.21†
Institutional block shareholdings ≤ 45% > 30%	0.29	0.13	-6.53**
Institutional block shareholdings >45%	0.24	0.02	-13.48**
Executive chairman	0.59	0.58	-0.26
Chairman is CEO	0.37	0.31	-1.95†
Age of CEO	52.42	55.75	8.1**
Number of years as CEO	8.08	7.25	-2.04†
Returns on Capital employed in year t-1	18.90	20.77	2.82*
Abnormal returns on shares in year t-1	0.02	0.63	0.27
Returns on Capital employed, 1 yr. lag,industry adjusted	-0.29	1.84	3.57**
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	-0.98	1.15	0.96
Returns on Capital employed, 1 yr. lag with 2 yr. moving average	19.39	21.13	2.79*
Returns on Capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	-0.38	1.64	3.64**
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-0.53	0.88	0.90
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-0.18	-0.23	-0.03
Returns on Capital employed, Change with respect to previous years performance	-0.99	-0.70	0.72
Returns on Capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.83	-0.58	0.90
Abnormal returns on shares, Change with respect to previous years performance	1.15	-0.42	-0.53
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.98	-1.13	-0.09

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.6.1
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (CHANGE OF CEO)

Variable	NO CHANGE IN CEO MEAN	CHANGE IN CEO MEAN	INDEPENDENCE OF MEANS t-value
Annual turnover of executive directors	8.03	19.40	4.83**
Annual turnover of all directors	7.55	17.60	6.27**
Board size	10.58	12.98	3.17*
Non-executive directors (%)	33.20	48.73	5.96**
Directors block shareholdings (%)	13.93	2.98	-5.65**
Directors block shareholdings ≤ 5%	0.59	0.82	3.78**
Directors block shareholdings ≤ 15 % > 5 %	0.08	0.08	-0.22
Directors block shareholdings ≤ 30% > 15%	0.07	0.11	1.10
Directors block shareholdings > 30 %	0.25	0.02	-5.45**
Institutional block shareholdings (%)	29.79	23.05	-2.26†
Institutional block shareholdings ≤ 15%	0.35	0.44	1.26
Institutional block shareholdings ≤ 30% > 15 %	0.21	0.24	0.31
Institutional block shareholdings ≤ 45% > 30%	0.17	0.19	0.59
Institutional block shareholdings >45%	0.27	0.13	-2.46*
Executive chairman	0.63	0.54	-1.35
Chairman is CEO	0.07	0.17	2.65*
Age of CEO	57.42	57.68	0.59
Number of years as CEO	7.66	6.59	-1.94‡
Market capitalisation	945.32	1685.91	2.25†
Returns on capital employed in year t-1	11.56	9.53	-0.90
Abnormal returns on shares in year t-1	2.22	3.09	0.05
Returns on capital employed, 1 yr. lag,industry adjusted	1.18	0.02	-0.40
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	-0.83	1.23	0.25
Returns on capital employed, 1 yr. lag with 2 yr. moving average	11.69	9.43	-1.24
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	1.12	-0.18	-0.60
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	4.49	-2.54	-1.72‡
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	2.15	-4.29	-1.55
Returns on capital employed, Change with respect to previous years performance	0.02	0.67	0.37
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.81	-0.03	0.83
Abnormal returns on shares, Change with respect to previous years performance	0.23	9.19	1.11
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.74	4.12	1.16

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.6.2
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (CEO DUALITY)

Variable	NO CEO DUALITY MEAN	CEO DUALITY MEAN	INDEPENDENCE OF MEANS T VALUE
Change in chief executive	0.13	0.13	0.16
Annual turnover of executive directors	15.29	13.75	-0.58
Annual turnover of all directors	14.06	12.57	-0.71
Board size	11.22	12.14	1.09
Non-executive directors (%)	48.38	38.92	-3.24**
Directors block shareholdings (%)	6.79	8.48	0.81
Directors block shareholdings ≤ 5%	0.71	0.72	0.25
Directors block shareholdings ≤ 15 % > 5 %	0.15	0.05	-2.28†
Directors block shareholdings ≤ 30% > 15%	0.03	0.11	2.72*
Directors block shareholdings > 30 %	0.12	0.13	0.16
Institutional block shareholdings (%)	30.57	24.38	-2.10†
Institutional block shareholdings ≤ 15%	0.32	0.43	1.68‡
Institutional block shareholdings ≤ 30% > 15 %	0.29	0.20	-1.51
Institutional block shareholdings ≤ 45% > 30%	0.13	0.20	1.61
Institutional block shareholdings >45%	0.26	0.17	-1.66‡
Age of CEO	54.98	58.58	3.44**
Number of years as CEO	6.33	7.38	1.83‡
Market capitalisation	1011.25	1479.65	1.55
Returns on capital employed in year t-1	8.44	11.27	1.50
Abnormal returns on shares in year t-1	-0.99	4.15	0.96
Returns on capital employed, 1 yr. lag,industry adjusted	-0.91	1.13	1.21
Abnormal returns on shares, 1 yr.r. lag,industry adjusted	-1.85	1.13	0.47
Returns on capital employed, 1 yr. lag with 2 yr. moving average	8.79	11.13	1.51
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	-0.66	0.84	1.10
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-4.00	2.55	1.47
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-4.69	-0.00	1.03
Returns on capital employed, Change with respect to previous years performance	0.28	0.39	0.05
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	0.29	-0.67	-0.90
Abnormal returns on shares, Change with respect to previous years performance	8.25	3.61	-0.53
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	3.69	1.07	-0.57

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.6.3
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (DIRECTORS SHAREHOLDINGS)

Variable	LESS THAN COMPLETE SAMPLE MEAN	GREATER THAN COMPLETE SAMPLE MEAN	INDEPENDENCE OF MEANS t-value
Change in chief executive	0.14	0.11	-0.58
Annual turnover of executive directors	14.68	12.78	-0.59
Annual turnover of all directors	13.7	10.94	-1.15
Board size	12.78	9.28	-4.24**
Non-executive directors (%)	43	37.59	1.45
Institutional block shareholdings (%)	25.93	26.74	0.13
Institutional block shareholdings ≤ 15%	0.39	0.42	0.41
Institutional block shareholdings ≤ 30% > 15 %	0.21	0.26	0.89
Institutional block shareholdings ≤ 45% > 30%	0.22	0.06	-3.71**
Institutional block shareholdings >45%	0.17	0.26	1.23
Executive chairman	0.59	0.57	-0.35
Chairman is CEO	0.11	0.17	1.26
Age of CEO	56.81	59.71	2.65*
Number of years as CEO	7.45	6.02	-3.65**
Market capitalisation	1752.91	170.46	-7.28**
Returns on capital employed in year t-1	9.61	12.93	1.35
Abnormal returns on shares in year t-1	4.09	-1.35	-1.10
Returns on capital employed, 1 yr. lag,industry adjusted	-0.23	2.80	1.31
Abnormal returns on shares, 1 yr.r. lag,industry adjusted	1.15	-2.22	-0.51
Returns on capital employed, 1 yr. lag with 2 yr. moving average	9.87	12.18	1.48
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	-0.11	1.92	1.15
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	0.22	2.01	-1.10
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-2.45	1.89	-0.58
Returns on capital employed, Change with respect to previous yeaccs performance	-0.1068	1.73	0.86
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.3231	-0.62	-0.27
Abnormal returns on shares, Change with respect to previous years performance	3.8836	8.05	0.53
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	1.4788	2.82	0.32

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$

Table A.6.4
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (INSTITUTIONAL SHAREHOLDINGS)

Variable	LESS THAN COMPLETE SAMPLE MEAN	GREATER THAN COMPLETE SAMPLE MEAN	INDEPENDENCE OF MEANS t value
Change in chief executive	0.13	0.13	0.08
Annual turnover of executive directors	14.32	13.98	-0.14
Annual turnover of all directors	12.81	13.28	0.52
Board size	13.14	9.89	-4.59**
Non-executive directors (%)	38.65	46.30	2.75*
Directors block shareholdings (%)	9.96	4.91	-3*
Directors block shareholdings ≤ 5%	0.70	0.74	-0.72
Directors block shareholdings ≤ 15 % > 5 %	0.05	0.13	2.27†
Directors block shareholdings ≤ 30% > 15%	0.08	0.09	0.22
Directors block shareholdings > 30 %	0.17	0.06	-2.89*
Executive chairman	0.57	0.59	0.28
Chairman is CEO	0.14	0.10	0.79
Age of CEO	58.96	55.34	2.65*
Number of years as CEO	6.86	7.42	1.04
Market capitalisation	2070.82	200.51	-7.34**
Returns on capital employed in year t-1	10.79	9.94	0.49
Abnormal returns on shares in year t-1	6.63	-3.54	-2.06†
Returns on capital employed, 1 yr. lag,industry adjusted	0.81	0.13	-1.35
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	3.70	-5.11	-1.49
Returns on capital employed, 1 yr. lag with 2 yr. moving average	11.04	9.56	-1.03
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	0.94	-0.42	-1.07
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	3.40	-3.62	1.70‡
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	0.83	-4.76	-1.17
Returns on capital employed, Change with respect to previous years performance	-0.05	1.01	0.56
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.62	-0.05	0.58
Abnormal returns on shares, Change with respect to previous years performance	6.68	2.18	-0.48
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	2.88	0.14	-0.56

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.6.5
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (NON-EXECUTIVE DIRECTORS)

Variable	LESS THAN COMPLETE SAMPLE	GREATER THAN COMPLETE SAMPLE	INDEPENDENCE OF MEANS t - value
Change in chief executive	0.09	0.18	1.93†
Annual turnover of executive directors	11.15	17.96	2.77*
Annual turnover of all directors	11.23	15.17	2.38*
Board size	11.22	12.69	1.94†
Directors block shareholdings (%)	9.55	6.08	-1.92†
Directors block shareholdings ≤ 5%	0.73	0.71	-0.36
Directors block shareholdings ≤ 15 % > 5 %	0.04	0.13	2.71
Directors block shareholdings ≤ 30% > 15%	0.08	0.10	0.53
Directors block shareholdings > 30 %	0.16	0.08	-1.83
Institutional block shareholdings (%)	20.87	32.67	4.4**
Institutional block shareholdings ≤ 15%	0.47	0.31	-2.66*
Institutional block shareholdings ≤ 30% > 15 %	0.25	0.19	-1.05
Institutional block shareholdings ≤ 45% > 30%	0.17	0.19	0.48
Institutional block shareholdings >45%	0.11	0.30	3.82**
Executive chairman	0.73	0.40	-5.53**
Chairman is CEO	0.10	0.15	1.22
Age of CEO	57.32	57.85	0.57
Number of years as CEO	7.98	5.97	-3.94**
Market capitalisation	1368.50	1318.91	-0.15
Returns on capital employed in year t-1	12.70	7.70	-2.96*
Abnormal returns on shares in year t-1	5.24	-0.48	-1.17
Returns on capital employed, 1 yr. lag,industry adjusted	2.72	-2.15	-3.23*
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	2.96	-3.04	-1.03
Returns on capital employed, 1 yr. lag with 2 yr. moving avercage	12.99	7.34	-4.14**
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	2.76	-2.50	-4.5**
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	3.70	-3.05	-1.67‡
Abnormal returns on shares, 1 yr. lag with 2 yr. moving avercage, industry adjusted	2.04	-5.52	-1.91‡
Returns on capital employed, Change with respect to previous years performance	-0.22	1.07	0.63
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.80	0.09	0.88
Abnormal returns on shares, Change with respect to previous years performance	2.39	8.09	0.75
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	0.97	2.87	0.48

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;

Table A.6.6
AUTHORISED INSTITUTIONS
INDEPENDENCE OF MEANS (MARKET CAPITALISATION)

Variable	LESS THAN COMPLETE SAMPLE	GREATER THAN COMPLETE SAMPLE	INDEPENDENCE OF MEANS t - value
Change in chief executive	0.13	0.14	0.25
Annual turnover of executive directors	13.54	16.44	1.18
Annual turnover of all directors	12.60	14.32	1.04
Board size	9.64	19.56	15.03**
Non-executive directors (%)	39.55	48.70	2.89*
Directors block shareholdings (%)	10.25	0.26	-8.48**
Directors block shareholdings ≤ 5%	0.65	0.96	7.52**
Directors block shareholdings ≤ 15 % > 5 %	0.09	0.04	-1.78‡
Directors block shareholdings ≤ 30% > 15%	0.11	0.00	-4.97**
Directors block shareholdings > 30 %	0.17	0.00	-6.28**
Institutional block shareholdings (%)	29.83	13.44	-6.42**
Institutional block shareholdings ≤ 15%	0.33	0.65	4.48**
Institutional block shareholdings ≤ 30% > 15 %	0.24	0.18	-1.09
Institutional block shareholdings ≤ 45% > 30%	0.19	0.14	-0.98
Institutional block shareholdings >45%	0.24	0.04	-5.32**
Executive chairman	0.63	0.42	-2.81*
Chairman is CEO	0.09	0.23	2.28†
Age of CEO	56.99	59.51	3.13*
Number of years as CEO	7.63	5.20	-4**
Returns on capital employed in year t-1	10.44	10.56	0.09
Abnormal returns on shares in year t-1	1.11	8.12	1.21
Returns on capital employed, 1 yr. lag,industry adjusted	0.34	1.28	0.77
Abnormal returns on shares, 1 yr.r. lag, industry adjusted,	-0.23	2.07	0.46
Returns on capital employed, 1 yr. lag with 2 yr. moving average	10.38	10.75	0.22
Returns on capital employed, 1 yr. lag with 2 yr. moving average, industry adjusted.	0.07	1.61	1.48
Abnormal returns on shares , 1 yr. lag with 2 yr. moving average	-0.63	5.21	1.86‡
Abnormal returns on shares, 1 yr. lag with 2 yr. moving average, industry adjusted	-1.52	-0.68	0.27
Returns on capital employed, Change with respect to previous years performance	0.60	-0.47	-0.48
Returns on capital employed, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	-0.23	-0.99	-0.67
Abnormal returns on shares, Change with respect to previous years performance	5.05	4.56	-0.05
Abnormal returns on shares, Change with respect to previous years performance, 2 yr. moving average, industry adjusted	1.45	3.07	0.33

** $p < 0.0001$; * $p < 0.01$; † $p<0.05$; ‡ $p< 0.10$;