Graduate School of Business

Ownership Structure and Firm Performance:
The case of Indonesia

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This thesis is presented for the Degree of
Doctor of Business Administration
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Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

Sign. .................................................................

Date:.. ..........................
Abstract

This study looks at the relationship between ownership structure, monitoring and firm performance. The research employed the agency theory hypothesised by Jensen and Meckling (1976) from the view of contractual relationships among various parties involved within a company. It presents a longitudinal study of the 161 non-financial publicly listed companies in the Jakarta Stock Exchange between 1994-2000. This design enables a researcher not only to examine the effects of various governance variables on corporate performance, but also to examine the extent to which such relationships vary with changes in the general economic environment.

This study reveals that only a small proportion of private-domestic Indonesian firms have a widely dispersed ownership structure. Viewed from the standpoint of traditional agency theory, the separation of ownership and control seems to work differently in Indonesia. In this country the agency problem is not between the owners and the managers, as in Anglo-Saxon countries, but may be between “strong” controlling shareholders and “weak” minority owners. The findings suggest a strong association between degrees of ownership concentration, owner involvement in supervisory/management board and the existence of family business groups. These factors are interdependent, and each of them relates cohesively to the others within the organisation. In this regard, the collectivism and higher power distance value dimensions that are dominant in Indonesian society also heighten such relationships. Inappropriate institutional, law and legal enforcement provide the means for the controlling shareholders to continue these practices, which insulate them from external interference, monitoring and supervision.

Taken together, these findings support the view that national cultural features have a profound effect on the structure of national economies. The evidence corroborates the uniqueness of corporate governance practices in Indonesia, and the findings support the supremacy of controlling shareholders. Further to the growing debate on the costs and benefits of controlling shareholders, the empirical findings of this study reveal that these shareholders are the source of the corporate governance problem rather than solution. In short, the most basic factor which inhibits the effectiveness of
corporate governance implementation in Indonesia is the existence of powerful large shareholdings in the hands of a family. Governance reform, therefore, should address the corporate system by seeking to reduce the supremacy of these shareholders, and at the same time empower the other stakeholders.

The findings also support the view of both the co-evolutionary and path-dependency theories in regard to factors that determine the pattern of ownership structure. The development of firms in Indonesia follows the path-dependence structure and, during this process, the firms' environments will interact with and operate endogenous responses for environmental change. Such exogenous and endogenous forces shape the environment and trigger organisations to adapt in different ways so that they are able to survive. Thus, one could expect there to be different corporate governance systems within each country and any effort towards reforming such systems should consider factors specific to that country. This implies that governance reforms should be fully compatible with a country's national culture, institutional, legal and business systems. Other variables, such as informal norms (social norms and cultural beliefs) and the political environment in a country should also be considered in the design of these reforms.
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There comes a time in a man's life when to set where he has to go
-if there are no doors or windows - he walks through a wall.

 Bernard Malamud (1972)

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'...[one] should...make a return to those with whom one has studied philosophy,
for their worth cannot be measured against money, and
they can get no honour which will balance their services...'

ARISTOTELE, Nicomachean Ethics, 1164b3-5
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Chapter 1: Introduction

1.1 Introduction

The East Asian economic crisis in late 1997 triggered discussion on the importance of governance systems in countries within this region. A study by the Asian Development Bank (ADB 2000) revealed that poor corporate governance was one of the major contributing factors to the build-up of vulnerabilities in the affected countries that finally led to the Asian financial crisis. Indonesia, as one of the countries most affected by the crisis, has been forced to consider corporate governance issues at the forefront of the nation's agenda for corporate and economic policy.

Initiatives underlying the corporate governance reform in Indonesia have been presented in the form of a "Code for Good Corporate Governance", followed by recommendations for legal and regulatory reform to support the implementation of such a code (The National Committee on Corporate Governance 2000)\(^1\). The committee believes in the importance of institutional framework and further development of sectoral policies at the institutional level for this code to be applied in an Indonesian context. Corporate governance reform agenda in Indonesia also aimed to strengthen the current institutional structure. This view is in accordance with the importance of the totality of the institutional and organisational mechanisms to promote the effective governance systems.

1.1.1 Governance Structures in Indonesia

The corporate governance structure in Indonesia is characterised by the fact that most companies are managed and owned principally by founding family members, implying that there is little divorce of ownership and control. Indeed, majority owners can retain control of their companies even though the companies are listed, which implies

\(^1\) The committee (Komite Nasional Mengenai Kebijakan Corporate Governance) was formed in August 1999 through the Decree of the Coordinating Minister for Economics Finance and Industry No Kep. 10/M.EKUITIN/08/1999, 19 Agustus 1999.
that ownership rights and management control are coupled in the hands of a small circle of family members and trusted business associates. This situation is heightened by a relatively small, undeveloped, and illiquid capital market which provides no discipline and control of management through the market for corporate control (will be discussed in section 2.4.2). As has been argued by Patrick (2002), the Indonesian stock exchanges are not strong, effective self-regulating institutions, and government oversight in practice is not strong. The highly concentrated and family-based ownership structure of companies leaves corporate decisions in the hands of the controlling family (discussed in section 2.4.4). Small and public investors have little or no power to protect themselves from appropriation by large shareholders as a result of weak legal protections.

Apart from the high level of ownership concentration, most of the companies in Indonesia belong to or have an affiliation with business groups, which are also owned by family (family business groups). Patrick (2002) argues that business groups in Indonesia control most of the listed companies, directly or through pyramiding of stock ownership through other firms. Higher reliance on external sources of financing through bank loans is also a general feature of firms in this country. Theoretically, banks should be in a position to play a significant corporate governance role by monitoring business client performance and management behaviour. However, each top business group in Indonesia controls at least one bank, which serves mainly to finance group activities with little autonomy available to the bank-manager to make sound and independent decisions (Patrick 2002). Patrick (2002) also found that about half of all bank lending was to companies in its own group, and loans to such groups were of the order of 20 times the legal lending limits. This situation implies weaknesses in the implementation of regulatory rules in Indonesia.

Checks and balances within corporate governance practices could also be achieved through the active role of boards of directors in their supervisory and advisory tasks (will be discussed in section 2.4.3). This internal control mechanism is believed to be an efficient and low cost governance mechanism. This could be possibly achieved if directors are largely independent of management and have appropriate knowledge of the firm (Van den Berghe & De Ridder 1999). However, board members in Indone-
sia are appointed due to their close relationship, mostly family ties, with the major shareholders (ADB 2000). The ADB (2000) also claimed that almost 85 per cent of companies’ controlling owners in Indonesia appointed members of their family to the management team and on Board of Directors. The dominance of family-related board members in this country could hinder the effectiveness of their monitoring role in providing checks and balances on a company’s operation.

The Asian Development Bank (2000) suggests that weaknesses in corporate governance in East Asian countries appears to owe much to ‘highly concentrated ownership structure, excessive government interventions, under-developed capital markets, and the weak legal and regulatory framework for investor protection’ (p.2). In the case of Indonesia, the currency composition and term structure of corporate foreign debts has caused the country to be extremely vulnerable to the crisis (Husnan 2003). Moreover, the weakness in basic regulatory structures for the corporate sector and poor compliance and enforcement appear to be the major problems in this country. In sum, Husnan (2001) concludes that apart from weaknesses in appropriate governance systems, a key problem in corporate governance in Indonesia is the non-enforcement of the legal and regulatory frameworks that exist.

1.1.2 Context and Governance Structures

There are distinct differences in corporate governance contexts across countries and they can be seen to change over time. As a consequence, there is no specific corporate governance system that is best suited for every company and all countries. In general, every governance systems could be classified as being either market-dominated or bank-dominated (Schmidt & Tyrell 1997)\(^2\). Market-oriented governance systems generally refer to the Anglo-Saxon countries (i.e. the U.S. and the U.K) where the capital market plays an important role in their economy. In these countries the market for corporate control takes a place at the heart of their control system, which is known as the “outsider control system”. Continental European countries and

Japan have been categorised as having bank-oriented governance systems. Within these countries, the role played by the market for corporate control is almost insignificant (Schmidt & Tyrell 1997). The term “insider dominated control” is often used to describe this system, characterised by relatively stable and concentrated ownership structures by some of the shareholders. According to Kuada and Gullestrup (1998) the cultural aspects in the society where the governance system exists could be seen as the cause of the differences between these two systems.

According to Whitley (1990), from a sociological perspective the historical patterns of state authority and business-government relations have shaped the structure and consequences of corporate ownership and control. Historically, the relationship between businesses and the state in Indonesia goes back to the era of independence, where government became directly involved in industry as a result of the nationalisation of Dutch-owned firms (Husnan 2001). Since this period, the business pattern and legal framework for companies in Indonesia was based on the Dutch system. It was in 1995 that the government introduced the new Company Law\(^3\), followed by new bankruptcy laws and the establishment of a special Commercial Court in 1998 (Robins 2002). However, under these new regulations, many business practices are still inherited from a Civil Law system invented by the Dutch (Lindsey 2002) during 350 years of its colonialism in Indonesia. A discussion of the legal framework of Indonesian corporate governance is provided in the following chapter (section 2.7.1).

The development of corporate structures in Indonesia can be seen as following a theory of path dependence (Bebchuk & Roe 1999)\(^4\). This theory holds that the corporate structures of an economy depend on the structures with which the economy started, and corporate rules will themselves depend on these structures. As a corollary, La Porta et al. (1997) argue that differences among countries in the structures of law and their enforcement, such as the historical origin of their laws, account for differences

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3 Previous Company Law in Indonesia (Kitab Undang-undang Hukum Dagang) was based on the “Wetboek van Koophandel, Staatsblad 1847” invented by the Dutch (Company Law 1995).

4 According to Bebchuk and Roe (1999, p.127) there are two sources of path dependence: structure driven and rule driven. “Initial ownership structures are affected by the structures with which the economy started because they affect the identity of the structure that would be efficient for any given company and because they can give some parties both incentives and power to impede changes on them.”
in financial development. This in turn will affect a country's financial system and subsequently a company's choice of financing in different ways (Berglof 1990). Thus, it might be argued that the financial system in a country will determine the particular governance orientation that governs the relationship between various parties involved within a corporation.

1.1.3 Governance and the Separation of Ownership and Control

The underlying problem of corporate governance, the separation of ownership and control, has been recognised by a long tradition of scholars from Adam Smith (1776) to Berle and Means (1932) and Jensen and Meckling (1976). However, dispersedly held corporations described in the model of Berle and Means (1932) are less common around the world. Indeed, Roe (1991) and Porter (1998) have argued that dispersed ownership represents a competitive disadvantage for the US and advocated a more concentrated ownership for competitive advantage of companies in this country. Further, a study by La Porta, Lopez-de-Silanes and Shleifer (1999) revealed that about sixty-four percent of large firms in the twenty-seven richest countries have controlling shareholders and control is often concentrated within a family. Similarly, several studies in emerging and developing economies found the dominance of highly concentrated ownership among corporations. Therefore, it might be argued that the issue of ownership concentration is increasingly important in the corporate governance of enterprises.

Concentrated ownership has been criticised by Shleifer and Vishny (1997), La Porta, Lopez-de-Silanes and Shleifer (1999), and Bebchuk, Kraakman and Triantis (2000) for providing excessive power to the controlling owner to use corporate resources for their own purposes at the expense of other stakeholders. The level of appropriation could be higher if the controlling owner was also involved in the management and/or director of a company. As such, the type of agency problems will also deviate from traditional manager-shareholders conflicts as can be found in firms with widely dis-

5 Claessens, Djankov and Lang (2000) examine nine East Asian countries; Sarkar and Sarkar (2000) conducted a study for India, while Yeh, Lee and Woidtke (2001) conducted a study on publicly listed companies in Taiwan.
persed ownership. When ownership is concentrated to a level at which the owner obtains effective control of the firm, the nature of the agency problem shifts to conflicts between the controlling owner (who is also the manager) and minority shareholders. The powerful block shareholders could influence corporate decisions that benefit this group of shareholders at the expense of other interested parties within a company.\(^6\)

However, the existence of block shareholders can also benefit a company and, subsequently, all shareholders. According to Brickley and Dark (1987) companies that are owned and controlled by large block shareholders have a strong incentive to ensure 'the capital is deployed sparingly and used efficiently and that indirect production costs are tightly managed' (p. 404). In addition, the incentive effects of this type of ownership reduce the need for third party monitoring and supervision (Carney & Gedajlovic 1991). This mitigates the problems of free riding in corporate control, permitting control to be exerted more effectively. In the case of a companies affiliated to business groups, it has also the advantage of utilising internal transfer of funds within the groups to overcome capital market inefficiencies. In this respect, it might be argued that the benefit of the controlling role provided by large block shareholders outweighs the costs.

The preceding discussion implies that Indonesia can be portrayed as having a Continental European governance system rather than a market-based system. On the other hand, it could also be argued that concentrated and family-based ownership are prominent in this country. In this regard it is beneficial to investigate the role of holders of large blocks of shares in resolving the agency problems of corporations in order to promote the best corporate governance practices. From this point of view it is important to observe the impact of different patterns of ownership structure on firms’ performances. The choice of performance measures would also be critical, as companies in Indonesia have their own accounting standards (will be discussed in detailed in section 2.5).

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\(^6\) The potential costs of large shareholders are highlighted in terms of 'conflict-of-interest' and the 'strategic-alignment' hypotheses (Jensen & Meckling 1976; Gomes 2000; Bennedsen & Wolfenzon 2000).
1.1.4 Performance and Ownership Structure

Previous studies have utilised the agency theory to investigate the relationship among various parties within a company and the impact on performance resulting from the separation of ownership and control. The agency theory, as it will be discussed in more detail in the following chapter (section 2.3), has been extensively used as a theoretical background to study the ownership-performance relationship. This theory proposed two types of governance devices in reducing the impact of agency problems; the external and internal control mechanisms\(^7\). External control refers to the possibility of a company's external environment disciplining a poor performance company, while the internal control mechanism relies on devices internal to the firm. In general, these corporate control mechanisms will provide checks and balances in a company's operation and, subsequently, will discipline various parties within an organisation. A discussion of corporate control mechanisms is provided in the following chapter (section 2.4).

In the case of Indonesia, as in most developing economies, some of the control devices may not work as well as in countries with fully developed financial systems. For instance, the market for corporate control through take-over processes is uncommon in Indonesia. This is because of concentrated ownership in the hands of family, who retain majority control. Moreover, these shareholders exercise tight control over company's operation and could influence management decisions through their involvement in management and/or board of directors. The role of banks, as a major capital provider in this country, has also been limited. Unlike Japan, banking institutions in Indonesia are prohibited from having shares in a company; therefore, banks have no representatives on boards and are unable to closely monitor company operation.

In the absence of the most common corporate control mechanisms in Indonesia, relative to other countries, it is interesting to observe the country's corporate governance

\(^7\) Jensen (2000, p. 34) distinguishes four control forces operating on the corporations from society's standpoint: (1) capital markets, (2) legal-political-regulatory system, (3) product and factor markets, and (4) internal control system headed by the board of directors. However, the first three could be classified as an external control to the firm.
system. Given their specific corporate structure and environmental characteristics it is possible that other mechanisms could provide checks and balances as a substitute or complement for common devices. For example, the existence of family-based block shareholders could also be seen as providing governance substitutes in enhancing company's performance (detailed in section 2.4.5). The benefits of large shareholding are highlighted under the 'convergence-of-interest' and the 'efficient monitoring' hypotheses (Jensen & Meckling 1976; Gedajlovic 1993). These hypotheses view the existences of large shareholders as likely to be more efficient than small and dispersed shareholders in monitoring company management.

The existing empirical evidence on the impact of ownership structures on firm performance refers almost exclusively to Anglo-Saxon firms (Lehmann & Weigand 2000). The results of previous studies on this aspect are somewhat mixed, due to the wide variation in measures of performance and ownership (section 2.6.1). Using the agency theory perspective, this study focuses on corporations in Indonesia, and there are distinct differences in various aspects compared with firms in Anglo-Saxon countries. This study, therefore, seeks to examine performance under different patterns of ownership structure and owner involvement in the board. In particular, this study investigates the role of holders of large blocks of shares in resolving agency problems and increasing firms' performance among publicly traded corporations in Indonesia.

1.2 Key Propositions

Four key propositions are developed in the thesis as the basis for hypotheses formulation. These are then subject to empirical testing.

The first proposition is that ownership structure determines the nature of agency problems and hence will determine the distribution of power and control within an organisation (Jensen & Warner 1988). In the absence of control mechanisms prevalent in developed economies, majority shareholders could serve as an alternative governance mechanism in mitigating agency problems (Shleifer & Vishny 1997; Burkart & Panunzi 2001). The incentives for shareholders owning large blocks of shares to protect their investment and consequently monitor management can be ex-
pected to increase with the level of their share ownership (La Porta et al. 2000; Pedersen & Thomsen 2003). All else being equal, ownership concentration may reduce agency costs (Jensen & Meckling 1976), as it is easier for a few holders to monitor management than when ownership is widely dispersed. As a result, lower monitoring costs will lead to better performance, which is favourable for shareholders.

The second proposition is that the extent of the monitoring and control, through the involvement of majority owners on the board, should be reflected in reducing agency costs (Lins 2003). Shareholders could minimise asymmetric information and apply effective control when they have superior information through involvement in boards of directors (La Porta et al. 2000; Morck, Shleifer & Vishny 1988). If owners’ involvement in the board as an internal control mechanism is effective in minimising monitoring costs, a positive relationship should exist between their involvement and corporate performance (Pedersen & Thomsen 2003). Majority owners, because of their larger stake in a company, have the incentive (i.e. high cash flow rights) and the power (high voting rights) to exercise tight control and influence over management and thus might enhance firm performance.

The third proposition is that in the absence of a liquid capital market in emerging economies, a firm might find alternative sources for its financing needs. Affiliation to other companies within the group might be a potential way to resolve the problems (Claessens, Djankov & Klapper 2000; Joh 2003). Business groups to which a company belongs, and the group’s banking affiliation, could be seen as an internal capital market in providing financing needs (Leff 1978). All else being equal, this market will offer lower financing costs (Banerjee, Leleux & Vermaelen 1997) and easy access to capital sources and hence might increase a firm’s performance.

The fourth proposition builds upon the above by recognizing the difference in economies of scale due to the firm’s size. Large companies might have better resource allocation and can minimise transaction costs (Banerjee, Leleux & Vermaelen 1997). As a result, all else being equal, large companies should have better performance, particularly when faced with competition on firm’s critical resources (Pfeffer &
Salancik 1978). One such event, for example, is presented by the financial crisis in 1997. In addition, it is expected that large and affiliated companies might still perform better than smaller and independent companies after the crisis period, as they can easily transfer resources between companies within the group.

The modelling and testing of the above four propositions will form the basis of the thesis. The framework will be based on the agency theory to determine whether a company's ownership structure and performance relationship is as the theory predicts.

1.3 Objectives of the Study

The purpose of this study is to investigate the conditions under which concentrated ownership, owner involvement in a supervisory or management boards and company affiliation will enhance or decrease the firm's performance. Specific objectives are as follows.

1. To determine whether corporate performance, as measured by the accounting rate of return, is higher in majority ownership firms relative to those with dominant and dispersed ownership structures.

2. To determine whether corporate performance, as measured by the accounting rate of return, is higher in firms with the owner involved in supervisory or management boards membership relative to those that have no owner involved in these boards.

3. To ascertain whether corporate performance, as measured by the accounting rate of return, is related to the degree of owner involvement in the supervisory or management board membership.

4. To determine whether corporate performance, as measured by the accounting rate of return, is higher in affiliated firms relative to that of independent firms.
5. To assess whether the above variables are influenced by the economies of scale and market power, as measured by firm size and the financial shock due to the Asian financial crisis, as measured by a time specific effect.

1.4 Significance of the Study

This research addresses the issue of control mechanisms within a corporate governance structure as a result of a separation of ownership and control, focusing on non-financial publicly listed companies in Indonesia. Although previous research has added to our knowledge of the relationship between ownership and performance, the present study provides contribution and uniqueness to the literature as described below.

1.4.1 Specific Environmental Context

Studies addressing the issue of ownership and performance are mostly based on developed economies, such as the US and UK (e.g. Demsetz & Lehn 1985; Morck, Shleifer & Vishny 1988; McConnel & Servaes 1990; Franks & Mayer 1990b). Given their different environmental system the results of such studies are not generalisable to the developing economies. Although several studies, such as Wiwattana-kantang (2001) on Thailand, Yeh, Lee and Woidtke (2001) on Taiwan, and Joh (2003) on South Korea, have also been conducted in emerging economies they are still limited. Some of them are comparative country studies (e.g. Claessens, Djankov & Lang 2000), where differences in legal, taxation and accounting rules, as well as institutional frameworks, are not controlled. As has been argued by Joh (2003) a study focusing on one specific country can avoid the endogeneity problems between ownership structure and institutional environments. By focusing on publicly listed companies in Indonesia, this study can control the country specific factors and observe the ownership-performance relationship more precisely.

There are several advantages to undertaking a study of Indonesia to address some of the governance issues specific to developing and emerging countries. Firstly, Indonesia has enjoyed a remarkable economic growth and has been characterised as one of
the 'economic miracles' in East Asia. Secondly, prior to the economic crisis in 1997, the government of Indonesia introduced new regulations including the company and capital market law as the legal framework in regulating corporate activities. This reform was aimed at accommodating the rapid economic growth in this country. Finally, Indonesia is also representative of many developing countries in terms of its reliance on external sources of finance, as well as the prevalence of insider-dominated family businesses.

1.4.2 Family Business Groups

Claessens, Djankov and Lang (2000) reveal that except for Japan, most publicly traded corporations in nine East Asian countries have a high level of ownership concentration and large numbers of family controlled firms. In these countries, large companies are often owned indirectly through a chain of companies, privately held by close family and relatives. As a result, most studies of this topic have only looked at immediate ownership, as their ultimate shareholders cannot be traced because of the lack of information on these privately owned corporations (Claessens et al. 1999; 2000). This study differs from previous ones in that it traces the ultimate owners through a chain of ownership to an ultimate control, providing a broader base for analysis.

Traditionally, family-owned business groups have been the dominant form of private sector big business organisation in Indonesia (Patrick 2002). Consequently, such business groups can be expected play an important role in the country’s economy. According to Khanna (2000) ‘economists who studied business groups have tended to emphasise that group affiliates are linked together through equity cross-ownership’ (p.749). In the case of Japan, for instance, Berglof and Perotti (1994) argue that a system of concentrated ownership within keiretsu firms (and their affiliated main banks) serves as an effective governance mechanism. This study will accommodate the role of company affiliation and the differences in ultimate ownership patterns between group-affiliated and independent firms in the context of corporate

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8 A study by Husman (1999) identified around 300 business groups in Indonesia prior to the crisis in 1997, comprising of 9,766 business units. The share of these business groups to the Indonesian GDP was at a stable level of 12.7 –13.4% between 1990-1996.
governance practices in Indonesia. It contributes to the literature on the costs and benefits of this affiliation by comparing the performance of these two different types of company.

1.4.3 Board Structure

Companies incorporated under the Indonesian Company Law have two boards; a supervisory board that performs supervisory roles, and the board of management that performs the executive role. Previous studies that incorporate the role of the board of directors as part of the internal control mechanism, have relied chiefly on the unitary board structure prevalent in the Anglo-Saxon models. There are several studies on two-tier boards, but they are still limited to developed countries such as Germany and the Netherlands (e.g. The Conference Board 1977; Charkham 1995; Prowse 1995).

The two-tier board structures of German corporations, for example, consist of a supervisory board (Aufsichtsrat) and management board (Vordstand). The Annual General Meeting (AGM) of shareholders elects the supervisory board members, half of which consists of the representatives of company employees proposed by the unions (Fukao 1995). This supervisory board then elects the members of the board of management which manages the corporation’s daily activities. In Indonesia (Company Law, article (1) 1995) both the members of supervisory board (board of commissioners) and board of management (board of directors) are elected, expelled and held responsible to shareholders through the annual general meeting. As such, the board of management in Germany is insulated from the direct pressure of shareholders, while in Indonesia both the boards are under direct scrutiny from shareholders. In addition, there are no legal representatives of employees in supervisory boards in Indonesia as found in other two-tier board systems, and no one can be a member of both boards of the same company.

The presence of supervisory/management boards within the two-tier board system in Indonesia, which also differs from other types of dual board, might also serve as a unique contribution of this study. Specific roles of supervisory boards in accordance
with Indonesian Company Law, discussed in the next chapter (section 2.7.1.3), are believed to influence their effectiveness in performing monitoring functions. Moreover, this study will define insider control more broadly to include significant family control over the company through involvement in both supervisory and management boards.

1.4.4 Other Relevant Issues

Most previous studies in this area take a sample of publicly traded corporations and exclude companies for which ultimate owners cannot be identified (Wiwattanakantang 2001). This procedure creates a sample selection bias. Furthermore, studies reported in the literature cover limited time frames due to data availability. This study differs, in that it observes all of the non-finance industry companies listed from 1994 to 2000. The inclusion of the full population within a study with a wide time frame, and the ability to trace the ultimate owners, means this study may not suffer from these shortcomings.

A study by the Asian Development Bank (2000) shows that structural weakness, combined with the lack of corporate legal and regulatory framework, has contributed to the crisis in Indonesia. This study analyses within the economic ‘event horizon’ of Asia’s crisis, the relationship between ownership structure and corporate performance. It examines empirical evidence of the corporations in Indonesia before and after the onset of the Asian crisis. Through controlling the time specific effects, the impact of factors external to the firms could be observed. Finally, it is hoped that this study will provide an insight to the decisions taken by the government of Indonesia to enhance corporate governance reform.

1.5 Research Paradigm

For the purpose of this study, the methodology will draw upon prior research from both the finance and management literature. The theoretical basis for this research is the agency relationship hypothesised by Jensen and Meckling (1976). Jensen and Meckling define organisations as ‘legal fictions which serve as a nexus for a set of contracting relationships among individuals’ (p. 310). The relationship between vari-
ous parties within a company will be viewed from the contractual agreement which describes the rights and obligations of each party. However, because of the uncertainty of the future, the contract will be incomplete in nature. The incomplete contracting allows corporate behaviour to diverge from value maximisation (Berglof 1990). These contractors (or principals) are the suppliers of the capital and the managers (or agents) who serve as coordinators between all interested parties. Agency theory suggests that shareholders are owners of financial capital, not owners of the firm (Oswald & Jahera 1991). Thus, a separation of ownership and control exists because capital owners delegate decision-making to managers and control to the board of directors. Within this context, the delegation of authority within a hierarchical relationship is necessary to complete a task, which in turn makes the agency analysis become useful (Jacobides & Croson 2001).

Based on the above assumptions, this study draws on the functionalist paradigm, which, from Burrell and Morgan (1979) comes under the broad umbrella of the objectivist perspective. This paradigm is characterised by an objectivist view of the organisational world with an orientation toward stability and maintenance of the status quo. According to Gioia and Pitre (1990) under the functionalist paradigm, organisational structures are seen as shaping the activities of organisation members in fairly deterministic ways. Moreover, it is also assumed that external rules and regulations govern the external world, and the goal of researchers is to find the order that prevails within the phenomenon. Therefore, following Ardalan (2000) this study is aimed at understanding order, equilibrium and stability in society and the way in which these can be maintained.

The ontological choice of this study is the realist ontology which is predicated upon the assumption that the reality is apprehendable and exists independently of the knower (Smith 1983). Ontologically, the realism school of thought sees reality as “being” rather than “becoming” which leads to the existence of an objective that produces true explanatory and predicative knowledge of reality. Therefore, by assuming that scientific theories can be assessed objectively by reference to empirical evidence, the positivist epistemology becomes the way to know the subject-object relationship. The positivist epistemologies seek to explain and predict what happens in
the social world by searching for regularities and causal relationships between its constituent elements' (Burrel & Morgan 1979, p. 5). With a 'human nature' approach to social science, this study will view people and their activities in deterministic ways 'as being completely determined by the situation or environment in which ...[they are]...located' (Burrel & Morgan 1979, p. 5). For analysis of the data, this study will use the nomothetic methodology through a quantitative approach. This approach assumes the object of the study can be objectively measured and controlled using a particular research instrument unaffected by individual perceptual differences. In sum, the current study follows the functionalist paradigm based on realism ontology, positivist epistemology, the deterministic view of human nature, and nomothetic methodology.

1.6 Organisation of the Thesis

The remainder of the thesis is organised as follows. In Chapter 2 a review of the ownership structure and firm's performance literature is undertaken. This review is primarily focused on previous studies that are based on the agency theory perspectives. Chapter 3 develops testable hypotheses based on research propositions, followed by the formal model specification. Chapter 4 describes measurement variables and construction of the data, followed by the methodology. Chapter 5 contains a description of statistical assumptions, summary of descriptive statistics, and the exploratory and confirmatory data analysis. Chapter 6 presents a summary of the results and discussions of the findings of this study. Chapter 7 describes conclusions of this study, its limitations and implications for further research.
Chapter 2: A Review of the Ownership Structure and Firm’s Performance Literature

2.1 Introduction

Corporate governance has become a key policy issue in addressing the way a company is managed in various countries. However, the effectiveness of corporate governance reform in a country depends on the distinct national business systems in that country (Pedersen & Thomsen 1999). Kuada and Gullestrup (1998) argued that macro-cultural variables might have strong influence on the manner in which the firms are governed. Further, these variables will influence the country’s economic systems and, in particular, its financial system. This in turn will affect ownership patterns (Berglof 1990), corporate systems (Moerland 1995), corporate structure (Roe 1993), disciplinary mechanisms (Prowse 1995), as well as the governance orientation (Kim & Hoskisson 1997). In consequence, it might be argued that it is highly unlikely that corporate governance systems that work well in one country will also fit the others, due to their different cultural contexts.

There are extensive literatures examining different facets of corporate governance from various disciplines. This study deals with typical agency constructs within corporate governance structure and their impact on corporate performance. In particular, it will observe the relationship between ownership structure, monitoring mechanisms and firm’s performance within the agency theoretical framework. By observing publicly listed companies in the Indonesian capital market, this study is deliberately focussed on this issue in one of the developing economies.

This chapter will provide a review of literatures on the ownership and performance relationship, providing the basis to develop hypotheses. The chapter is organised as follows: first, an overview of corporate governance concepts; second, discussion of the underlying principles of agency theory; third, an overview of corporate governance and control mechanisms. fourth, specific reference to performance measurement; fifth, specific reference to the issues of ownership-performance relationship;
sixth, a review on the features of governance implementation in Indonesia, including the legal framework of Indonesian corporate governance, followed by the conclusion.

2.2 Corporate Governance

The Cadbury Committee on the Financial Aspects of Corporate Governance in its final report described corporate governance as ‘the system by which companies are directed and controlled’ (MacMillan & Downing 1999, p. 18). Despite its simple definition, this view provides a very basic understanding of what constitutes the corporate governance concept. From the accountability point of view, Monks and Minow (1995, p. 179) argue that ‘the single major challenge addressed by corporate governance is how to grant managers enormous and discretionary power over the conduct of the business while holding them accountable for the use of that power’. This definition highlights the importance of an appropriate balance between the power and accountability of management in pursuing a company’s objectives.

As corporate governance issues are multifaceted, its definition should also consider the broader context to include the business environment, social and cultural, as well as the political framework (Blair 1995). Seen in this light, corporate governance could be defined as referring to ‘the whole set of legal, cultural and institutional arrangements that determines what publicly traded corporations can do, who controls them, how that control is exercised, and how the risks and returns from the activities they undertake are allocated’ (Blair 1995, p. 3). This definition is accommodative in order to consider the differences in governance systems across countries, which is argued by Denis and McConnel (2003, p. 20) as the basis for the ‘second generation of international corporate governance research’.

Despite the continuous growth of the literature on corporate governance, there appears no single model of corporate governance. This means that there is also no common definition (Keasey, Thompson & Wright 1997). There are various issues concerning the corporate governance concept; accountability and performance (Cadbury 1999), mechanisms for controlling managerial inefficiency or failure to maxi-
mise value (Macey 1998), control and coordination of various self-interested stakeholders (OECD 1998), accountability to shareholders (Kay & Silberston 1995; Blair 1995), and control mechanisms designed for efficient operation of the corporation (John & Senbet 1998). Meanwhile, the desired final outcome of corporate governance practices is improved performance of the firm and reduction of conflict of interests within the company (OECD 1998).

2.3 The Agency Theory

Agency theory has become a popular theoretical perspective in corporate governance to explain organisational behaviour. Prasad (1990) argues that although developed by financial economists, agency theory is a subset of organisation theories. In a corollary, Jensen (1988) considers that agency theory is derived from the nexus of contracts view of organisation. From this view, agency theory perceives the firm as a nexus of contracts between different parties, known as the firm’s stakeholders. This theory assumes the contract to be incomplete in nature, not fully specifying the parties’ obligations for every conceivable contingency (Berglof 1990). As a result, there can be conflicts of interest among the parties involved. To overcome these potential conflicts, there is a need for guidelines on how the firm should be governed and directed in order to achieve the firm’s goals.

The agency theory approach to organisation is concerned with the role of capital markets and structure of modern corporations (Davis & Thompson 1994). The theory assumes that the efficient operation of capital markets and the value of residual claims held by shareholders is reflected in the company’s share price on the stock market. The efficient capital market, therefore, serves as a selection mechanism to

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9 Scholars from economics (Williamson 1985), finance (Jensen & Meckling 1976), accounting (Bairman 1982), sociology (Kang & Sorensen 1999), and law (Roe 1993), as well as organisational (Eisenhardt 1989), and strategic management (Hill & Snell 1989) have increasingly utilised this theoretical perspective in analysing corporate, and in particular, executive behaviour in large public firms.

10 Consequently, these contracts include not only the explicit legal contract, in which the terms are clearly specified (e.g. employment contracts), but also long term relationships built on implicit contracts of shared understandings (Boatright 2002).
discipline a company's governance structure that is reflected in a share price. For instance, the takeover processes facilitated by this market ensure that a company that is governed to maximise shareholder wealth survives in the competition for capital.

The agency theory, as has been addressed by Jensen and Meckling (1976) was based on the proposition of the separation between ownership and control. Such a separation will give the agents (managers) incentives to pursue activities which will benefit themselves, at the cost of their principals (owners). The basic premise is that 'if both parties to the relationship are utility maximisers there is good reason to believe that the agent will not always act in the best interests of the principal' (p. 308). They believe that the owner-manager's divergence of interests causes agents to fail to maximise the welfare of the principal. This failure is the most important cost resulting from the principal and agent conflict, which is known as the agency problem. Through their convergence-of-interest hypothesis, Jensen and Meckling (1976) argue that corporate performance will increase with the level of management or insider ownership in a company.

On the other hand, Demsetz (1983), within similar theoretical framework, has argued that the increased level of insider ownership will reduce corporate performance. This argument is known as the entrenchment hypothesis, which is in direct contrast with the previous hypothesis. The following studies by Morck, Shleifer and Vishny (1988) and McConnel and Servaes (1990; 1995) support this view through their findings that increased managerial ownership adversely impacts a firm's value over certain ownership ranges. Proponents of this hypothesis suggest that providing managers with share ownership to align their interests with the owners may not effectively solve the agency problems.

Despite their conflicting results, both views recognise the need for control mechanisms to align the interests of principals and agents in order to resolve the agency problem. However, exercising control through monitoring mechanisms is not without costs. Monitoring or agency costs\(^\text{11}\) will be borne by the principals as the capital

\(^{11}\) Agency costs are defined as the sum of the monitoring expenditures by the principal, the bonding expenditures by the agent, and the residual loss (Jensen & Meckling 1976).
owners in this relationship. The owners have incentive to ensure that managers did
not diverge from the goal to maximise shareholder value. However, as rational entre-
preneurs, owners have to consider the cost and benefit\textsuperscript{12} of monitoring mech-
isms that they choose to oversee management. In sum, the agency theory seeks to define
the nature of contracts that will minimise agency costs; that is the costs of monitor-
ing, motivating and ensuring the commitment of the agent (Davis & Thompson
1994).

2.3.1 The Agency Problem and Corporate Governance

In the business context, the term ‘governance’ is commonly used and widely known.
Despite the fact that it has been applied for more than a decade in various organisa-
tions, this concept is continuously developing, particularly in business organisations.
This evolution is considered to be important in order to meet the needs of a changing
corporate environment. Moreover, corporate governance becomes critical in enabling
a company to perform competitively in the market place (OECD 1998) and to in-
crease the firm’s access to international capital markets (MacMillan & Downing
1999). Thus there is an increasing necessity to apply good governance induced by the
markets.

Despite the growth of scholarship in this field there is still considerable debate on
what actually constitutes corporate governance (Keasey, Thompson & Wright 1997).
This is partly due to the broader implication of this concept, which might differ
across companies and countries. In fact, the OECD (1998) reports that there is no
single universal model of a corporate governance system and its forms are continu-
ously developing within business organisations. However, the dominant view of cor-
porate governance hinges on the issue of separation of ownership and control within
the firm, which is modelled by the agency theory.

The agency theory identifies potential conflicting interests among parties within a
company, which in turn affect corporate behaviour in different ways (Jensen & War-

\textsuperscript{12} The incomplete contracting literature views the standard financial instrument (e.g. equity) as con-
ferring both control rights and rights to a return stream of income for their holders (Berglof 1990).
ner 1988). Since each party has interests that may differ from others, the governance system can serve as ‘rules of the game’ for every party to follow. Hence this system provides control to ensure that the business practices and the achievement of organization’s objectives do not benefit one party at the expense of the others.

Conflicts of interest between various parties are caused by the differences in objectives of each party, based on their positions and interests in the company. However, identifying which party has the dominant conflict with shareholders is of importance to determine the nature of the agency problems. This might be done by observing a company’s ownership structure as the basis for identifying the distribution of power among interested parties in an organisation. The reason is that the pattern of ownership concentration and composition will determine which party has the dominant power in the organisation (Jensen & Warner 1988).

2.3.2 The Agency Problem and Ownership Structure

Early in the 20th century, Berle and Means (1932) observed that the dispersion of equity ownership had led to a transfer of corporate control from individual owners to professional managers in the joint-stock company. Berle and Means emphasised that when control is distinct from ownership, those in control may deploy assets in ways that benefit those in control rather than owners. As a result of their analysis, much of the literature on corporate governance assumes widely dispersed ownership and focuses on managing conflicts of interest between managers and shareholders resulting from the separation of ownership and control.

After the mid-20th century the ownership concentration in more developed economies with strong capital markets has shifted into the hands of financial institutions, such as pension or mutual funds (Hawley & Williams 1997). As such, recent literature brings into question the assumption of widely dispersed ownership and suggests that perhaps the more fundamental conflict of interest is between majority and minority shareholders. For example, La Porta et al. (1998) study a sample of large non-financial firms from 49 countries and find that average ownership by three largest shareholders is 46 percent. A following study by La Porta, Lopez-de-Silanes and
Shleifer (1999) revealed that control is often concentrated within a family who are often the founder of the firms or their descendants.


Shleifer and Vishny (1997) state that the fundamental agency problem in large corporations in most countries is not the Berle and Means’ conflict of interest between outside investors and managers. They believe that the dominant agency problem around the world is the conflict between outside investors and controlling shareholders, who have almost full control over managers. Shleifer and Vishny (1997) argue that this problem may also arise between shareholders and creditors, and between shareholders and other stakeholders. Therefore, it is crucial to determine the type of ownership structure, as it may be the most important factor in shaping the corporate governance system of any country (Aoki 1995). Through this process one might determine the nature of the agency problems and, more specifically, identify which parties might dominate conflict within corporations.

Within the corporate governance context, the key aspects of corporate ownership are its concentration and composition (ADB 2000). The degree of concentration determines the distribution of power within a company, whether it is dispersed or concentrated. Moreover, the structure and concentration of shareholding are two elements that may limit the role of the corporate control (Lannoo 1999).

The shareholders, as principals in the agency problem, play an important role, since they have the right and certain risks associated with possession and control of their investment. However, when ownership is dispersed, shareholder control tends to be weak because of poor shareholder monitoring due to the ‘free-rider’ problem (La
Porta, Lopez-de-Silanes & Shleifer 1999). One reason is that shareholders will bear a high cost of monitoring and will receive only a small amount of benefit proportionate to their shares. Small shareholders, having less to lose, are less likely to monitor the firm’s activities. The power, therefore, will rest with the incumbent management, unless other stakeholders or alternative mechanisms exist for monitoring the company’s management.

By contrast, when a concentrated ownership exists, large shareholders have the incentives and resources to monitor management decisions and reduce agency costs (Shleifer & Vishny 1986). Large shareholders are willing to exercise tight control and bear the cost of monitoring, since this relates to the risk and return of their investment. This is particularly relevant to the family-based ownership that exercises corporate control through pyramidal ownership and high involvement of family members appointed to the board or management team. Agency problems within this type of company may exist between the controlling owners (inside ownership), and other stakeholders (i.e. creditors and minority shareholders). In such cases, corporate control by minority shareholders tends to be weak due to their limited power and access to information.

There are other studies addressing the issue of ownership structure within the agency framework which find in favour of concentrated ownership. For example, Shleifer and Vishny (1997) view concentrated ownership from the position of the effectiveness of law and regulations in protecting the property rights. They suggest that the benefits from concentrated ownership are relatively larger in countries that are generally less developed, where property rights are not well defined and/or protected by the judicial system. Cubbin and Leech (1983) contend that management will have more discretion to pursue their own objectives where there is no controlling shareholder. In this relation, controlling shareholders\textsuperscript{13} have incentives to obtain the information necessary to effectively control management.

\textsuperscript{13} Throughout this study a controlling shareholder is defined as ‘one which, if held by the largest bloc, has a specified high degree of control, such that it can be said to dominate the company’ (Short 1994, p. 217).
Ownership structure is an important element in corporate governance; the separation of ownership from control remains as the central idea of research in this area (Denis & McConnel 2003). However, the realities of ownership and control that lead to agency conflicts between professional managers and their widely dispersed shareholders in the Anglo-Saxon countries are not common in other countries around the world. Different agency problems arise when there is little separation of ownership and control with equity ownership concentrated in the hands of inside owners (Lins & Servaes 1999). As a consequence, the agency problem has shifted from the traditional manager-shareholders relationship to the conflict between ‘majority and minority shareholders’.

### 2.4 Corporate Governance and Control Mechanisms

Central to the study of the effects of ownership structure and firm performance is the concept and definition of ‘control’ (Short 1994). It is, therefore, necessary to define what is meant by ‘control’ within the context of the ownership and control structure of the firm. Fama and Jensen (1983a) consider a firm’s decision process -namely, initiation, ratification, implementation, and monitoring- in defining the concept of control. They argue that, due to the presence of agency costs ‘an effective system for decision control implies, almost by definition, that the control (ratification and monitoring) of decisions is to some extent separate from the management (initiation and implementation) of decisions’ (p. 304). Within this context, control refers to the ability of a particular individual or group dominate the decision making process within a firm.

Since control can be defined as the ability of individuals or groups to direct the affairs of the company\(^{14}\), most of the earlier empirical studies differentiate between owner-controlled firms and management-controlled firms. Firms are generally classified as being owner-controlled if a dominant shareholding interest owns a specified proportion...

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\(^{14}\) In terms of ownership, Fogelberg (1980, p.55) defines control to be ‘the ability to direct the affairs of the company, or to directly influence the policy decisions that are made ....the ultimate control of any company is determined by the distribution of voting shares and the ability of any shareholder, or group of shareholders, to directly influence decisions which the board of directors make'.

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fraction of the firm. On the other hand, if the shareholding interests are so diverse that no single interest or coalition of interests can effectively control the firm (Short 1994), it should be classified as the management-controlled firm. Furthermore, she claims that most researchers of the ownership-performance relationship utilise the percentage of ownership as the criterion to differentiate the ownership type of a firm.

McEachern (1975) introduces more ownership categories other than those of the dichotomous classification scheme of being owner- or management-controlled firms. This writer argues that owner-controlled firms can be classified further into two groups: outside owners who were not actively involved in management (externally controlled firm) and owners who were also managers (owner-managed firms). This classification is based on the argument that controlling shareholders who were also managers had different incentives from those shareholders external to the firm. In his study of 48 large US firms, McEachern (1975) demonstrates a significant difference in firm performance between these types of ownership.

Apart from the abovementioned classification of ownership, Cubbin and Leech (1983) raise two important dimensions in regard to the separation of ownership and control: the location of control and the degree of control. The location of control can be categorised according to whether the control is internal or external to management. The degree of control is measured by the voting power exercised by the controlling group of shareholders in a company. They believe that the degree of control is dependent on the location of control, as owner-managed firms exhibit a higher degree of control for any given level of shareholding than external-controlled firms. Controlling shareholders have a specified degree of control, especially if they are also involved in the management team in providing internal control to the incumbent management.

Previous research addressing control issues in organisations has utilised various categorisations of ownership structure. However, Short (1994, p. 216) argues that there is 'little consensus with regard to the central issue: at what level of ownership and within which type of ownership structure is there effective control of the firm'. This argument is based on the use of different definitions of control as implied by
different cut-off points of ownership in each study. A major problem associated with the actual type of control contained in each category concerns the classification of the shareholdings of individuals who are also managers or directors of the firm.

2.4.1 Ownership Structure and Governance Mechanism

Governance mechanisms can be broadly characterised as being either internal or external to the firm. The internal mechanisms of primary interest are the board of directors and the managerial incentive schemes, while the external mechanisms rely on the effectiveness of the market in providing discipline over a company and the legal/regulatory system. Based on such disciplinary mechanisms, one could expect different corporate governance systems to arise as a result of varied financial systems, legal and regulatory framework, and the market for capital mobilization across countries.

Ownership structures are a central distinguishing feature of financial systems (Moerland 1995). As such, distinctions between different financial systems may help explain differences in corporate behaviour, especially with respect to handling the agency problems involved. Following Berglof (1990) financial systems can be differentiated as market or bank-oriented, based on the pattern of capital mobilization used by companies to finance their operations in certain countries. The major financing choice and financial institution's involvement could be used to determine the governance orientation of any country (Kim & Hoskisson 1997). In Anglo-Saxon countries, for example, ownership concentration is low (Charkham 1995) and companies rely heavily on stock markets to channel the flow of capital. By contrast, concentrated ownership is a salient feature in some countries in Continental Europe (Moerland 1995) and in East Asia (ADB 2000). In these countries, external finance dominates corporate financing through bank loans.

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15 For example, Holl (1975) uses a cut-off point of 20% to classify firms as management-controlled firms, while Claessens, Djankov and Lang (2000) used the same cut-off point to classify a firm as the owner-controlled
2.4.2 The Market for Corporate Control

'The market for corporate control' refers to the control function provided by market competition as a corporate governance instrument in disciplining management behavior. Within this mechanism are included the capital market, the product market, and the managerial labour market (Fama 1980; Fama & Jensen 1983a).

The product market operates through the ability of a firm to produce products and sell them to the market within a cost structure, including the cost of capital (Denis 2001), which allows them to sell the products at a competitive price. Therefore, inefficiency of management will be reflected by poor performance of the product in the market. If this process occurred more severely, it could bring the firm into financial distress and, even worse, toward bankruptcy. Lowered share price of a company signals management failure, and the market will react to replace the management. However, Jensen (1983) suggests that product market competition is not a straightforward instrument in the fight for effective corporate governance.

Theoretically, the managerial labour market operates by a similar process. According to Fama (1980) the 'signals provided the efficient capital market about the values of a firm's securities are likely to be important for the managerial labour market's revaluations of the firm's management' (p. 292). This is to say, a company's share price will provide a signal of the failure of management to successfully govern the corporation. The availability of new managers in the labour market ensures that poor management will be replaced. However, Fama (1980) cast his doubts on the effectiveness of this mechanism in providing the signal for the market to be able to respond in disciplining management. It might be argued that such an instrument will only work perfectly in the case of an efficient capital market.

Previous discussion suggests that both the product and managerial labour market instruments are actually related to the capital market mechanism because the outputs of both are reflected in the value of shares in the capital market16. The agency theorist

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16 Since all of these mechanisms rely for their effectiveness on the market, Fama (1980) tends to label them as 'the market induced mechanisms' in disciplining management.
believes that the capital market can determine corporate control and exacerbate conflicts of interests between managers and shareholders. This mechanism operates through the possibility of mergers and acquisitions in disciplining inefficient management. Theoretically, the takeover process occurs if the markets perceive the current management team to be inefficient, based on certain performance indicators. Ideally, the market is supposed to react by offering an alternative to such management through a friendly or hostile takeover. The objective of this mechanism is to ensure that incumbent managers perform competently, lest the market acts in response to discipline them.

The market for corporate control works well in the market economies, characterized by relatively well-developed capital market and low ownership concentration (Aoki 1995). This control mechanism will work effectively in circumstances where a relatively dispersed ownership exists, and the markets are very active in monitoring the company’s performance. The study by ADB (2000) in East Asian countries found that the market for corporate control has been largely inactive in this region. This is partly due to the difficulties of takeover processes, since ownership is so concentrated on and dominated by the role of the family-based shareholder. Moreover, ownership concentration among companies in this region (Claessens, Djankov & Lang 2000) shows that only a small portion of corporate ownership is in the hands of non-controlling owners or outside shareholders.

Sarkar, Sarkar and Bhaumik (1998) argue that the link between the market for corporate control and firm performance in developing countries can be weak for several reasons. Effective shareholder monitoring through the threat of selling or buying shares will only be possible if the shareholders and potential buyers are well informed about true company performance. It is widely known that there are considerable limitations on the amount of company information in developing countries. Therefore, the true performance of a company may not be accurately shown through the share price. Another problem is relatively high transaction costs associated with a takeover where the transfer of shares between buyers and sellers often takes a considerable amount of time. In some cases, success or failure of takeovers also depends on the ability of potential buyers to gain government support.
In sum, the external control market does have limitations as a corporate governance mechanism. Control contests are time consuming and expensive, and hence they may not be an effective way of dealing with small deviations from value maximising behaviour (Dens 2001). In the case of Indonesia, for example, capital markets are less developed and there is a lack of information available to the public on a company's performance. Therefore, it might be argued that there are obstacles in the market for corporate control mechanism to effectively work in developing countries such as Indonesia.

2.4.3 Internal Control Mechanisms

The very purpose of the internal control mechanism is to provide an early warning system to put the organisation back on track before difficulties reach a crisis stage (Jensen 2000, p.49). Therefore, the board of directors at the apex of the internal control system has the final responsibility for the functioning of the firm. Corporations in most countries of the world have boards of directors, although they have some differences in practices. In the Anglo-Saxon countries, the unitary board type is common in practice. On the other hand, in Continental European countries and Japan the two-tier board system is more prevalent.

The active role of a board of directors in performing their supervisory and advisory tasks is believed to be an efficient and a less expensive governance mechanism than other external mechanisms. The board of directors can act to restrict potential conflicts on interests between managers and shareholders. This can possibly be achieved if directors are independent of management and have appropriate knowledge of the firm (Van den Berghe & De Ridder 1999).

The position and composition of the board differs considerably from country to country (Moerland 1995). The primary board related issues that have been studied in the Anglo-Saxon countries concern the size and structure of the board\(^{17}\). In the U.S. the

\(^{17}\) Previous studies on boards in these countries are summarised by Dens and McConnel (2003) as the issue of board independence, fraction of these directors that are outsiders, the number of these directors that comprise the board, and whether the CEO and chairpersons position are held by the same individual.
most important role of the board is setting the rules of the game for the CEO (Jensen 2000). The job of the board is to ‘hire, fire, and compensate the CEO, and to provide high-level counsel’ (p. 49). However, Denis (2001) argues that on average the role of boards of directors in monitoring companies has been poorly executed. One of the major issues is that the independent director lacks information about a company while the CEO holds such information. This information deficiency restricts the effectiveness and the ability of even talented boards to perform to their level of expertise.

In line with the issue of board independence is the problem of “board duality” in performing its monitoring role. This situation can be found in the unitary-type of board system, which is prevalent in the Anglo-Saxon governance system. The joint structure of board leadership might potentially intensify the conflict of interest between management and shareholders. Boards might be less likely to exert effective control over management decisions on behalf of shareholders, since they lack independence. The need for director independence, therefore, is important in resolving this conflict through exercising objective judgement of management’s performance.

In a two-tier board system, as commonly found in continental European countries, a company’s board consists of an executive board and a supervisory board. Within this system, executive boards coincide with the top-level management team, while the supervisory board is completely composed of outside experts with a broader control function than in Anglo-Saxon countries (Moerland 1995). Indonesia has also adopted this two-tier system of board but without the employees’ representative on the supervisory board. In Indonesia, the supervisory board is a body separated from and independent of the executive or management board. It might be argued that this type of board system leads to a formal separation of supervisory and executive responsibilities.

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18 Duality could be defined as ‘the situation where one individual is simultaneously Chairman and CEO of the company’ (Gay 2002, p. 47), while Daily and Dalton (1997) called this situation as the “joint board leadership” issue.

19 In this two-tier board system, no one can become a supervisory board or executive board member in the same company (i.e. managing and monitoring activities are strictly separated).
Most of the best practice recommendations (e.g. OECD 1999) are somewhat less stringent and seek to have a balance of executives and non-executives, with some non-executives including some truly independent directors. However, Millstein (2002) argues that there is no mandate regarding board independence and no widely applied definition of independence. It seems that there exists general consensus that a public company's boards should have a balance between executive and non-executive members.

In response to the independence issues of the board as a governing body, agency theorists propose managerial incentive schemes as a means of conflict resolution between the managers and shareholders (Rindova 1999). This instrument could be seen as internal to the firm and resolving agency problem through the 'incentive alignment solutions'. The basic argument is that 'management should be more willing to act to maximise shareholder value if doing so provides management with greater reward as well' (Denis 2001, p. 201). Providing management with the proper incentive schemes will moderate executive actions through increasing aligning their interests with those of shareholders.

The popular issue within this scheme is that of determining the appropriate structure and level of compensation of the top executives of the firm. Previous studies have focused on two overriding issues, namely the level of executive pay and the sensitivity of pay to performance (Murphy 1998). The literature suggests that the most straightforward way in achieving the objective of this scheme is to have management teams with ownership of common stock of the firm. Moreover, it is suggested that to relate this compensation plan to financial performance (also called the pay-performance sensitivity) maximises the impact of such options.

The incentive alignment solutions through the managements' equity-related holding may only work well in the environment where there exists widely dispersed ownership. In the case of Indonesia, where ownership is concentrated in the hands of fam-

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20 However, Daily and Dalton (1997) identify six indicators which they claimed reasonably demonstrate the independence of the board chairperson (1) an inside/outside succession to the position of board chairperson, (2) tenure as CEO and (3) with the focal firm, (4) ownership stake in the firm, (5) familial relationships, and (6) outside director proportion.
ily members, this issue is not as important as it is in developed countries. Additionally, there is evidence that most of the large shareholders in Indonesia appointed their family members or relatives to the board and/or management team (e.g. Claessens, Djankov & Lang 2000). In contrast to the developed economies, such appointments result from their close relationship with the large shareholders, or they are appointed to such positions because they already hold a significant proportion of ownership of the company. Therefore, the issue of stock option plans and performance pay sensitivity in this case could be seen as less relevant in promoting the alignment of interests in the relationship between management and shareholders.

2.4.4 The Pattern of Ownership Concentration

A study by La Porta, Lopez-de-Silanes and Shleifer (1999) found that controlling shareholders in large publicly traded firms are common in most countries. This study also finds that 26 percent of the firms that have controlling shareholders are controlled through a pyramid structure. Further study by Claessens, Djankov and Lang (2000) also find that corporate control is enhanced through pyramid structures and cross-holdings among firms in nine East Asian countries. These findings have important implications for the ability and incentives of controlling shareholders to control corporations, as well as expropriating minority shareholders.

Pyramidal- and cross-ownership are two types of ownership and control patterns that permit controlling shareholders to control corporations (Wiwattanakantang 2001). Pyramidal ownership is the process of controlling corporations by the head of a group via layers of companies through a chain of ownership relations\(^2\). Spreading their investment over a large number of firms and concentrating those of the entrepreneur at the top of the pyramid allows the entrepreneur to control a larger set of assets of various companies (Bianco & Casavola 1999). Therefore, the main agency problem within this type of ownership is not between strong managers and weak owners, as in the case of widely held corporations. Instead, the form of agency con-

\(^2\) For a more detailed analysis of pyramid structures see La Porta et al. (1997) and La Porta, Lopez-de-Silanes and Shleifer (1999).
flict arises between relatively “strong” block shareholders and “weak” minority owners.

Cross-shareholding ownership occurs when a company further down the chain of control has some shares in another company in the same business line. This mechanism not only will assume effective control for block shareholders, but also protects the power of the controlling shareholders. Therefore, Claessens, Djankov and Lang (2000) argue that this type of ownership is also part of the pyramidal structure, which reinforces the view that the companies are not widely held. This shareholding can be used to assure control and insulate the controlling shareholders from being monitored by any corporate governance mechanisms (Wiwattanakantang 2001). As in pyramidal ownership, this ownership pattern also provides the controlling owners with a super majority interest over minority owners.

La Porta, Lopez-de-Silanes and Shleifer (1999) reveal that the pyramid structure is very common in a sample of the twenty largest firms in each of the twenty-seven wealthy countries. Indeed, pyramidal ownership structure through involving business groups is one of the more common features in continental Europe (Nicodano 1998). In all of the East Asian countries, corporate control is enhanced through pyramidal structures and cross-holding among firms (Claessens, Djankov & Lang 2000). In the case of Indonesia, ‘pyramidal ownership structure with ultimate owners is more prominent where family holding is high and in a number of cases one family owned several publicly listed companies’ (Claessens, Djankov & Lang 2000, p.92).

Although the pattern of pyramidal and cross-shareholding ownership can also be found in other countries such as Italy (Bianco & Casavola 1999), Belgium (Renneboog 2000), and Germany (Franks & Mayer 1990a), the governance structures are quite dissimilar. For example, German firms have close relationships with banks which supply both equity capital and debt, while Italian firms are characterized by large industrial groups with interlocking directorships (Kabir, Cantrijn & Jeunink

Pyramid structures are defined in Berle and Means (1932) as owning a majority of the stock of one corporation, which in turn holds a majority of the stock of another – a process that can be repeated a number of times. The Asian Development Bank (2000) define cross shareholding as ‘two companies owning each others’ shares, as a means of enhancing control’ (p. 27).
1997). In contrast, in Indonesia, banks cannot supply equity capital for companies and interlocking directorships are virtually nonexistent in this country. These differences imply that the influence of various disciplinary mechanisms will vary from country to country.

2.4.5 Other Governance Mechanisms

Although most literatures in corporate governance observe the impact of various governance mechanisms on corporate performance, some researchers focus on the effectiveness of governance mechanism substitutes. Recent studies by Beatty and Zajac (1994) and Sundaramurthy, Mahoney and Mahoney (1997) suggest that governance mechanisms substitute for each other. Rediker and Seth (1995) argue that ‘individual governance mechanisms are not independent of each other, as has previously assumed in much of the empirical governance literature’ (p. 86). Between the two broad categories of governance mechanisms, the external and internal mechanisms, there are also exist several devices for each of them. Coles, McWilliams and Sen (2001, p. 29) argue that ‘a firm may substitute governance choices across mechanisms or may choose to substitute devices within mechanisms’. This substitute mechanism allows a firm to select configurations of mechanisms which are most suitable for their specific organisational and environmental contexts.

Dharwadkar, George and Brandes (2000) argue there are significant differences in agency problems between different governance contexts. They suggest that the agency problem in countries with relatively strong governance structure should be resolved differently from those of relatively weak governance structures prevalent in emerging economies. This perspective suggests that the agency solutions that mitigate agency problems in the strong governance context of developed economies might not necessarily be effective in other economies. Therefore, Dharwadkar, George and Brandes (2000) distinguished between “traditional” agency problems, which are common in developed economies, as opposed to “unique” agency problems, which they posit exist in emerging economies.

In comparison to developed economies, the “unique” agency problem in emerging and developing countries is characterised by the expropriation of minority sharehold-
ers (La Porta et al. 2000). Morck, Shleifer and Vishny (1988) reveal that the expropriation problem occurs within the weak governance context when large or majority owners assume control of the firm and deprive minority owners of their rights. Therefore, in the case of a country where weak governance exists, governance mechanisms are required to address specific appropriation, aside from other traditional agency problems.

A study by Husnan (2001) suggests that most East Asian corporations have the majority of their shares held by the founding owner. Moreover, this study also found that these countries have relatively small and not-well developed capital markets as indicated by the concentration of market capitalisation and thin trading volumes. There is also evidence that the controlling owner retains majority control through selling small amounts of a company’s equity (Claessens, Djankov & Lang 2000). As such, the market for corporate control will work differently in these countries.

There are arguments that ownership concentration can be both a complement and a substitute for shareholder protection in countries with poor legal protections. Shleifer and Vishny (1997) suggest that ownership concentration can be a substitute for legal protection because large owners perform the monitoring function. In a corollary, Burkart and Panunzi (2001) claim that outside block ownership is an optimal substitute for legal shareholder protection when the law is of intermediate quality, while it acts as a complement when the law is poor. In sum, the existence of ownership concentration in a country with weak legal and regulatory enforcement could be seen as a substitute mechanism for other governance devices.

There are several arguments advanced in support of the appointment of owners’ related family members to the management or board of a company. McConaughy et al. (1998), for example indicate that family relationships improved monitoring and provided incentives that are associated with better firm performance. Family members are assumed to have a special interest in the firm’s success, given that the firm represents the legacy of its founder and the social status of the family is likely to be tied to a firm’s performance. The “reputation effect” of this relationship could prevent so-
cial sanctions against the family\textsuperscript{23}, so it might have a positive impact on firm performance (Kets de Vries 1993). In addition, given the long-standing relationship between the family and a company, it could provide the appointed family members with excellent knowledge of the firm (Smith & Amoako-Adu 1999; McConaughy, Matthews & Fialko 2001). From this view, it might be argued that owners' involvement in board and/or management team might complement other disciplinary mechanisms.

Technically, the corporate control mechanism could also be performed by banks that have a stake in a company as a capital provider, apart from shareholders. This is particularly possible in a country with a high level of external financing (Charkham 1995). Moerland (1995) argues that the intense involvement of banks in providing corporate financing, as in Japan and Germany, may reduce the costs of inherent agency conflicts. Moreover, such involvement by the bank as a capital supplier could also lessen the costs of restructuring in case of financial distress: banks could create conditions to allow them to monitor a company's activities closely. Indeed, for just such a reason, bank employees in Japan are frequently appointed to managerial positions, or as members of firm's board of directors (Moerland 1995).

Previous discussion has focused on the issues of governance mechanisms within the agency theoretical framework. Mechanisms that work well in one country may work differently in other countries, due to the country specific governance structure and environmental factors. The choice of governance mechanisms that is appropriate in one country should therefore be carefully assessed in order to achieve the governance outcomes effectively.

\textsuperscript{23} The issue of "reputation effect" in Indonesia could be seen through the concept of "family values" that have been claimed to have greater impact and 'appears to be formally recognised at the higher level'. 'The term kekeluargaan (family spirit and brotherhood), for example, appears explicitly in the 1945 Indonesian constitution and other regulation enactments. The family values could also be seen as the preference towards collective accountability over personal accountability as in the case of Bank Summa and the Soeryawidjaya family' (Tabalujan 2002a, pp. 507-511).
2.5 Performance Measurement

The purpose of corporate governance is to improve firm performance (Borsch-Supan & Koke 2002). Understanding various aspects of performance measurement, particularly the choice of relevant measures of performance, is important in pursuing research objectives. In line with the view of firm performance as a multidimensional construct (Peng & Luo 2000) there is disagreement as to what criteria and indicators of performance should be employed (Dalton et al. 1980; Ford & Schellenberg 1982). Moreover, Hannan and Freeman (1977) argue that the disagreement in regard to organisational performance is so intense that some have questioned the usefulness of studying performance at all. Consequently, it is important to assess relevant aspects of performance measurement for this study in order to find an appropriate measure to employ in answering research questions.

2.5.1 The Development of Performance Measurement

Performance measurement systems have historically developed as a means of monitoring and maintaining organisational control in order to ensure the achievement of organisational goals and objectives (Brignall & Ballantine 1996; Ghalayani & Noble 1996). Performance measurement reflects 'organisational culture and philosophy, and describes how well work is done in terms of cost, time and quality' (Tatikonda & Tatikonda 1998, p. 49). An appropriate performance measurement system, therefore, should enable organisations to monitor the implementation of plans, determine how successful these plans are, and how to improve them.

An important issue in the discussion of performance measurement is to delineate the domain of the performance concept. Venkatraman and Ramanujam (1986, p. 803) differentiate three domains in the performance measurement concept as (a) domain of financial performance, as the narrowest concept of business performance, (b) domain of financial and non-financial (operational) performance, as a broader conceptualisation of business performance, and (c) domain of organisational effectiveness.

Venkatraman and Ramanujam (1986) argue that most of the studies utilising performance measurement have restricted their focus to the first two domains. They be-
lieve that this tendency is due to the availability of data and the implications of that for operationalisation. This argument is a corollary to the position of Kald and Nilsson (2000) who state that difficulties in using performance measures other than the financial lie in translating programs and activities to be measurable. Therefore, one might argue that the operationalisation and benefit of performance measurement systems in the organisational context are important issues in designing performance measurement.

Early models of performance measurement focused solely on financial-accounting measures, and this 'formal' performance measurement system is an extension of the company's financial reporting systems (Atkinson, Waterhouse & Wells 1997). Such measures, for example Return On Investment (ROI), are widely regarded as the most useful measure and ultimate bottom line of business performance. This kind of financial measure is used both as an objective of management and as a criterion variable to evaluate the effect of various factors on performance. However, this financial-based performance measurement has been claimed as traditional⁴ and of little help in measuring performance in the new competitive environment (Chow, Haddad & Williamson 1997).

Financial performance indicators remained the single most importance performance measurement until the 1980's (Ghalayani & Noble 1996). In the late 1980's, performance studies flourished, as it was hoped that overall effectiveness measures could be constructed as a result of changes in the world market (Meyer & Gupta 1994). Moreover, a dynamic environment requires companies to make more complex strategic decisions, where the outcomes extend over a longer period (Waterhouse & Svendsen 1998) and require different and more dynamic measures.

Currently, several performance measurement models have been developed that could be considered as improvements on the traditional financial models. These models are very much finance related and take the position that business processes' ultimate

⁴ Ghalayani and Noble (1996, p. 64) classify limitations of traditional performance measurement into 'general limitations due to overall characteristics, and limitations specific to certain traditional performance measures such as productivity and cost'.

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success can be viewed through focussing on financial performance measures. Among these models are the Balanced Scorecard (Kaplan & Norton 1996), the Economic Value Added (Stern, Shiely & Ross 2001) and the Strategic Performance Measurement (Waterhouse & Svendsen 1998).

Although new performance measurement models have subsequently been introduced, all of them retain financial performance measures. These improved performance measures use additional indicators that are non-financial, or else they utilise operational performance measures as complementary, with financial measures at the core of the model. Therefore, it might be argued that these models are still in the first (core) domain of performance measurement, the domain of financial performance. This argument is partly based on the fact that financial measures are legitimate and important indicators (Eccles & Pyburn 1992), and necessary as long as measures of residual claims are required for legal economic reasons (Waterhouse & Svendsen 1998). Indeed Chow, Hadad and Williamson (1997, p. 22) argue that ‘financial measures should be retained and viewed in the larger context of the company’s competitive strategies for creating future value’. At the end of the day, financial measures still continue to be the end measures of company’s performance.

2.5.2 Financial Performance and Agency Research

2.5.2.1 Financial Accounting Information

Financial accounting information is the product of a company’s accounting and external reporting systems, providing quantitative data concerning the financial position and performance of the firm for a specified period. The financial statements supplied by management are subject to external audit to verify that they are prepared in accordance with the generally applicable statutory and professional principles (Sloan 2001). From the view of agency research, Sloan (2001) argues that accounting data serves as an important source of information for governance mechanisms that help alleviate the agency problems faced by a company.

Previous researchers in corporate governance have examined the role of accounting information in the operation of various governance mechanisms, including studies on
managerial compensation plans (Bushman & Smith 2001), boards of directors (Beasley 1996), proxy contests (DeAngelo 1988), takeovers (Palepu 1986), shareholder litigation (Skinner 1994), and debt contracts (Sweeney 1994). Another emerging stream of research, the law and finance approach to corporate governance (La Porta et al. 1997; 1998), suggested that investor protection against appropriation by corporate insiders has important economic effects. Based on this approach, a study by Rajan and Zingales (1998) concludes that accounting information has a positive relationship with economic performance. This suggests that an important role for accounting information in governance research and ‘the governance role of accounting information is likely to generate first order economic effects’ (Bushman and Smith 2001).

Sloan (2001) believes that accounting information is required for most governance mechanisms to operate efficiently. Further, aside from providing an important input to the governance process, Sloan (2001) argues that accounting information is itself a product of a governance process. However, the issue of appropriateness of this measure should be considered cautiously, since it may cause bias in the result of a study. For example, accounting information may not be appropriate as the basis to determine management compensation.

2.5.2.2. Market-Based Financial Performance

Although accounting information is useful and important in corporate governance studies, not all of the agency costs are reflected in the accounting measures (Wiwattanakantang 2001). This limitation has led researchers to utilise information based on the market indicators of performance, such as stock prices. For example, Bacidore et al. (1997) argue that the financial performance measurement through the firm’s stock price is appropriate in measuring shareholder wealth creation by determining ‘how much shareholders increase their wealth from one period to the next based on the dividends they receive and the appreciation in the firm’s stock price’ (p. 14).

The choice of performance measures by using market indicators also has disadvantages where different development of capital markets might also cause bias in the result, particularly in cross-country studies. Further, in order to use market indicators
to measure performance, it should be assumed that stock prices have to reflect the true value of the firm (Lindenberg & Ross 1981). Therefore, it is possible that market indicators that represent the true value of a firm can only be found in fully developed capital markets. Khanna and Palepu (1999), however, argue that this assumption may not be met in the case of emerging economies, because the capital markets are illiquid and there is a lack of timely disclosure.

There seems to be a trade-off between the advantage and disadvantage of accounting versus market-based measures. For example, prior research has found both accounting- and market-based performance measures to be related to the corporate governance decisions as in the case of CEO compensation (e.g. Engel, Gordon & Hayes 2002). The use of accounting measures may not be accurate in this case because this measure is subject to manipulation by management (Wiwattanakantang 2001). On the other hand, the use of a marked-based measure may not be an efficient contracting parameter because it is driven by many factors beyond the control of the firm’s executives’ (Bacidore et al. 1997, p.11). Despite this problem, the choice of performance measures should consider the appropriateness of the measurement in relation to specified research objectives.

2.5.2.3 The issue of Context Specificity

Another relevant issue in regard to performance measures is the appropriateness of one measure in different institutional contexts. Market-based performance indicators (e.g. stock prices) may not be suitable in the context of developing economies where capital markets are not fully developed. In this regard, Claessens and Djankov (1999b, p. 502) argue that in a country with weak minority shareholder protections, the use of stock market performance may lead to a ‘downward bias in the relationship between ownership and firm’s valuation’. Therefore, they suggest that researchers not use stock market prices in the construction of performance indicators in a country where this problem exists.

Similar problems also exist for accounting data, since data quality relies heavily on the quality of accounting standards in one country (Claessens & Djankov 1999b). It is widely recognised that there are considerable cross-country differences in account-
ing regimes. This becomes a problem in a cross-country study where differences in accounting standards can be a major issue. Disclosure practices in every country could also influence the quality of information. Sloan (2001) argues that developed countries tend to have more highly regulated financial accounting systems in comparison to less-developed countries where regulation by opportunistic regulators may well hinder economic development.

Based on the firms' objective of maximising shareholder wealth, the performance measurement chosen should be able to measure shareholder wealth creation (Bacich and Walther 1997). Different environmental and contextual aspects should also be considered in the choice of performance measurement, particularly in cross-country studies.

2.6 The Ownership-Performance Relationship

There is a growing body of research in economics and management literature that links the pattern and amount of stock ownership with managerial behaviour, and eventually, corporate performance. However, most of the previous research in the corporate governance area is focused on corporations with diffused ownership within the framework of the conventional Anglo-Saxon model of corporate control. As a result, little is known about the behaviour of joint stock companies with concentrated ownership (Holderness & Sheehan 1988). Despite the emphasis on issues related to ownership structure and identities of major shareholders, previous research has come up with many possible governance roles for controlling shareholders.

Within the field of agency theory, one of the most commonly investigated empirical problems has been the relationship between types of ownership and organisational performance (Leblebici & Feigenbaum 1986). Although there are already numerous studies of this relationship, the influence of different patterns of ownership structure on corporate performance has been widely debated. As has been argued by Craswell, Taylor and Saywell (1997) different points of view find support in the mixed results of existing empirical research, almost all of which evidence is US-based (e.g. Dem--

setz & Lehn 1985; Morck, Shleifer & Vishny 1988; McConnell & Servaes 1990). However, differences in institutional and economic factors between countries might have different impacts regarding the ownership-performance relationship.

L literatures on optimal ownership structures of firms relating to the levels of private benefits and controls (e.g. Grossman & Hart 1988) have extended research beyond the Anglo-Saxon environment. This research, although also still at the level of theoretical debate, is especially important for countries with relatively high concentrated ownership. These countries have been identified as having relatively low protection of minority shareholders and where expropriation of minority shareholders by the controlling shareholders is extensive (Shleifer & Vishny 1997). These expropriations may take various forms, such as related parties transactions, asset stripping and other forms of transferring of revenue and assets between firms (e.g. Morck, Shleifer & Vishny 1988; La Porta et al. 2000). Within this context, the primary agency problem is not the failure of managers to satisfy the objectives of diffused shareholders. In this environment agency conflicts have been identified as the expropriation of minority shareholders (Shleifer & Vishny 1997; La Porta et al. 2000). However, the expropriation by controlling owners is constrained by their financial incentives (Filatotchev et al. 2001). For example, La Porta et al. (2000) show that countries with poor investor protection would typically exhibit more ownership concentration than do countries with good investor protection. They argue that the choice of concentrated ownership, other things being equal, should lead to lower expropriation.

2.6.1 Empirical Studies on Ownership and Performance Relationships

A number of studies provide empirical evidence of the relationship between corporate ownership pattern and firm’s performance. A study by La Porta et al. (2000) of the largest quoted firms from 27 countries finds that higher cash flow ownership is associated with higher corporate valuation. This study also reveals that such an effect is greater in countries with weak or inferior investor protection. Using a data-set of 2,658 companies listed in East Asian countries, Claessens et al. (1999) document that high cash flow rights in the hands of large-block holders are positively related to corporate valuation.
The most researched topics in this literature are the effect of the owner's stake on performance (Demsetz & Lehn 1985; Morck, Shleifer & Vishny 1988), the optimal bundling of cash flow and control rights (Grossman & Hart 1988; Harris & Raviv 1988), the costs and benefits of a single large controlling shareholder (Shleifer & Vishny 1986; Burkart, Gomb & Panunzi 1997), and of several large shareholders (Pagano & Roell 1998). However, empirical research in this area has mostly been limited to studies based on data from developed economies. Moreover, considerably less attention has been paid to ownership structures such as those involving a single individual, a family, a coalition of families, or coalition between business groups and the impact of such ownership on performance. This dimension of ownership, which is prevalent in Indonesia (Lukviarman 2001), is the subject of this study.

Little attention has been given to the effect of closely versus widely held shareholding on company performance. A study by Demsetz and Lehn (1985), for example, found an insignificant relationship between stockholding by the 5 and 20 largest shareholders on firm's performance by using ROE as performance measure. However, they found from the same sample that these stockholdings together with shareholdings by the 5 largest families & individuals and holdings by the 5 largest institutional investors have a significant relationship to firm's market return. It would seem that this study came up with mixed results through using different performance measure and various degrees of shareholding.

A subsequent study conducted by Morck, Shleifer and Vishny (1988) presents conflicting results about the relationship between ownership structure and firm value. A study by Holderness and Sheehan (1988) using both ROE and Tobin's Q as performance measures, found no significant difference between majority held shareholding by a single individual or entity and diffusely held shareholding. A study conducted by Murali and Welch (1989) comparing closely held firms by small group of individuals and widely held firms, obtained similar results using purely accounting profit rates as a measure of performance.

A recent study by Thomsen and Pedersen (2000) on 435 firms in 12 European Union countries, found a significant result in testing the relationship between concentrated ownership, shareholding by institutional investors and accounting profit. A study by
Wiwattanakantang (2001) found that the presence of controlling shareholders, which is prevalent in most South East Asian countries, is associated with higher firm performance. Further, this study reveals evidence that family-controlled firms have significantly higher performance relative to firms with no controlling shareholder, as measured by return on assets and the simplified Tobin’s Q.

While the evidence discussed above derives from various countries other than Indonesia, it should be pointed out that temporal variations as well as nation-specific factors are expected to influence the ownership-performance relationship. As has been argued by Jensen (1983) variations in capital markets, product and factor markets, internal control systems and political, legal and regulatory systems have influenced agency costs arising from differential ownership structures. It is likely, therefore, that the type of agency problems identified by Jensen and Meckling (1976) will differ to some extent in the case of Indonesia. The ownership-performance relationship needs to be tested in different contexts and this study will observe it among publicly listed companies in Indonesia.

The preceding discussion implies that previous research utilising the agency theory perspective assumes that ownership features influence corporate behaviour and performance. Given various measurements of both ownership and performance variables and different institutional environments, it is expected that the outcome will also vary. Generalisation of the assumptions of agency theory remains an important issue that needed to be further explored. Moreover, performance measurement continues to be a crucial issue in the study of corporate governance. As has been argue by Debrue (cited in Phan 2001, p. 134) ‘performance, in whatever form constructed, is itself a noisy dependent variable’. This suggests the importance of assessing the measurement issues in the ownership-performance relationship.
2.6.2 Measurement Issues in Ownership-Performance Relationship

The existing empirical evidence on the impact of ownership structures on firm performance refers almost exclusively to Anglo-Saxon firms (Lehmann & Weigand 2000). The results of previous studies on this aspect are somewhat mixed, due to the wide variation in measures of performance and ownership.

Literature on ownership-performance relationship has relied on the basic proposition that different patterns of ownership structure lead to different impacts on firm’s performance. Moreover, studies concerning the relationship between ownership and firm performance have yielded conflicting results. These studies are summarised in table 1, page 48. Despite the use of different measures of ownership and performance, the conflicting results may also be attributable to the underlying model used in the studies.

Previous studies using ownership structure measures can be categorised into four groups; (1) emphasis on managerial versus owners’ control of shareholding (e.g. Kamerschen 1968; Thonet & Poensgen 1979), (2) emphasis on majority versus diffusedly held ownership (e.g. Holderness & Sheehan 1988; Murali & Welch 1989), (3) measure of ownership owned by directors and/or officers (e.g. Lloyd, Jahera & Goldstein 1986; Kim, Lee & Francis 1988), and (4) combination of ownership measures (e.g. McConnel & Servaes 1990, 1995; Han, Lee & Suk 1999).

The use of some categorisations of ownership measures has been criticised by Demsetz and Villalonga (2001) as putting together shareholdings owned by persons with different interests. In particular, these writers did not agree to distinguish and measure ownership by management or directors under the same study, as it could lead to wrong interpretation. They suggest that these two groups have conflicting interests and that this is clearly evident when studied by means of agency theory. Therefore, the fractions of shares owned by outside shareholders and by management should be measured separately for their impact on firm’s performance.
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<tr>
<th>Author(s)</th>
<th>Sample &amp; Period</th>
<th>Ownership Variable(s)</th>
<th>Performance Variable(s)</th>
<th>Main Results</th>
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</table>
 b. Owner controlled (OC) ≥ 10%  
 c. Dummy for change in control from 1929 to 1963 | - Return on equity                   | No significant difference between MC and OC firms, but significant positive relationship between ROE and change in control |
| Steer and Cable (1978) | 82 U.K. firms (1967-1971)     | a. Owner control (OC) ≥ 15% of cohesive group or ≥ 3% ownership by managers  
 b. Management control (MC) otherwise | - Return on equity  
 - Return on assets  
 - Return on sales | OC firms are significantly more profitable (weak) than MC firms for all measure of performance. |
 b. Owner control (OC) ≥ 25% of cohesive stock ownership and no other part with 25% of cohesive stock ownership | - Return on equity (ROE)  
 - Stocks return assuming dividends are reinvested (SR)  
 - Market value to book value (MBV)  
 - Growth of Total Assets | OC firms are significantly less profitable than MC firms (for ROE & MBV), and no significance difference between OC & MC for SR. OC firms have greater growth in total assets |
 b. Weak owner control (WOC) > 30% > 10%  
 c. Strong owner control (SOC) ≥ 30%  
 d. All owner control (AOC) = WOC+SOC | - A risk adjusted return on sales (RARS)  
 - Return on equity (ROE) | WOC and AOC firms with a large degree of monopoly significantly more profitable than MC firms for RARS, otherwise not |
Table 1 (Continued)

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a. A5 – percentage of equity owned by 5 largest shareholders  
b. A20- percentage of equity owned by 20 largest shareholders  
c. AHI- approximation of Herfindal measure of ownership concentration | Accounting rate of return (average annual net income/book value of shareholders equity) | No significant relationship between ownership concentration and accounting rate of return |
b. Percentage of shareholding by largest shareholder (voted as a block) & owner controlled | Monthly common stock returns | No significant relationship between ownership and return |
d. Lowest quartile  
e. Second quartile  
f. Third quartile  
g. Highest quartile | - Market value of outstanding equity shares  
- Price earnings ratio (equivalent EPS ratio) | The firms with high insider ownership outperform low insider ownership firms |
| Holderness and Sheehan (1988) | 101 majority held & 101 diffusely held large US listed firms (1979-1984) | a. 95%+ majority held > 50.1% ownership by single individual or entity (other corporation or fund)  
b. Diffusely held < 20% ownership by any shareholder | - Tobin’s Q by firm’s market value to replacement cost of plants and inventories  
- Return on equity | Finds no significant difference in performance between majority held and & diffusely held firms |
Table 1 (Continued)

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<th>Performance Variable(s)</th>
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| Morck, Shleifer and Vishny (1988) | 371 large US firms (1980)                     | a. Combined shareholding by all members of the board in the ranges (0-5%), (5-25%) and (25-100%)  
|                    |                                              | b. Combined shareholding by top two officers                                             |                                           - Tobin's Q by market value of stock, preferred stock and debt to replacement cost of plant and inventories  
|                    |                                              | c. Dummy for presence of founder                                                          |                                           - Profit rate by net cash flow to replacement cost of capital  
|                    |                                              |                                                                                         |                                           | Profitability is significantly increased for board membership in the (0-5%) and significantly decreased in the (5-25%) and if founder is present in the board of old firms. Similar results for top two officers. |
| Murali and Welch (1989)   | 43 closely held and 83 widely held US firms (1977-1981) | a. Closely held firms > 50% by small group or individual                                 |                                           - Adjusted stock market return  
|                    |                                              | b. Widely held firms, all other firms                                                    |                                           - Return on assets  
|                    |                                              |                                                                                         |                                           - Return on equity  
|                    |                                              |                                                                                         |                                           | No significant difference in performance between closely held and widely held firms |
| McConnel and Servaes (1990) | 1,173 firms (1976)  
|                    | 1,093 firm (1986)  
|                    | US firms listed on NYSE or AMEX  
|                    | 1976 & 1986                                                  | a. Insider stock ownership by managers and directors                                      |                                           - Tobin's Q by market value of stock, preferred stock and debt to replacement value of assets  
|                    |                                              | b. Institutional ownership                                                               |                                           - Return on assets by earnings before depreciation, interest and taxes divided by replacement value of assets  
<p>|                    |                                              | c. Blockholders as combined ownership by non-insiders who have more than 5% ownership   |                                           | Both measures of profitability significantly increasing with ownership by managers and directors (similar result for insider plus all blockholders). Performance increased significantly with institutional ownership. No measure of blockholder ownership seems to have any effect |
|                    |                                              | d. Largest single blockholders                                                           |                                           |                                                                               |
|                    |                                              | e. Dummy for presence of blockholders                                                     |                                           |                                                                               |
|                    |                                              | f. Insiders plus blockholders                                                            |                                           |                                                                               |
|                    |                                              | g. Insider ownership in range (0-5%), (5-25%) and (25-100%)                              |                                           |                                                                               |
|                    |                                              | h. Insider plus all blockholders in the ranges (0-5%), (5-25%) and (25-100%)             |                                           |                                                                               |</p>
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| Hermelin and      | 134 US firms listed in NYSE (1971, 1974, | Combined stock ownership by present CEO and all former CEOs still in the board in the range a. 0% - 1%  
                      |                            1977, 1980, 1983)                                                                  |                                                                                         | Tobin’s Q by ; market value of stock, preferred stock and debt to market value of capital stock, inventories and other assets Return on assets by EBIT to replacement value of assets Performance increased significantly with the CEO ownership in the (a) range and decreased significantly in (b) range. Otherwise the different regressions present insignificant or contradicting evidence |
| Weisbach (1991)   |                                          | b. 1% - 5%                                                                            |                                                                                        |                                                                            |
|                   |                                          | c. 5% - 20%                                                                           |                                                                                        |                                                                            |
|                   |                                          | d. 20% - 100%                                                                         |                                                                                        |                                                                            |
| Denis and Denis   | 72 US firms with ≥ 50% insider ownership by managers & directors (1985) | a. Majority ownership ≥ 50% insider ownership by managers and directors b. Institutional ownerships c. Dummy for outside blockholder ownership d. Dummy for family and founder involvement in management or BOD | - Return on equity  
- Return on assets  
- Operating income to assets  
- Tobin’s Q  
- Market to book ratio | No difference in performance between majority-controlled firms and other firms. The likelihood of majority control increases significantly with family/founder involvement |
<p>| (1994)            |                                          |                                                                                        |                                                                                        |                                                                            |
| McConnel and      | US firms listed in NYSE or AMEX (990 (1976), 876 (1986), 780 (1988)) | a. Insider stock ownership by managers and directors b. Institutional ownership c. Blockholders as combined ownership by non-insiders who have more than 5% ownership | Tobin’s Q by market value of stock, preferred stock and debt to replacement value of assets Similar result with previous study (1990), except Tobin’s Q is significantly increasing with blockholder ownership. |                                                                            |
| Servaes (1995)    |                                          |                                                                                        |                                                                                        |                                                                            |</p>
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<th>Author(s)</th>
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b. Average percentage of equity ownership per top-level managers (using log of this value) | - Tobin’s Q by market value of stock + estimated market value of preferred stock + book value of total liabilities to book value of total assets  
- Return on Total Assets | Find some evidence of roof-shaped relation. After controlling for firm characteristics and firm fixed effects, there is no relation between managerial ownership and performance |
Limited sample 120 large firms in 1935 & 1995 | a. Percentage & dollar ownership by the firm’s officers and director both directly and indirectly  
b. Percentage & dollar ownership by CEO (MO)  
c. Combined shareholding by officers and directors in the ranges (0-5%), (5-25%) and (25-100%) | Tobin’s Q by market value of stock, book value of debt to book value of assets | Profitability is significantly increasing for MO in the (0-5%) range and significantly decreasing in the (5-25%) range for 1935 sample. For the 1995 sample Tobin’s Q is significantly increasing for MO in the (0-5%) range |
| Han, Lee and Suk (1999) | 2000 firms from G-7 countries (1991-1994) | a. Insider ownership (ratio of closely held shares to total number shares outstanding)  
b. Closely held shares (shares held by officers, directors, beneficial owners and principal stockholders) | - Return on Equity  
- Asset Turnover  
- Net Profit Margin | Find no evidence that firm performance is improved by concentration of insider ownership |
Table 1 (Continued)

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</table>
b. Dummy variable for the identity of largest owner for each: bank, non-financial company, family (single person or foundation), government, institutional investors. | - Market to book value of equity (MBV)  
- Return on Assets (ROA) | There is a positive effect of ownership concentration on performance (MBV and ROA). The effect of ownership concentration is dependent on owner identity |
| Wiwattanakantang (2001) | 270 Thailand Firms (1996) | a. Dummy variable for (a) controlling shareholders, (b) family ownership, (c) government ownership, (d) foreign investor (e) more than one controlling shareholder.  
b. Dummy variable for (a) controlling shareholders and (b) their involvement in management within the range [25-50], [50-75], and [75-100]. | - Simplified Tobin’s Q  
- Sales-asset Ratio  
- Return on Assets | Controlling shareholders is associated with higher performance. The controlling shareholders’ involvement in the management has a negative effect on performance. Family controlled firms have significantly higher performance |
b. Percentage of shares owned by (outside) five largest shareholders | Tobin’s Q | No significant effect of ownership structure on firm performance. |

Source: Author’s compilation
The studies on ownership-performance relationship that came after the Demsetz and Lehn (1985) critique focus on the fraction of shares owned by a firm’s management. In regard to this issue Demsetz and Villalonga (2001, p.214) argue that ‘exclusive reliance on this measure to track the severity of the agency problems suggests that all shareholders classified as management have a common interest. This is not likely to be true’. These writers provide the example of a board member who has a position because he/she has, or represents someone who has large holdings of the company’s stock. They argue that this type of board is likely not to have interests identical to those of professional managers. It is likely that their interests are more closely aligned with outside shareholders.

The performance measurement used in studies of the ownership-performance relationship seems to follow a similar pattern to the ownership category. Prior to Demsetz and Lehn (1985), studies of this relationship used purely accounting profit (e.g. Kamerschen 1968; Steer & Cable 1978; Bothwell 1980). Some later researchers, although still utilising accounting profit, have already relied on Tobin’s Q as a measure of firm performance. Included among these are Demsetz and Lehn (1985), Holderness and Sheehan (1988), Morek, Shleifer and Vishny (1988), McConnel and Servaes (1990), and Denis and Denis (1994). Other researchers, including Hermelin and Weisbach (1991); McConnel and Servaes (1995); Himmelberg, Hubbard and Palia (1999); Holderness, Kroizer and Sheehan (1999) have relied mainly on Tobin’s Q as a measure of firm performance in their studies.

The issue of the use of the accounting profit rate and/or Tobin’s Q as a measure of firm’s performance is important for the study of the ownership/performance relationship. These two measures differ from each other in two aspects (Demsetz & Villalonga 2001, p. 213). Firstly, is in the time perspective: accounting profit is backward-looking, while Tobin’s Q is a forward-looking measure of performance. Within this context, accounting profit rates are affected by accounting practices and emphasise what management has accomplished. Tobin’s Q, on the other hand, reflects the value investors assign to a firm’s intangible assets based on predicted fu-

---

26 Demsetz and Villalonga (2001) define management holdings to include shares owned by members of corporate board, the CEO and top management.
ture revenue stream. As such, this measure could be seen as estimating what the management will accomplish.

A second distinction is in regard to who is actually measuring performance. For accounting profit rate, this measure is done by the accountant, constrained by standards set by his/her profession. Tobin’s Q measures are used in common by the community of investors constrained by their perception (i.e. optimism, pessimism). Demsetz and Villalonga (2001) believe that this later measure is preferred by economists, most of whom have better understanding of market constraints than of accounting constraints. However, they further argue that Tobin’s Q measurement is affected by the psychology of investors, as it will also include the prospects and the outcomes of present business strategies.

Although the above discussion reveals that accounting profit and Tobin’s Q are different in their perspective, the two measures are interrelated. According to Demsetz and Villalonga (2001, p.213) the investor community who developed Tobin’s Q measurement do not ‘ignore the past in their attempts to determine reasonable expectations for the future profitability of firms’. The reason is that ‘high accounting profits are usually accompanied by high stock prices’ (p.214). The use of the market value of the firm as a numerator of Tobin’s Q to some significant degree reflects accounting profit rates. In sum, it might be argued that the use of either of these performance measurements will have a similar result.

Research on the ownership-performance relationship has utilised a variety of performance measurements; however, it appears the results cannot conclusively be shown to be affected by the performance measures used in the study.

2.6.3 Other Methodological Concerns

The majority of empirical studies in the ownership-performance relationship employ dummy variables to classify firms by control type (e.g. Pedersen & Thomsen 1997). Some of the studies (e.g. Demsetz & Lehn 1985) have utilised continuous variables as a shareholder concentration measures. However, the use of both dummy and continuous variables in this relationship has implicitly assumed that ‘if there is some dif-
ference in performance of firms due to different ownership structures, the relationship is uniform' (Short 1994). Further, she clarifies specific assumptions on the use of each variable as follows.

'In the case of dummy variables, this means that the relationship occurs in the same direction for each firm classified within the same group. In the case of continuous variables, it assumes that a linear relationship exists between, for example, shareholder concentration and performance' (p. 218).

The assumption of linearity in the relationship between ownership and performance has been claimed as producing misleading results (Short 1994). This assumption does not recognise the possibility of relationships which may exist within various ranges or classifications of ownership levels. Morck, Shleifer and Vishny (1988) criticised a study by Demsetz and Lehn (1985) which failed to find a significant relationship between ownership concentration and performance, on the grounds that their result may due to their use of a linear specification which failed to capture any existing non-linear relationship. Further, Cubbin and Leech (1983) argued that 'the misclassification resulting from the use of fixed rules [in classifying ownership category] which make no allowance for variation in dispersion between companies is likely to be a serious source of bias in cross-sectional empirical studies' (p. 365). To overcome this problem, Short (1994) suggests the need for more complex and finer variables of ownership classifications to be defined using several different cut-off points.

The identity of large shareholders is perceived to be another important aspect in the study of the ownership-performance relationship (Short 1994). For example, McConnell and Servaes (1990) argued that some block shareholders might be passive investors whilst others may play a more active monitoring role. This view was based on the fact that large shareholders will only have incentives to monitor management if the benefit outweighs the costs. In this relation shareholders' identity could also provide information on whether the owner is also involved in the management team or board of directors. It was suggested, therefore, that differences in the identity of large shareholders should be further investigated to discover the level of ownership at which shareholders find it profitable to exercise close monitoring processes. According to Short (1994) this process is reasonable 'rather than simply defining share-
holders as being large if they own more than some arbitrary percentage of equity’ (p. 223).

The discussion presented in this section highlights a number of issues associated with empirical research on the effect of ownership and control structure on firm performance. The main area of contention within this relationship is that of ‘defining variables that empirically capture the notion of control’ (Short 1994, p. 227). Studies by Morck, Shleifer and Vishny (1988) and McConnel and Servaes (1990) could be seen as an important contribution in this area as both studies consider the possibility of non-linear relationship between ownership and performance. Moreover, both of these studies and those of Holderness and Sheehan (1988) have also pioneered the use of Tobin’s Q as an alternative measure of performance within the ownership and performance relationship. The results generated by previous studies using a range of ownership and a range of performance measures summarised in Table 1 remain inconclusive on whether the type of ownership structure does significantly affect performance.

2.7 Issues on Corporate Governance Implementation in Indonesia

Moerland (1995) argues that corporate systems across the world differ markedly with respect to their historical origins, methods of capital mobilisation and structure of ownership. This raises the issue of ‘the effects of varying institutional settings on managerial behaviour and corporate control’ (p. 17). Hence, it might be argued that the relative importance of various disciplinary governance mechanisms and their effectiveness is expected to differ across countries. In the case of Indonesia, given its specific institutional environment that may affect governance systems, it is fruitful to assess the country institutional framework in providing proper understanding for the basis of this study.

2.7.1 Legal Framework of Indonesian Corporate Governance

La Porta et al. (1998; 2000) argue that the law and finance approach to corporate governance emphasises the important role of laws and institutions protecting investors for the development of a country. Specifically, La Porta et al. (1998) argue that
the value of ownership rights attached to corporate equity depends on the country's legal system and the quality of its law enforcement. As a corollary, Pedersen and Thomsen (1997) argue that company legislation differs from country to country and this affects the financial systems and ownership structures in a number of ways. This view is based on the role of governance concepts in promoting accountability, control, transparency, and predictability. As part of a broad social system, law and regulation serve as the guidance in allocating and enforcing the rights and obligations in one country. In sum, the system of law and regulations are the most basic corporate governance mechanisms that govern the firm's operations that exist outside the firms (Denis 2001).

Corporate governance as guidance for a company's best practices arises in the context and is affected by, differing national frameworks of law, regulation and stock exchange listing rules, and differing societal values. Therefore, to understand one nation's corporate governance practices, one must understand the underlying legal and enforcement framework. As has been argued by the OECD (1999) the primary role for regulation is to shape a corporate governance environment compatible with societal values that allows corporations to succeed in generating long-term economic gain. In order for governance practices to achieve effectiveness, they should be supported by an enabling regulatory framework to achieve better corporate performance.

2.7.1.1 The Development of Indonesian Corporate Law

Indonesia's Company Law (1995) originated from the civil law tradition of Continental Europe, which is different from the common law system found in Anglo-American countries and the Commonwealth (La Porta et al. 1997). There are some features of this law that are relevant to this study such as: the board structure (including the appointment and dismissal of both supervisory and management boards), and the rights of shareholders on the general meetings of shareholders (particularly voting roles based on 'one share-one vote' and the simple majority rules principles). The existence of this regulation is necessary to develop the legal environment, which in turn, determines the rights and obligations of the market participants.
In the effort to move towards a more democratic society, Indonesia is facing challenges of many kinds, including the paradigm change needed to embrace good corporate governance. Prior to the Asian crisis, Indonesia had made some moves towards greater corporate openness. In 1995, the government introduced a new Company Law and enacted the Capital Market Law as the legal instrument regulating listed securities and market players. Following the economic crisis, in 1998 the government passed a new Bankruptcy Law and created a new Commercial Court. These laws aimed at enabling creditors to force debtors into bankruptcy and thus increasing protections for creditors. Subsequently, in 1999 the Indonesian government also adopted a law against corruption, collusion, and nepotism. In sum, the government of Indonesia has put a comprehensive effort in enhancing regulatory reform as a foundation for better governance practices in this country.

2.7.1.2 The Company and Capital Market Law

The Company Law 1995 lies at the centre of Indonesia’s legislative corporate framework. It came into operation on 7 March 1996 (Tabaluan 2002a) and generally refers to limited liability companies (Perseroan Terbatas/PT) including both private and public companies. Specifically, article 1 (6) of the Company Law 1995 defines a public company (perusahaan terbuka) as a company whose capital and number of shareholders meet certain criteria or a company which makes an offer to the public. This definition did not specify detailed criteria for public companies and the main differences between the private and public companies in Indonesia can be found in their “deeds of establishment” (Tabaluan 2002a). Moreover, specific regulations regarding public companies in Indonesia are regulated through the Capital Market Law 1995.

The important aspect of the company law framework relevant to the issue of corporate governance is the regulation related to shareholder rights. The Company Law 1995 (article 65 (2)) states that there should be an annual general meeting of shareholders (Rapat Umum Penegang Saham/RUPS) held within six months from the end of the company’s financial year. Some of the issues that should be addressed during this meeting are that the RUPS should approve the annual report (article 60 (1)) which include the annual account (article 56). Prior to the RUPS, the annual report
must be signed by all of the management and supervisory boards members (article 57(1)). The Company Law 1995 (article 58) also states that the annual account presented in the RUPS should comply with the Indonesian Financial Accounting Standard (Standar Akuntansi Keuangan). Further, if the company is a public company the accounts must be audited by a certified public accountant and the accountant's reports should also be presented at the annual general meeting of shareholders (article 59).

The Company Law 1995 (article 110) provides another important shareholder right, in regard to the provision for requests to the State Court to inspect the company. This right may be used if the company, the management or the supervisory board is suspected of committing an illegal act which cause loss to the shareholders, third parties, or the company itself. However, these rights only relate a shareholder controlling not less than 10 percent of the issued shares with valid voting rights. Minority shareholders who own fewer company shares cannot exercise these rights.

The Capital Market Law 1995 (Undang-undang Nomor 8 Tahun 1995 Tentang Pasar Modal) is another formal legislation influencing corporate governance practice in Indonesia. The Capital Market Law (1995, article 1 (22)) provides specific criteria for a listed company; it should have at least 300 shareholders and a minimum paid-up capital of Indonesian Rupiah 3 billion. To distinguish public companies from privately owned firms, the name of each public company should have the suffix “terbuka” (abbreviated as “Tbk”) which literally means “open” (Company Law 1995, article 13 (3)). All of the companies listed on the two Indonesian stock exchanges (i.e. the JSX and the SSX) must be public companies and each exchange has their own specific regulations issued through a special decree.

The Capital Market Law 1995 specifies the role of regulatory organisations, especially the Capital Market Supervisory Board (BAPEPAM) and the Jakarta Stock exchange (JSX). The BAPEPAM is the key institution in the capital market and it reports directly to the Minister of Finance (article 3 (2), Capital Market Law 1995). In general, the tasks of BAPEPAM are dealing with the development, regulation and supervision of the capital market (article 3 (1)) and specifically its inspection and investigation power. Article 100 of the Capital Market Law also grants this institution
the rights to investigate any party suspected of having committed or being involved in wrongdoing. In sum, the role of BAPEPAM is to promote and regulate the capital market and its institutions in an orderly, proper and efficient market.

The preceding discussion highlights the corporate legal and regulatory framework in relation to the operationalisation of companies in Indonesia. It is worth mentioning that the regulations governing business practices in this country are already in place.

2.7.1.3 Internal Corporate Structure

The major difference between boards of directors in different countries is the presence of two-tier versus single board structure (Conference Board 1977). A single board structure, also known as a ‘unitary board’ is prevalent in the Anglo-Saxon countries. This type of board condenses executive and supervisory responsibilities of the board in one legal entity (Gay 2002). On the other hand, the two-tier board, also called two-board system, is found mostly in Continental European countries. The later provides for the separation of executive and supervisory roles under different boards (appendix 2).

Companies incorporated under Indonesian Company Law must have both a board of directors and management board (articles 79 & 94, Company Law 1995)\(^\text{27}\). Both the members of directors and management boards are appointed and may be dismissed at any time at a shareholder’s meeting (RUPS) with a resolution supported by a simple majority (articles 80 (1) & 95 (1) Company Law 1995)\(^\text{28}\). Further, this law states that every public company listed in the stock exchange must have at least two directors (article 94 (2)) and two members of the management board (article 79 (2)). A com-

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\(^\text{27}\) Within the two-tier board structure regime, this board is also named a "supervisory board" with the emphasis more on its role in supervising the management board. Throughout this study the term “supervisory board” is used to refer to the board of commissioners (in Indonesia) or board of directors (in the Anglo-Saxon board regime).

\(^\text{28}\) However, the Company Law (1995) seems to impose responsibilities on the supervisory board which are not matched with powers to hold management boards accountable to them. This is based on the fact that supervisory boards do not have the power to select, evaluate and replace management board members.
pany other than one listed in the stock exchange (i.e. private companies) may have only one director and one member of management board.

The director or supervisory board (technically named the “board of commissioners” or dewan komisaris) is composed entirely of non-executive directors, and a member of management board cannot be a member of supervisory board—or vice versa—in the same corporation. This board is headed by a president of commissioner (presiden komisaris) and is responsible for supervising (mengawasi) and advising (memberikan nasihat) the board of management (article 1 (5) & article 97, Company Law 1995). The management board (technically named the “board of directors” or dewan direksi) consists of entirely executive and is headed by a president director (presiden direktur). The management board is responsible to manage (mengurus) and represent (mewakili) the company in its daily operations and perform all of the executive roles (article 1 (4) & article 82 Company Law 1995).

The Company Law (1995) and the two-tier board structure in Indonesia clearly separate the executive and non-executive boards. This separation is consistent with the agency theory suggestion that ‘shareholder interests would be safeguarded only where the two posts were held by separate individuals’ (Gay 2002, p. 47). A supervisory board’s independence arises from the fact that its members do not have a personal financial stake in retaining management, so they can act as shareholder surrogates to ensure that the company is run in the best interest of its owners. Furthermore, supervisory board members are also independent of management for their tenure and remunerations. In addition to these independencies, the supervisory board has an affirmative incentive to monitor effectively, especially in the absence of the market for corporate control which is non-existent in most developing economies.

However, the study by ADB (2000) revealed that in a lot of instances, the members of supervisory boards in Indonesia are appointed due to their close relationship, including family ties, with the major shareholders. The same study also found systematic evidence that almost 85% of a company’s controlling owners appointed members of their family to the management team and/or the supervisory board. This dominance of family-based controlling shareholders might be seen as the basis for
the effectiveness of the role of the supervisory board in providing checks and balances on a company’s operations.

Coombes and Watson (2001) found that the appointment of people with close family ties as members of the board, particularly in relation to block shareholders, is prevalent as the control model of corporate governance found in Asia, Latin America, and much of Continental Europe. However, there are no studies yet into the effectiveness of monitoring roles by supervisory boards in Indonesia. Indeed, studies of the two-tier board system are limited to the German-type or Continental European board, which is different from that of Indonesia. While in large companies in Germany and the Netherlands workers’ representation is commonplace (Lannoo 1999), in the case of Indonesia there are no rules to include on the board members who represent the employees.

The above discussion reveals that the law and governance structure adopted in Indonesia is influenced partly by the Dutch corporate governance model (Asian Corporate Governance Association 2000). In regard to the legal framework, it is clear that before the introduction of new Company Law in 1995, Indonesia utilised the Commercial Code of 1847 introduced by the Dutch colonial authorities. The present corporate structure adopted by companies in this country was also rooted in colonialism through nationalisation of the Dutch owned companies. Although there exists a regulatory framework for publicly listed companies in Indonesia (i.e. Company Law 1995 and Capital Market Law 1995), the implementation of these legal frameworks is dependent on law enforcement and the proper exercise of judicial power.

2.7.2 The Asian Financial Crisis: Impact on Indonesia

Until the recent collapse, the Indonesian economy had undergone more than a decade of remarkable growth and structural transformation. Indeed, the Indonesian economy has been considered an important contributor to the East Asian miracle. Prior to the financial crisis, economic growth reached more than 7 percent per year and the inflation rate was kept at single digit levels (BPS 1998). In mid 1997 a financial crisis hit this region and by early 1998 Indonesia was in its worst economic recession since the 1960s (Widianto & Choensni 1999). The depth of the financial crisis exposed the
weakness of the country's corporate sector, since all of the corporate sectors, except utilities, posted negative growth (Husnan 2001).

Widiandto and Choesni (1999) believed that the financial crisis in Indonesia was triggered by a combination of several macro and microeconomic factors. They argue that an inconsistent monetary and exchange rate policy, weak supervision of the banking and financial sectors and an accumulation of foreign currency debts, constituted, among other things the causes of the crisis. From another standpoint, the highly concentrated and family-based ownership structure of corporate groups, heavy reliance of companies on bank credits, and inadequacy of the regulatory framework under the financial liberalization were seen to have contributed significantly to the crisis in Indonesia (Husnan 2001). Hamilton-Hart (2000) argued that even if the crisis could be explained by reference to external factors, the issue of domestic governance was also relevant in the case of Indonesia. This suggests that weakness in internal environmental factors, particularly in relation to corporate governance, existed prior to 1997 and contributed most to the crisis.29

Widiandto and Choesni (1999) report that the impact of the economic crisis in Indonesia has resulted in dramatic decreases in capacity utilisation rates across all industries and was the most severe among the countries in the region. The crisis had less impact on foreign firms however, and their capacity utilisation rates are higher than average. There was also evidence that decreased demand for products and the effect of the depreciation of the rupiah in raising input costs was a major cause of output decline. The problems of low capacity utilisation and reduced demands due to the crisis affected firms' revenue. In this case, also, foreign-owned firms have been less affected by the fall in domestic demand. This suggests that the financial crisis had a lesser impact on foreign-owned companies in comparison to domestic firms. Consequently a researcher should consider this issue in the analysis of the data as it may create bias in results of the study.

29 For a detailed discussion on governance and the impact of crisis in Indonesian economy, see Soesastro (2000)
A study by Husnan (2001) found that banks are the major source of financing by corporations in Indonesia, and most of it is foreign currencies debt. This study also reveals that the reliance of firms on bank loans is due to insufficient internal financing and an undeveloped capital market. As a corollary, Claessens, Djankov and Lang (2000) find evidence that reliance on external financing allows controlling owners in Indonesia to maintain company control. The crisis has therefore impacted most companies due to increased interest expenses and foreign exchange losses as a result of the use of unhedged foreign debt. This situation was worsened by losses in operations due to decline in sales and increases in the cost of imported inputs (Husnan 2001).30

Shirazi (1999) argues that rapid economic development combined with weak and inadequately regulated financial systems in East Asian countries played a critical role in giving rise to the rapid growth of banks and other financial intermediaries. He further argues that Indonesia’s banking system is the most distressed in the region because of weaker pre-crisis conditions. In 1999, in order to facilitate the payment system, the government closed down 38 banks with their assets managed by the government through the Indonesia Bank Restructuring Agency (IBRA) and 7 banks were taken over by the government. The remaining 73 banks, with capital asset ratios equal to or greater than 4 percent, remain open. However, these banks have reached non-performance loans ratios of more than 60 percent. These had confined to increase, since interest rates had not declined (Husnan 2001).

The financial crisis in Indonesia has impacted almost all corporate sectors across industries, particularly those of domestic-owned companies. The crisis had a huge impact on financial institutions, especially the banking sector, due to negative spreads (i.e. deposit rate was higher than the credit rate) and relatively high non-performing loan ratios. In relation to this study, it is important to carefully assess the impact of this crisis as it might create confounding effects on the analysis.

30 For a more comprehensive survey see Kawai (2000).
2.8 Conclusion

Previous literatures examining the ownership-performance relationship within the agency perspective provide mixed results and there is no consensus. As noted by Demsetz and Villalonga (2001), differences abound across the studies, both between variables --due to methodological issues such as measurement and sample used-- and in estimating technique applied. Other non-methodological reasons for such differences could arise from the overall structure of economies and regulation (Maycr 1997), comparative politics (Kay & Silberston 1995), and social pattern and economic development (Cadbury 1999).

An investigation of the appropriate regulatory environments is necessary to determine the rights and obligations of market participants and the incentive to promote sound governance practices. Different institutional settings affect how these participants react in relation to certain costs and benefits of their actions to maximise wealth. As a consequence it is expected that governance mechanisms and their effectiveness will work differently across countries.

This research is undertaken within the Indonesian context. Given the country's specific corporate structure and environmental characteristics, the problem which dominate, among others, are equitable treatments of shareholders, inadequate disclosure and transparency, and limitation on the role of governing boards. The tightly held ownership structure and underdeveloped stock market cause other elements of both internal mechanisms and the market for corporate control under the agency theory to be unsustainable.

Ownership structure might be seen as the most important mediator of incentives to good corporate governance. Corporate governance among Indonesian firms is characterised by concentrated ownership and relationships to a business group. Most of the founding families retain majority shares and are also involved in supervisory and/or management boards. Research into these conditions, using the agency approach, is needed to determine whether different patterns of ownership structure and the monitoring role exercised by majority owners affect firm performance.
Chapter 3: Hypothesis Development

3.1 Introduction

The preceding chapter elaborates on the relationships of ownership and firm performance within the perspective of agency theory. The empirical evidence within this area refers almost exclusively to Anglo-Saxon firms which have different attributes from those of developing economies. Because of Indonesia’s specific institutional and environmental characteristics, most of the existing empirical evidence may not be applicable there. The literature suggests that concentrated ownership and the role of large shareholders, together with the absence of ‘the market for corporate control’ mechanisms, are dominant features of developing economies. Further, the role of business groups and owners’ involvement in a supervisory board could also be viewed as an important characteristic of corporate practices in the context of weak governance and the underdeveloped institutional framework in Indonesia. A gap in the literature was identified with respect to research identifying conditions under which ownership concentration and owner’s involvement in a supervisory board serve to either enhance or lessen corporate performance, given different ownership structures.

This chapter will build upon this central theme to develop four propositions that serve as a basis for the development of hypotheses which are subject to empirical examination. The remainder of the chapter is organised as follows; first, the development of research propositions based on agency theory; second, the formulation of hypotheses based upon the research propositions; and third, a discussion of control variables relevant to the study.

3.2 Research Propositions

The major issue in corporate governance since Berle and Means (1932) has been the separation of ownership and control prevalent in large corporations. In every company it is probable that, given a certain structure of ownership, an identified group of interests will be able to realised their objectives over time (Zeitlin 1974). When own-
ership is concentrated, large shareholders could play an important role in monitoring management. The amount of investment this group has in a company, as identified through the amount of their shareholdings, leaves them with the incentives to closely monitor the company’s affairs (section 2.4.2).

The existence of large shareholders may restrain managerial decisions and thus may reduce agency costs, which in turn will enhance the firm’s performance (Lehman & Weigand 2000; Shleifer & Vishny 1986). Furthermore, shareholder involvement in the supervisory board may further increase close monitoring of management decisions. The underlying assumption is that by re-integrating ownership and corporate control, the firm’s performance will be enhanced. As both the incentive and the ability to monitor increase with share concentration, control over a corporation will be more stringent and effective (Lehman & Weigand 2000). It could be said that effective monitoring of a company’s activities rests upon committed owners who actively participate in governing the corporation through involvement in a supervisory board (section 2.4.3).

This research aims to study the impact on firm performance of different ownership structures, the effectiveness of large shareholders monitoring through their involvement in the supervisory board, and the impact of companies’ cross-shareholding through group affiliation. The convergence-of-interests and the efficient monitoring hypotheses propose that the existence of large shareholders and concentrated ownership influence the level of agency costs and firm performance. The following discussion summarises the propositions formulated to establish the relationship between the agency theory and the constructs measured in this study. Further, they will be developed into several research hypotheses as a basis for empirical study.

The first proposition is that ownership structure determines the nature of agency problems and hence will determine the distribution of power and control within an organisation (Jensen & Warner 1988). In the absence of control mechanisms prevalent in developed economies, majority shareholders could serve as an alternative governance mechanism in mitigating agency problems (Shleifer & Vishny 1997; Burkart & Panunzi 2001). The incentives for shareholders owning large blocks of shares to protect their investment and consequently monitor management can be ex-
pected to increase with the level of their share ownership (La Porta et al. 2000; Pedersen & Thomsen 2003). All else being equal, ownership concentration may reduce agency costs (Jensen & Meckling 1976), as it is easier for a few holders to monitor management than when ownership is widely dispersed. As a result, lower monitoring costs will lead to better performance, which is favourable for shareholders.

The second proposition is that the extent of the monitoring and control, through the involvement of majority owners in the board, should be reflected in reducing agency costs (Lins 2003). Shareholders could minimise asymmetric information and apply effective control when they have superior information through involvement in boards of directors (La Porta et al. 2000; Morck, Shleifer & Vishny 1988). If owners’ involvement in the board as an internal control mechanism is effective in minimising monitoring costs, a positive relationship should exist between involvement and corporate performance (Pedersen & Thomsen 2003). Majority owners, because of their larger stake in a company, have the incentive (i.e. high cash flow rights) and power (high voting rights) to exercise tight control and influence over management and thus might enhance firm performance.

The third proposition is that in the absence of a liquid capital market in emerging economies, a firm might find alternative sources for its financing needs. Affiliation to other companies within the group might be a potential way to resolve the problems (Claessens, Djankov & Klapper 2000; Joh 2003). Business groups to which a company belongs, and the group’s banking affiliation, could be seen as an internal capital market in providing financing needs (Leff 1978). All else being equal, this market will offer lower financing costs (Banerjee, Leleux & Vermaelen 1997) and easy access to capital sources and hence might increase a firm’s performance.

The fourth proposition builds upon the above by recognising the difference in economies of scale due to the firm’s size. Large companies might have better resource allocation and can minimise transaction costs (Banerjee, Leleux & Vermaelen 1997). As a result, all else being equal, large companies should have better performance.
In the context of this study, it is necessary to control for the impact of the Asian Financial Crisis on the ownership-performance relationship during the period of the study. The changes in this macroeconomic factor might influence the performance of firms in the Indonesian capital market in different degrees (Claessens, Djankov & Xu 2000). The inclusion of the “time-specific effect” is suggested by the fact that during the period of the study the Indonesian economy was experiencing different facets of development. Prior to the crisis, the Indonesian economy experienced stable economic growth and has been considered as one of the Asian miracles (ADB 2000; Husnan 2001). Following the economic crisis in mid 1997, the economy of this country slid into drastic downturn with the worst conditions since 1965 (Husnan 2001). For this reason, the time of observations will cover the three-year periods before and after the crisis with the exclusion of the year 1997, the year when the crisis hit the Asian region.

The following sections develop these propositions into testable hypotheses.

3.2.1 Ownership Structure and Performance

The literature on ownership concentration focuses on the extent to which large block shareholders, as compared to dispersed ones, are in a better position to make a company’s management accountable. Craswell, Taylor and Saywell (1997) argued that owners of block shareholdings could exercise monitoring practices since they could achieve results effectively due to their monitoring expertise. However, the existing theoretical and empirical literature reveals conflicting predictions and evidence on the role of large shareholders in enhancing corporate value (e.g. Shleifer & Vishny 1997). Additionally, most of these theoretical arguments and evidence has been restricted to certain countries, such as the U.S., the U.K., Germany, and Japan. There is very little information available with respect to developing countries where corporate ownership is found to be heavily concentrated.

Several costs and benefits in regards to the existence of large shareholders and concentrated ownership are believed to be relevant in the context of developing countries (Wiwattanakantang 2001), such as Indonesia. However, one should carefully assess its implications due to the country’s unique institutional specificities. Some of these
specificities are: a less developed and illiquid capital market; relatively weak legal and regulatory framework; weak enforcement of the legal and regulatory frameworks that exist; less active takeover market; a highly concentrated family-based ownership; a higher dependence on external sources of financing (Claessens, Djankov & Lang 2000; ADB 2000; Husnan 2001). Based on these factors, it might be argued that institutional and economic arrangements in Indonesia are relatively specific in comparison to other countries. If this be true, adopting corporate governance systems from other countries without considering these factors may lead to the ineffectiveness of the system.

In the empirical literature ownership concentration is the standard indicator for the extent of governance exercised by firm's owners. A study by Kabir, Cantrijn and Jeunink (1997) found evidence that more concentrated ownership of shares provides more effective monitoring of managers. This is consistent with the principal-agent paradigm which predicts that if left unattended, non-owner managers will tend to divert parts of the firm's resources to value-destroying projects. To prevent this, or to ensure value-maximising behaviour on the part of managers, the existence of concentrated ownership might be seen as an effective mechanism. Controlling shareholders with large stakes have both the incentive and the power to acquire information necessary to supervise management and thus reduce information asymmetries. Grossman and Hart (1988) and Shleifer and Vishny (1986) believe that by actively monitoring the management and the firm's value, owners of a significant share may mitigate the free-rider problem.\(^{32}\)

While empirical results are mixed, financial theory still indicates that ownership structure affects the governance of a firm which in turn affects performance. Addi-

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\(^{31}\) In Indonesia, the large equity-shareholder mostly relies on self-enforcing contractual arrangement rather than legal protections (Scott 1999).

\(^{32}\) Monks and Minow (1996, p. 105) reveal that 'any shareholder who wants to exercise ownership rights to influence a company must undertake all of the expenses, for only a pro rata share of gains, if there are any.' Individual or minority shareholders who actively monitor management would bear all the costs of actions whose benefits mainly accrued to others (i.e. majority shareholder).
tionally, existing research supports the premise that majority ownership\textsuperscript{33} is different from less concentrated ownership. The next step is to determine if the performance of majority-ownership firms is indeed greater than that of other firms. Consistent with the view that controlling large shareholders can prevent expropriation, higher ownership concentration is expected to reduce agency costs and, subsequently, improve firm's performance. Therefore, all else being equal,

\[ H_{1a} \quad \text{Corporate performance among all companies, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures.} \]

Apart from the distribution of ownership concentration, Short (1994) and Pedersen and Thomsen (1997) suggest that an appropriate measure of ownership structure should also consider the identity of the relevant owners. Recent study by Pedersen and Thomsen (2003) found that identity of owner matters in the ownership-performance relationship, particularly among large controlling shareholders. In particular, Douma, George and Kabir (2002) and Claessens et al. (2002) argue that it is important of disentangle the effects of foreign and government ownership from other private-domestic firms due to their governance specificity. Therefore, after controlling for the effect of owner identity, all else being equal,

\[ H_{1b} \quad \text{Among private-domestic companies, majority ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings.} \]

In summary, this study focuses on the consequences for performance of large shareholders having majority control over a company. More specifically, this study examines the impact of the integration of ownership and control in the hands of large shareholders, as reflected in ownership concentration, on firm performance in Indonesia.

\textsuperscript{33} As will be discussed in detail in the following chapter, this study defines majority ownership as one owner (a person, family or company) who owns more than 50 per cent of the company’s shares. In regard to company performance, it is measured by the ratio of net profit to total assets (ROA) and the ratio of operating profit to total sales (ROS) as a secondary measure.
3.2.2 Performance and Monitoring

Carney and Gedajlovic (2002a) argue that the measure of ownership concentration per se does not necessarily imply owner involvement in directing company affairs. They further state that,

\[ \text{\'measures of ownership concentration do not distinguish between the share concentrated in the hands of those who have direct managerial control over a firm and the share held by shareholders that rely on professional salaried managers to operate the firm on their behalf\'} \ (p. 272) \]

This statement suggests the need for other forms of measurement to take account of the relevant distractions.

Previous studies of Indonesia (e.g. ADB 2000; Husnan 2001) report that corporations in Indonesia characterised by substantial family ownership usually achieve this through holding companies at the top of business groups. Further, these studies show that in 1997 family corporate holdings, which are mostly owned by members of the founder’s families, owned 67.2 per cent of the total outstanding shares of all publicly listed companies. This data reveals the roles played by large shareholders among corporations in this country and, most importantly, the existence of family business groups. These patterns of ownership allow the controlling owner to be highly involved in a firm’s operation, and leads to little separation of management and ownership control (Claessens, Djankov & Lang 2000).

From the agency theory perspective, Fama and Jensen (1983a) suggest that family relationships among owner-managers should reduce agency costs. They comment that agency problems between top managers and shareholders can be reduced if the residual claimants and the decision agents are the same. In other words, when ownership and control rest with the same individual or family, the need for costly monitoring by outside shareholders is reduced, thus increasing firm value. In the case of family controlled firms their members can have many dimensions of exchange within the family and this could be relatively durable for longer period. As has been argued by DeAngelo and DeAngelo (1985), family involvement serves to monitor and discipline managers because of long-term relationships between family members and the
firm. It might be argued that this relationship contributes to the monitoring and disciplining of related decision agents.

A study by Claessens, Djankov and Lang (2000) documented that more than two-thirds of firms in Asian countries\textsuperscript{34} have single shareholder control. This study also finds that corporations in Indonesia, although listed in the capital market, are mainly family controlled. One of the major concerns of firms controlled by families is that family interests may be furthered to extract private benefit at the expense of outside shareholders. Large shareholdings owned by family and the presence of insiders in the management and/or board team give them enough power to control and influence management decisions. However, large shareholders can benefit all shareholders, including minority owners because they have the power and incentive to prevent appropriation of company resources by management.

Maug (1998) argues that the word “monitoring” has been used as a comprehensive label for all value-enhancing activities, including shareholder activism. From the agency theory perspective, shareholder activism is necessary in the absence of more efficient mechanisms to protect their best interests (Fama & Jensen 1983b). For example, monitoring exercised through shareholders’ intervention in a company’s affairs is needed for information acquisition to reduce asymmetric information. Although large shareholders will benefit most from this activity, they have to bear all of the costs and face a free-rider problem. Empirical research has been addressed to the question of whether activism of large shareholders, including institutional shareholders, leads to better performance of companies.

Agency theory suggests that both block shareholders and boards of directors are important internal control mechanisms. For example, Jensen (1993) argues that together with other external control devices, these internal control mechanisms will work in concert to control agency costs between shareholder and managers. Additionally, he pointed out that among the desirable features for more efficient control systems are substantial equity ownership by managers and board members.

\textsuperscript{34} They report that Indonesia has ‘the largest number of companies controlled by a single family’ (p. 107), and such family takes control of at least four companies on average.
A study by Holderness and Sheehan (1988) found that, in most cases, majority shareholders are involved directly in the firm's management. They argued that 'majority shareholders do not merely monitor management teams, they lead them' (p. 319). This suggests that concentrated ownership implies intention on the part of these owners to be highly involved in the company's affairs.

La Porta, Lopez-de-Silanes and Shleifer (1999) and Claessens and Djankov (1999a) points that in most family owned firms, members of the family actively participate in management. In such firms board members are also the members of the family or relatives of the majority owners. In this situation, the interest of board members is aligned with that of majority shareholders. Therefore, combining block shareholdings by certain groups and nominating related persons as a member of a board could be expected to have a profound impact on effective monitoring. As this can reduce the agency costs, the involvement of majority owners in the board is expected to improve firm's performance. Therefore, all else being equal, among private-domestic firms,

$$H_{2a} \quad \text{Corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in the supervisory or management board's membership.}$$

In the absence of an effective market for corporate control in Indonesia, it might be argued that board monitoring could provide better functionality in maximising shareholders' value. In other words, effective monitoring by the governing board substitutes for other mechanisms external to the firm. However, not all firms experience the same level of agency conflict, and, hence may require different levels of internal monitoring by the board. One of the major issues in this regard is the composition of the board of directors that will determine the level of monitoring activities. In agency theory, the conflict-resolving role of outsider board members (Fama 1980; Fama & Jensen 1983b) is deemed to add value to the firms through providing knowledge and monitoring skills.

\[35\] A study by Morck, Shleifer and Vishny (1988) found that Tobin's Q measure of firm performance increases when founding family holds one of the positions of directors or CEO for firms incorporated after 1950.
However, in several studies that deal with board composition, and in particular the role of outside directorship and firm performance, the findings are not conclusive. A study by Booth and Deli (1996) found a negative relationship between the number of outside directors and the firm’s growth performance. Agrawal and Knoeber (1996) investigated various corporate control mechanisms, and found that firm performance is actually reduced when more outsider directors serve on the board, while Subrahmanyam, Ragan and Rosenstein (1997) found that abnormal returns are negatively related to the proportion of independent outside directors on the boards of bidding banks. The result of these studies suggests that the presence and composition of outsider or independent directors does not necessarily improve firm’s performance. This issue remains as an interesting field for further empirical study.

Previous studies in board composition follow the common practice of dividing directors into three categories (Bhagat & Black 2000, p. 2) as follows,

‘[i]nside directors (persons who are currently officers of the company), affiliated directors (relatives of officers; persons who are likely to have business relationships with a company, such as investment bankers and lawyers; or persons who were officers in the recent past) and independent directors (outside directors without such affiliations)’

However, this categorisation was based on the single tier board prevalent in the Anglo-Saxon countries where the CEO may also occupy the chairman position of the board. In the two-tier board regime, such as for companies in Indonesia where the position of management and supervisory boards are clearly separated, this categorisation could be applied with slight modification. In this study an affiliated board member is identified as an owner-related board member who is a relative of a shareholder or has personal ties to a company and/or controlling shareholders. A non-affiliated board member is an independent board member who does not have such affiliations, or whose only affiliation with the firm is board membership.

The 1995 Company Law (article 94) stated that every publicly listed company in Indonesia should have a minimum of two supervisory and management board mem-

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bers. The listing rules by the Jakarta Stock Exchange (2000)\textsuperscript{37} regulate that the number of independent supervisory board members should be proportionally based on shares held by non-controlling shareholders and at least 30 per cent of a company's supervisory board members should be independent. The term “independent board member” in this regulation refers to one who has no affiliation with controlling shareholders and is elected by non-controlling shareholders. However, this regulation creates a situation in which supervisory board membership is still dominated by affiliated or owner-related members. Controlling or large shareholders could appoint their relatives or other affiliated individuals to be the majority of board members in order to protect their interests.

The composition of the board, particularly the proportion of owner-related persons to the non-affiliated board members, could influence the effectiveness of internal governance mechanisms, since the formal position of the owner-related board members allows them to vote collectively in representing their financial stake in a company\textsuperscript{38}. The basic argument is that these board members have legitimate power and, within this context, the ‘power involves the ability to produce intended effects in line with one’s perceived interests’ (Pettigrew & McNulty 1995, p. 851). Thus, higher proportion of owner-related members of a board could be seen as allowing large shareholders to exercise a tight monitoring role over time. Additionally, this type of owner appointed and controlled majority of the supervisory/management board makes them highly involved in all key decisions. This will lead to lowered agency costs and may positively affect the firm’s performance. Therefore, all else being equal,

\textsuperscript{37} However, this rule is not relevant to this study, as this regulation should be effectively applied as of July 1\textsuperscript{st} 2000. The implementation of this regulation will actually take place after the end of financial year 2000, which marks the conclusion of the present study.

The Indonesian Code for Good Corporate Governance (2000) also stipulates that at least 20% of supervisory board must be independent of the directors and controlling shareholders and must hold no interests which may impair their ability to perform duties impartially. However, at this stage the code is not a mandatory instrument (Tabalujan 2002a).

\textsuperscript{38} Following Claessens, Djankov and Klapper (2003) this study did not distinguish individual family members and uses the family group as a unit of analysis.
Among companies with the owner involved in board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of the board is high.

In the majority of companies owned by a family, the holders of the largest block of shares are also involved in managing the company's affairs and could be called owner-managers (e.g. Shleifer & Vishny 1997; La Porta, Lopez de Silanes & Shleifer 1999). According to Jensen and Meckling (1976) owner managers with significant shareholdings have the incentive to be involved in the company's control and this would result in reduced "on the job consumption" and a greater convergence of interests between the principal and the agent. Therefore, all else being equal, it is expected that,

Majority ownership firms will exhibit a higher incidence of owner involvement measured by the proportion of owner-related board members to total number of board members, than will the dominant and dispersed ownership firms.

The Company Law (1995) requires every limited liability company in Indonesia, including listed companies, to have a supervisory and management board. Supervisory board assumes the function of supervising and monitors board of management activities. The management board is responsible to manage and represent the company in its daily operations and perform all of the executive roles. However, the association between firm performance and owner involvement in the supervisory or management board in a two-tier board system has been subject to little research. It is argued on the basis of the above discussion that the involvement of an owner-related board membership should be reflected in greater alignment of interests between management and shareholders.

3.2.3 Company’s Affiliation

The existence of ownership concentration, particularly for Asian companies that are controlled by families, is usually followed by the practice of engaging with business
groupings. Firms that share an ultimate owner may also share internal capital, labour and product sources in the same way as a business groups do. In some countries (e.g. Japan and Korea) the practice of connecting autonomous firms through equity linkage is frequently found. Kock and Guillen (2001) argue that business groups are a common type of enterprise in late-developing countries. Accordingly, they argue that ‘the timing and pattern of industrialisation have direct consequences for the ways in which firms acquire capabilities, how growth via diversification takes place, and the type and sequence of organisational structures that are adopted’ (p. 84). A company’s affiliation through equity ownership (e.g. pyramidal holding) might be seen as a response to the need of accommodating corporate growth.

The organisational arrangement by which one company relates to another through equity ownership usually depends on the existence of business groups. The practice of these cross-shareholdings among companies within business groups is achieved through the involvement of the companies’ large shareholders. In the case of a family-business group, the families usually establish a holding company to control other companies that are affiliated to the group. Although all shareholders in a company receive pecuniary benefits (i.e. dividends) in proportion to their ownership stake, controlling shareholders might have extra benefits from enjoying higher control over a company. Through their involvement, they will have more information and will be able to influence company decisions: for instance, in allocating the fraction of corporate assets to subsidiaries.

Another argument on the benefit of intra-company ownership linkage within business groups is the existence of an internal capital market among its constituent firms. In this regard, a company’s affiliations might be seen as advantageous to the efficient allocation of capital to compensate for imperfect sources of financing from the capital market. A study by Maksimovic and Phillips (2002) of firms in the US from 1974-1992 suggests that conglomerate firms allocate their resources efficiently across their segments. They also argue that demand shocks faced by a segment of

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39 The holding company had ‘two common features, ownership is concentrated and outside shareholders, at different stages and to various degrees, have suffered equity dilution’ (Wright et al. 2003, p 267).
conglomerate firms affect the growth rates of other segments, and do so 'even in the absence of agency costs and financial market imperfections' (p. 723).

The prevalence of business groups and subsidiaries listed in the Indonesian capital market make it relatively easy to observe their impact on corporate governance practices. Given the illiquid capital market and thin trading volume in this country\textsuperscript{40}, sole reliance on the market for financing seems to be ineffective for companies. Further, the desire of the founding family owners to retain their majority control of a company would also result in their being reluctant to sell additional shares to the market. Consequently, internal capital markets, inside a group but outside the firms, could be seen as the more effective way to alleviate market failures in providing financing needs for corporate growth.

Leff (1978, p. 673) defines a business group as 'a group of companies that does business in different markets under a common administrative and financial control' and its members are 'linked by relations of interpersonal trust on the basis of a similar personal, ethnic or commercial background'. The indirect ownership of a business group through the pyramiding of share ownership in affiliated companies leaves them under a business group's control. In this way, large shareholders can maintain their control through a chain of ownership and have greater incentives and means to influence a company's business decisions. Given the imperfect markets for finance and professional managers in developing countries, business groups could be seen as providing a company with internal capital and labour markets. Through its holding companies, a business group could also promote sharing resources and allocate capital efficiently between companies within a group. Further, a business group has the ability to promote good relationships with other parties outside the group (e.g. relationship banking) that may improve access to financing for firms and secure other critical resources. The abovementioned factors suggest that affiliated companies

\textsuperscript{40} The equity market capitalisation of Indonesia in 1997 was about 21.7\% of the country's GDP in comparison to Malaysia, 132.3\% of its GDP for the same year (Husnan 2001).
could reduce transaction costs significantly, create value, and to increase the firm’s performance. Therefore, all else being equal,

\[ H_{3a} \] Affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.

\[ H_{3b} \] Majority ownership firms will exhibit a higher incidence of affiliated companies than those of dominant and dispersed ownership firms.

\[ H_{3c} \] Among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.

### 3.2.4 Firm Size and Time Specific Effects

The following variables may affect the relationship between ownership, monitoring activities and performance. As a result, this study includes them in the models as control variables.

#### 3.2.4.1 Firm Size

Previous research has shown that firm size is an important factor in the study of corporate governance. Kole (1995) believes that different results reported in previous studies that analyse the relationship between ownership structures and performance are due to different samples employed. In their study on the performance of the largest family-controlled corporations in France, Jacquemin and Ghellinck (1980) documented the importance of controlling the firm size effect factor. They argue that differences in ‘control type can be only indirectly exercised, through the differentiated effects of the firm’s structural features upon it performance’ (p. 82).

Another argument for the importance of observing the impact of a firm’s size derives from the fact that, to some extent, larger firms could have an advantage over smaller ones. For instance, Pfeffer and Salancik (1978) argued that larger firms have far more influence over their environments than do smaller firms. Further, they believed that
larger firms are more likely to gain support in the form of critical resources from other stakeholders. These factors leave larger firms with access to such resources and make it easier for them to overcome financial problems, even in time of financial distress.

This study observes the effect of differences in firm size on the relationship between variables employed. Specifically, it will use firm size as a control variable to determine to what extent this variable matters in the relationship between ownership structures, monitoring by controlling owners and company affiliations and performance.

3.2.4.2 Financial Crisis

It is important for the researcher to study the interaction between the characteristics of the corporate sector and developments in one country with its institutional environment. In this regard it is important to observe the impact of the financial crisis on the corporate sector in Indonesia\(^\text{41}\). In referring to financial crisis, Claessens, Djankov and Xu (2000, p.24) argue that ‘one way to assess the relative importance of external financial shocks and underlying weaknesses would be to compare the operational performances of firms that had different exposures to these financial shocks’. However, the impact of crisis may differ across firms as delineated in the hypotheses.

Recent study by Claessens, Djankov and Klapper (2003) on the impact of crisis on corporations in East Asian countries reports that firm ownership structure does matter\(^\text{42}\). Specifically, they contend that a company controlled by management/family groups was less likely to go bankrupt during the crisis. The existence of family ownership could be seen as an important factor in the resolution of financial distress, since bank and family related firms may have access to preferential sources of external credit. The importance of group affiliation and family connections in Indonesia, suggests that companies falling in this category will have informational advantages

\(^{41}\) Chakrabarti and Roll (2000) document that six months following July 2\(^{nd}\) 1997, Indonesia lost 71% of its stock market value in dollar terms.

\(^{42}\) This study also reports that corporate sector in Indonesia characterised by the highest ownership by families (72%) in comparison to other countries in the region.
and non-market based resource allocations. Further, group-affiliated firms can more easily renegotiate their terms of credit to reduce the costs of financial distress.

Most business groups in Indonesia have been claimed to be heavily diversified. Stein (1997) argues that diversified firms can offer the benefit of improving capital allocation, particularly in emerging markets (Khanna & Palepu 2000). However, a study by Todd (2002) on the impact of corporate diversification on performance during the crisis proves that this benefit could disappear in a time of crisis. His study reports that diversified firms, which characterise most business groups in East Asian countries, 'inefficiently support distressed industries with resources from relatively stable industries' (p. 218).

3.3. Conclusion

This chapter has described the development of operational hypotheses, based on key propositions presented in section 3.2. A summary of these hypotheses is presented in table 2, followed by research models to describe the relationship between variables in the study (figure 1). The model of governance structure and performance linkages in this figure will serve as the basis for developing variable measurement and will be discussed in the following chapter.
Table 2: Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1a:</td>
<td>All else being equal, corporate performance among all companies, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures.</td>
</tr>
<tr>
<td>H-1b:</td>
<td>All else being equal, among private-domestic companies, majority-ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings.</td>
</tr>
<tr>
<td>H-2a:</td>
<td>All else being equal, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in supervisory or management board’s membership.</td>
</tr>
<tr>
<td>H-2b:</td>
<td>All else being equal, among companies with the owner involved in board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of the board is high.</td>
</tr>
<tr>
<td>H-2c:</td>
<td>All else being equal, majority ownership will exhibit a higher incidence of owner involvement, measured by the proportion of owner-related board members to total number of board members, than will the dominant and dispersed ownership firms.</td>
</tr>
</tbody>
</table>
Table 2: Summary of Hypotheses (continued)

H-3a: All else being equal, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.

H-3b: All else being equal, majority ownership firms will exhibit a higher incidence of affiliated companies than those of dominant and dispersed ownership firms.

H-3c: All else being equal, among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.

Economies of scale and market power, measured by firm size, and the Asian financial crisis, measured by the time specific effect, will have differential impact on the relationships among ownership structure, owner involvement in supervisory/management board, degree of owner involvement, company affiliation and firm performance.
Figure 1a: Model of Corporate Governance/Firm Performance Linkages
Figure 1b: Model of Corporate Governance/Firm Performance Linkages and Firm Size Factor
Figure 1c: Model of Corporate Governance/Firm Performance Linkages and Time Specific Effect

Note: BC = Before Crisis (1994-1996)
AC = After Crisis (1998-2000)
Chapter 4: Research Design

4.1 Introduction

In this chapter, all of the variables in the study are defined and the measurement is elaborated, based on the model specified in the previous chapter. This is followed by description of the data source for each variable. All of the data are sourced either from the Indonesian Capital Market Directory (ICMD), the Indonesian Business Data Center (PDBI) or the CIC consulting group (CIC). The data used in this analysis consist of seven years of observations for all of the non-financial listed companies in the Jakarta Stock Exchange (hereafter the JSX) over the period from 1994 through 2000. The observation period for this analysis was chosen to include the most recent data available at the time this project was commenced and to accommodate the time specific effect of economic crisis.

The remainder of the chapter is organised as follows: first, descriptions of all variables in this study and their measurement; second, the construction and sources of the data, followed by the adequacy of the data sets; and finally the methodology utilised in this study is presented, followed by concluding comments.

4.2 Variable Definition

The relationship between ownership concentration and economic performance need not be uniform (Fama & Jensen 1983a; Morck, Shleifer & Vishny 1988; Shleifer & Vishny 1997). This perhaps explains why previous empirical studies about the relationship between ownership structure and firm's performance have yielded conflicting results. From a methodological point of view, Demsetz and Villalonga (2001) argued that these results are partly accounted for by the measurements used by re-

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43 Indonesia has two stock exchanges: the Jakarta Stock Exchange (JSX) and the Surabaya Stock Exchange (SSX). Each is a licensed exchange operated by a limited liability company. The JSX by PT. Bursa Efek Jakarta (BEJ) and the SSX by PT. Bursa Efek Surabaya (BES). The JSX is located at the capital city (Jakarta) and SSX is located in the second largest Indonesian city of Surabaya. The SSX is much smaller than the JSX in terms of market capitalisation (Tabalujan 2002a). Some of the companies listed in the JSX are also listed in the SSX.
searchers. They further propose three conceptual issues to explain the differences in results of the previous studies as (1) the measurement of firm performance, (2) the measure of ownership structure used, and (3) whether the endogeneity of ownership structure is taken into account in the estimation of the effect of ownership on performance (p. 211). In a corollary, Kole (1995) rejected the possibility of conflicting results being due to differences in sources of data used by researchers. It is apparent that any researcher should clearly define the measurement of the variables in the study of ownership-performance relationship in order to obtain a more valid result.

The endogeneity problems in empirical governance research (section 2.6.3) have been a growing concern because they are considered to be significant although not fatal (Denis, 2001). Borsch-Supan and Koke (2002) further elaborate the importance of addressing endogeneity problems in empirical studies of corporate governance. They emphasise the issues of "reverse causality" by examining previous studies in ownership structure and performance relationship from econometricians' point of view. For example, they argue that "...the direction of causality between ownership structure and performance is not clear: concentrated ownership can improve firm performance via better monitoring, but well-performing firms could also attract investors" (p. 297). In a similar vein, Kole (1996) also observes that the causality between ownership and performance operates in the opposite direction. Himmelberg, Hubbard and Palia (1999) also support this issue by stating that 'both ownership and performance are determined by similar (observed and unobserved) variables in the firm's contracting environment' (p. 356). In general, researchers in this area argue that endogeneity is the most serious problem in studies on corporate governance and, hence, should be considered with caution.

\[43\] From the view of econometricians, Borsch-Supan and Koke (2002) argued that this problem is caused by (a) sample selectivity aspects, (b) missing variables and (c) measurement errors.

\[45\] Kole (1995), for instance, proves that the contradictory findings of Morck, Shleifer and Vishny (1988) and McConnell and Servaes (1990) on the relationship between the ratio of market to book asset value and managerial ownership were not induced by differences in the sources of ownership data.
4.2.1 Dependent Variable: Firm’s Performance

As discussed in Chapter two (section 2.6.2) previous empirical studies utilise two types of performance measures, accounting profit and Tobin’s Q, to observe the relationship between ownership and performance. As an indicator of performance Tobin’s Q is computed as the market value of debt plus the market value of equity divided by the replacement cost of all assets. The use of this indicator for the study on publicly listed companies in Indonesia is almost impossible since only a few of these companies issue debt securities. For example, at the end of 2000 only 31 companies have their corporate bonds listed on the exchange, which is less than 10 per cent of all companies listed in the capital market. Further, information needed for calculating the replacement cost for assets was also not available.

In regard to the use of accounting profit as a measure of performance, Joh (2003) highlighted its advantage over other performance indicators in the context of developing countries. He argued that accounting profitability is likely to be a better performance measure than stock market based measures, due to market inefficiencies in developing countries. Mosman et al. (1998) also show that a firm’s accounting profitability is more directly related to its financial survivability than its stock market value. Potential problems arising from the use of accounting performance indicators are due to poor implementation of accounting standards in some countries. However, this is likely to be a smaller problem in this study compared with cross-country studies as all firms in Indonesia are subject to the same accounting standards\textsuperscript{46}. Based on these arguments, the intended study will utilise accounting profitability as a measure of firm performance.

In this study, two measures of firm performance are derived from accounting rate of return, namely Return on Assets (ROA) and Return on Sales (ROS). Return on Assets focuses on overall performance of the firm and reflects the annual measured re-

\textsuperscript{46} Indonesia has adopted ‘21 International Accounting Standards’ (Saudaragan & Diga 2000) in 1994 and the Capital Market Supervisory Agency of Indonesia (BAPEPAM) accepted this promulgation in the same year and made them mandatory for all publicly listed companies. BAPEPAM is the Indonesian equivalent of the Securities and Exchange Commission (SEC) in the United States (Capital Market Law 1995, article 3 (2)).
return to the historical value of investments a firm has made. For this reason, ROA is measured as net income divided by total book value of assets. The use of Return on Sales, as a second measure, is aimed at avoiding the effects of differential asset valuation methods across firms, and the impact of new investment and depreciation (Li & Ye 1999). Claessens, Djankov and Lang (2000) also used this measure especially to measure firm’s efficiency prior to the crisis in nine East Asian countries. It is defined as sales minus cost of goods sold and operating expenses as a ratio of sales. Another advantage of this measure is that it is not influenced by the liability structure of the corporation, as it excludes interest payments, financial income, and other incomes or expenses.

4.2.2 Independent Variable: Ownership Structure

Ownership structure refers to the configuration of shareholdings of individuals or organizations in a company. One of the primary measures of ownership structure in the study of governance is the distribution of share ownership (i.e. percentage held), measured by the ratio of shares held by owner(s) to total number of company shares. The percentage level of shareholding in a company will determine how the firm is owned and how authority is distributed among owners. Thus, it will serve as the basis to determine the concept of control and power within a company. Short (1994) argues that most of the previous empirical studies which differentiate between owner controlled and management controlled firms (see table 1, section 2.6.2) are based on a percentage ownership criterion. However, Cubbin and Leech (1983) argue that this simple dichotomy took no account of the differences in shareholding dispersion which exists between firms. The study of ownership, therefore, should focus on the level of shareholding dispersion of the firm before making comparisons between firms.

A recent study by La Porta, Lopez-de-silanes and Shleifer (1999) found that ownership concentration is extremely high around the world, suggesting that concentrated ownership is universal. In emerging economies, ownership concentration is more

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17 The Indonesian Financial Accounting Standard requires that fixed assets should be reported at historical cost and inventories based on the lower of cost or net realisable value. (Ikatan Akuntan Indonesia 1998).
pronounced. Claessens, Djankov and Lang (2000) reveal that more than 40 per cent of publicly traded firms in nine East Asian countries, except Japan, have a dominant owner that is a family. Table 3 summarises information from the above study for publicly listed companies in Indonesia.

Table 3: Characteristics of Publicly Listed Companies in Indonesia

<table>
<thead>
<tr>
<th>Means of Enhancing Control:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyramidal ownership with ultimate owners</td>
<td>*</td>
</tr>
<tr>
<td>Cross Shareholding</td>
<td>1.3%</td>
</tr>
<tr>
<td>Controlling owner alone</td>
<td>53.4%</td>
</tr>
<tr>
<td>Management by the controlling family</td>
<td>**</td>
</tr>
<tr>
<td>**</td>
<td>84.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concentration of Control (20% cut-off point)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Widely held</td>
<td>***</td>
</tr>
<tr>
<td>Family</td>
<td>*</td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Widely held financial</td>
<td>***</td>
</tr>
<tr>
<td>Widely held corporation</td>
<td></td>
</tr>
</tbody>
</table>

* The highest among the nine Asian countries
** Among the highest within the nine Asian countries
*** The lowest among the nine Asian countries

Source: Extracted from Claessens, Djankov and Lang (2000, pp. 92-103)

Table 3 exhibits that Indonesia is amongst the countries in the Asian region that have companies characterised by highly concentrated ownership and are mainly family controlled. This study also reveals that most corporations in Indonesia exercise their control through pyramidal structures (also called parent-subsidiary structure) and this is the highest among nine Asian countries. A subsequent study by Claessens et al. (2000) also found that as much as 67.5 per cent of corporations in Indonesia are owned by top five shareholders, with the largest shareholders owning around 48.2 percent of these companies and only 0.6 per cent of them are widely held.

Concentrated ownership in the hands of controlling shareholders might give them the power to control corporate resources and they might try to treat themselves preferentially at the expense of other stakeholders (Shleifer & Vishny 1997; La Porta, Lopez-de-silanes & Shleifer 1999). On the other hand, large shareholders can pressure man-
agers to align decisions to the interests of shareholders and increase the company's economic performance (section 2.4.4). Since the presence of controlling (large) shareholders is associated with both costs and benefits to the firm, the net effect of controlling shareholders on corporate performance is an empirical issue.

As discussed in Chapter 2 (section 2.6.3), examining ownership in terms of the percentage owned by shareholders may fail to provide valuable insights into the relationship between performance and ownership structure and control structures. A review of empirical studies on the ownership and performance relationship by Short (1994) also reveals that the majority of previous researchers in this field classify ownership of the firms by percentage of shareholdings utilising dummy variables. This study follows a similar pattern in the use of dichotomous (dummy) variables to classify firm ownership type to observe the relationship between ownership and performance.

4.2.2.1 Ownership Structure: Data Description

Following Thomsen and Pedersen (2000), in this study the share and identity of the largest owner is considered to be a fairly good measure of ownership structure. Dharwadkar, George and Brandes (2000) argue that the ability to collect data concerning dominant owners and ultimate ownership patterns, as well as dominant owners' relationship to top management will play an important role in assessing the ownership-performance relationship in many emerging economies. Given the common feature of a pyramidal ownership structure in Indonesia (table 3), this study aims to identify the ultimate owners of a company through the chain of ownership structure.

The officially reported immediate ownership from the ICMD publications was used as the basis to trace the ultimate owner. It is then cross-checked through both PDBI and CIC publications to determine the company's affiliation and hence its ultimate owners. Following Claessens et al. (2000) 'ultimate owner' is defined as the shareholder who is not controlled by anybody else and who has at least 5 percent of the control rights of the company. If a company does not have an ultimate owner, this study classifies it as a dispersed ownership. Although a company can have more than
one ultimate owner, this study focuses on the largest ultimate owner or the one who has the most voting rights.

Following Claessens, Djankov and Lang (2000), in the case of private-domestic owned corporations, this study does not distinguish individual family members and uses the family group as unit of analysis. By identifying the name under which the shares are registered, this study delineates their family affiliation. Collective shares owned by individual family members will be treated as a family ownership. Control over the company is measured as equal to the fraction of the firm’s voting rights, measured as percentage of shares own by the ultimate shareholder(s). To measure the degree of control, this study combines shareholdings registered the name of the majority shareholder and other related shareholdings (i.e. through shares held by an individual and family or companies that are under his/her control).

As has been discussed in Chapter 2 (section 2.6.3) the use of a single category of ownership may not capture all effects of the ownership/performance relationship. Accordingly, Short (1994) suggests that researchers need to consider a more refined ownership variable through the use of several cut-off points. She argues that this procedure enables the researcher to observe the ownership/performance relationships in more detail within various ranges or classifications of ownership levels. Following this argument, this study classifies shareholdings into three categories: majority, dominant and dispersed ownership structure (table 4).

Since all firms in the majority ownership category have ultimate owners with more than 50 per cent ownership in a firm, it is possible to distinguish their owner identity into another sub-group. This group of firms (majority ownership) will be divided into three sub-groups: (a) private-domestic firms, firms that owned by majority private-domestic owners, (b) foreign-owned firms, and (c) government-owned firms. This procedure is consistent with differentiating the identity of a company’s large or controlling shareholders. Foreign and government-owned companies will be identified using a similar cut-off point (i.e. > 50 %) based on ownership data provided by ICMD. This percentage amount of ownership is considered to provide the owners with adequate control to influence a company’s operations.
In the case of private-domestic owned firms, ownership by families (majority ownership) is aggregated to include family members beyond their surnames (of blood and marriage types)\(^{48}\) and families are assumed to own and vote collectively. This category includes companies owned by a foundation (yayasan/trust) because it reflects the will of a personal founder and gives the family (heirs) a degree of control. These assumptions were based on the fact that cultural as well as institutional differences influenced the pattern of ownership structure in this country. The company is then classified according to the identity of ultimate owners based on data extracted from the ICMD, CIC and PDBI publications.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority Ownership</td>
<td>One owner (person, family, company) owns &gt; 50%(^{49}) or a majority shares of the company (including foundation/trust ownership)</td>
</tr>
<tr>
<td>Dominant Ownership</td>
<td>One owner (person, family, company) owns a sizeable (voting) share (20%(^{50}) &lt; share ≤ 50%) of the company</td>
</tr>
<tr>
<td>Dispersed Ownership</td>
<td>No single owner owns more than 20% of the company’s shares</td>
</tr>
</tbody>
</table>

*Source: Adopted with modification from Pedersen and Thomsen (1997)*

\(^{48}\) The Capital Market Law (Article 1 1995) defines ‘family affiliation’ as a ‘family relationship by marriage’ and ‘family relationship by descent’ both to the second degree, horizontally as well as vertically (detail is provided in footnote 51).

\(^{49}\) Under the ‘simple majority rule’ based on a ‘one-share-one vote’ mandated by the Company Law (1995) this figure effectively gives the owners majority voting rights in determining a company’s affairs, including the election of both supervisory and management boards. A more recent study by Nenova (2003) also utilises the 50% cut-off point to measure voting power as the total value of all votes composing the control block in her study involving 30 countries around the world.

\(^{50}\) According to the Capital Market Law (Article 1 1995) a person that directly or indirectly holds at least twenty percent of the voting rights of a company’s issued shares is called a “substantial shareholders”. Previous researchers have also used the 20% cut-off point of ownership (e.g. La Porta, Lopez-de-Silanes and Shleifer (1999) for companies around the world; Claessens, Djankov and Lang (2000) for companies in nine Asian countries).
4.2.3 Independent Variable: Monitoring

The existence of a two-tier board system in Indonesia might be seen as allowing the supervisory board to be more independent in overseeing executives in ratifying company’s decisions (section 2.7.1.3). The reason is that there is no overlap of membership between the two boards (i.e. CEO serves as the chairman of the board of directors as in the single tier board regime). The agency theory perspective (Fama & Jensen 1983a) conceptualised a decision system through a distinction between “decision-management” and “decision-control” to overcome agency problems. From the view of two-tier board it could be seen that the decision-management activities (initiation and implementation) are the responsibility of the board of executives. The responsibilities of controlling management decisions (ratification and monitoring) are delegated to the supervisory board. Thus, a clear separation of each board’s responsibilities in a two-tier board should lead to an effective system for decision control.

Shleifer and Vishny (1986) argue on the importance of monitoring by holders of large share blocks through involvement in the supervisory board. Since large shareholders invest a significant share of their wealth in a company, they do not want to risk losing control and will have strong incentive to monitor managers and exert more power to enforce their interests. This should increase the inclination of managers to maximise shareholder value. Large equity stakes can also achieve this cost effectively due to their monitoring expertise. Claessens and Djankov (1999a) argue that in most family owned firms in Asia, members of the family actively participate in management. In relation to majority shareholders in Indonesia where there is family involvement, most such companies appointed their family members to the supervisory/management board (section 2.4.3).

This study defines monitoring activity as a control mechanism to exercise power or authority within the corporate governance system to ensure that the company is directed and governed with consideration for all the various interested parties. Specifically, it relies on the monitoring performed by the supervisory board as an internal mechanism from the view of convergence-of-interest hypothesis. Due to specific features of internal board structure in Indonesia (section 2.7.1.3), there is a possibility that the owner of a company also involved in management board. Consequently, this
study needs to identify each member of a company’s supervisory and management boards and determine their affiliation to the large shareholders.

The number and the name of supervisory and management boards member is identified for each company on a yearly basis from various publications of ICMD. Annual data were collected because there is a possibility that the company might change its board members, as mandated by the annual general meeting of shareholders. Reconciling this information to the PDBI and CIC publications, provides information on whether members of supervisory or management boards have a (family) relationship to the owners. This study classifies a member of the board as ‘owner related’ if he/she serves as the member of this board and has family ties\textsuperscript{51} with the controlling shareholders. ‘Non-owner related’ board membership is defined as where she/he is on the boards and has no family ties to the owner of the firm (Denis & Denis 1994).

The effect of this variable will be observed only for non-foreign and non-government owned companies in the sample. A dummy variable was employed to identify the sample firms, set equal to one if a firm is classified as having owners’ related supervisory/management board’s membership and zero otherwise. For all of the firms that have been categorised as “owner related” board membership, this study will measure the impact of their degree of involvement on performance. This study will employ the composition (in a percentage point) of owner-related members to total number of the company supervisory or management board members to measure their degree of involvement in these boards. The firms are categorised into four (quartile) groups based on the degree of their owner involvement on each boards by using categorical variables.

\textsuperscript{51} The Capital Market Law (article (1) 1995) identifies family ties to include: (a) family relationship by marriage: a husband or wife; a mother- or father-in-law, and son- or daughter-in-law (1\textsuperscript{st} degree, vertical); a grandfather- or grandmother-in-law, and a grand-son or grand-daughter-in-law (2\textsuperscript{nd} degree, vertical); a brother- or sister-in-law (2\textsuperscript{nd} degree, horizontal); and a husband or wife of a brother- or sister-in-law (2\textsuperscript{nd} degree, horizontal), and (b) family relationship by descent: a parent or child (1\textsuperscript{st} degree, vertical), a grandparent or grand child (2\textsuperscript{nd} degree, vertical); a sibling (2\textsuperscript{nd} degree, horizontal)
4.2.4 Independent Variable: Company Affiliation

A study by Chung (2001) revealed that the institutional environment serves as the most crucial factor in the establishment of corporate groups, rather than any other organisational form. Previous empirical studies in East Asian countries (e.g. Claessens, Djankov & Klapper 2003; Claessens et al. 2000; Claessens, Djankov & Lang 2000) reported the dominant role played by family-business groups in these countries. Importantly, business groups owned their affiliated companies through the chain of pyramidal shareholdings. In the case of Indonesia, one reason for such a pattern of ownership structure is to overcome the limited role of the capital market in providing financing.

The main source of external finance in Indonesia is bank loans\(^{32}\). A study by Patrick (2002) found that there are close relationships between business groups and banks (section 1.1.1). Further, Agung (2000) argues that publicly listed firms in Indonesia face financial constraints and agency costs in raising external funds. The above study suggests that the agency costs vary across firms according to whether the firms are members of large business groups. In Indonesia, where most of business groups own banks, it follows that firms affiliated to these groups will also be affiliated to banks.

Leff (1978) argues that the formation of business groups in less developed countries is due to the inefficiency of financial markets. Capital markets in these countries not only fail to channel savings to investors, but also are unable to allocate existing resources effectively. Because of this, business groups can serve as an organisational mechanism to facilitate the pooling, mobilising and allocating resources available across businesses within the group.

Khanna (2000) argues that an understanding of the definition of business groups is itself important in any research utilising this construct. Business groups are a special type of enterprise system existing in almost every market economy. Chung (2001, p. 721) defines a business group as 'a set of legally independent firms that link to each

\(^{32}\) The average debt-equity ratios of corporate sector in Indonesia (1992-1997) was about 244% (Lukviarman 2001).
other through various economic and social relationships, and operate in a coherent manner. The above writer also argues that business groups do not necessarily engage in diversified activities in various industries, since in the early stage of group growth they are likely to have all their associated firms in the same industry. The important characteristic, therefore, is that each firm within a group is legally independent through its own management and identity, and is tied with others in the group by certain relationships (i.e. cross shareholdings).

Identification of a company affiliation with business groups was based on the ultimate owner of each company in the data set. The process started from information on shareholders obtained from the ICMD publication each year. The names of shareholders (i.e. company, foundation, individuals) were then traced to other sources of data from the CIC publications to obtain the company’s affiliation and historical background. It is then reconciled to the PDBI publications on conglomeration and business grouping in Indonesia, to determine whether a company is affiliated with one or more business groups. Affiliated firms are identified by a dummy variable that equal one if the firm in the data set is affiliated to one or more business groups and zero otherwise.

4.2.5 Control Variables

There has been considerable literature in the study of ownership-performance relationships (e.g. Qi, Wu & Zhang 2000) that mentions the importance of controlling potential confounding effects. This study included control variables, namely firm size and a time specific effect. Firm size may influence company performance in addition to the indirect effects via ownership structure. Time specific effects, due to the 1997 Asian economic crisis, may have provided an exogenous influence on company performance. The inclusion of these variables enables the researcher to control for the effects of variations in institutional features and macro economic performance on the likelihood of either improvement or deterioration on firm performance.

53 Leff (1978, p. 63) refers to a business groups as ‘a group of companies that does business in different markets under a common administrative or financial control’ and its members are ‘linked by relations of a similar personal, ethnic or commercial background’. Khanna (2000) argues that ‘other definitions by academics and regulators similarly emphasise both formal and informal social and economic ties among group affiliates’ (p. 749).
4.2.5.1 Firm’s Size Effects

Short (1994) and Borsch-Supan and Koke (2002) found that majority of empirical studies on the ownership-performance relationship tend to concentrate on samples of large firms, rather than taking a broad cross section of firms of different sizes. Short (1994) also argues the possibility that large owner-controlled firms may perform better due to better quality management, and sampling only large firms may mean that only the most efficient firms are selected. As a result, research outcomes may not be applicable to smaller firms. Such bias was also highlighted by Lawrisky’s (cited in Short, 1994) study on the sensitivity of various measures of management control.

Demsetz and Lehn (1985) argue that firm size is one among three general forces affecting ownership structure of the firm. This view was based on the fact that firm size is generally related to the resources employed in a company’s operations. The larger the firm size ‘the larger is the firm’s capital resources and the greater is the market value of a given fraction of ownership’ (p. 1158). Minority shareholders may feel their ability to intervene in supervising the company is reduced when the company is larger. In this regard, this study assumes that size effect (i.e. economies of scale, market power) needs to be controlled for, in order to isolate ownership effects. These arguments provide an adequate basis to justify the intention of this study to control the effect of this variable.

The firm’s size is measured by median split of the logarithm of book value of total assets in million rupiah. The measure of absolute firm sizes as a natural logarithm of total assets is aimed at reducing the skewness of firm size distribution (Lehman & Weigand 2000). Two sub-categories were constructed based on a median split of the data sets on total assets: large and small companies. Large firms are identified by a dummy variable that equals one if the firm is above the median of natural logarithm of total assets, and zero otherwise. All analyses were conducted for the continuous variable and each size sub-category. Tests were conducted to examine whether the

54 The same measure has been used extensively within this area of research (e.g. Zahra 1996; Ellingson 1996; Evans 2000).
relationship between ownership structure and firm performance is the same across size sub-categories\textsuperscript{55}.

4.2.5.2 Time Specific Effects

Motivated by the impact of the financial crisis on firm performance in Indonesia, this study controls the time specific effect on the ownership-performance relationship. The incorporation of this variable is important as the inefficiency and malfunctioning of corporate governance mechanisms has been pointed out as one of the major factors contributing towards the crisis. Further, Chakrabarti and Roll (2000) argued that the crisis has ‘justifiably engendered theoretical and empirical research attempting to explain the phenomenon’ (p.1). Suto (2003) argues that the high degree of dependency of firms on banking institutions for financing and concentration of corporate ownership in corporate groups and families worsened the impact of the crisis on corporations in East Asian countries. However, little has been done to compare this effect on the ownership-performance relationship.

In order to compare the data set before and after the commencement of the crisis, it is necessary to determine the cut-off period between the two. According to Johnson and Mitton (2003), the beginning of the crisis period in Asia corresponds to the devaluation of the Thai bhat on July 2, 1997\textsuperscript{56}. This date is generally considered as the starting point of the Asian financial crisis. In the case of Indonesia, the cut-off year of 1997 also comes from the fact that by mid-August 1997 the Indonesia rupiah had ‘lost 27 per cent of its value against the US dollar and the Indonesian monetary authorities abandoned the controlled float of the rupiah and were forced to allow it to float freely’ (Tabaluan 2002a, p. 500). It is believed that several problems which existed prior to the crisis were escalated in 1997 their affects on corporations in this country become apparent.

\textsuperscript{55} Similar procedures have been used by previous researchers (e.g. Rediker & Seth 1995)

\textsuperscript{56} Chakrabarti and Roll (2000) also argued that July 2, 1997 was the beginning of the Asian crisis and this date has been generally identified as the first time that a real crisis was apparent.
To take account of the 1997 crisis and its effects, observations of the panel of companies will be partitioned into time frames 'before' and 'after' the crisis, thus allowing for an interaction between environmental changes brought by the crisis and the ownership-performance relationship. By decomposing the data into two panel data sets (1994-1996 and 1998-2000) this study analyses and compares the impact of the crisis on the ownership-performance relationship. It excludes the observations of companies in 1997 because during this year companies faced two different environments and this might create biases in the results.

4.3 Construction of the Data

The data used in this analysis consisted of seven years of observations for all companies listed in the Jakarta Stock Exchange (JSX). In all cases the data were for the end of each financial year during the period of the study in order to be consistent with the use of audited financial statement data. This study observed all non-financial listed companies in the JSX over the period of 1994 to 2000. This observation period was chosen to include the most recent data available at the time this project was commenced. The choice of publicly listed companies was based on the most efficient data available and the presence of audited financial statements.

Four separate types of data were acquired for this study: (1) accounting data for firm's performance and size; (2) data on ownership by shareholders, and (3) the members of both board and management teams of all firms and their relationships with shareholders; (4) data on group affiliation and interconnectedness between members of board, family and management team on every company in the data set.

4.3.1 Sources of Data

Secondary data regarding ownership structure and financial indicators for the period of 1994 up to 2000 was obtained from the ICMD publications. The data for stockholders' involvement in board and/or management team, particularly certain data on the names and immediate holdings of all owners, was obtained from both ICMD and

57 The accounting-based financial indicators are at year-end.
the CIC publications. However, because in Indonesia the use of family names is uncommon\(^{58}\), other secondary sources such as regular studies conducted by the PDBI on conglomerations in Indonesia, were also utilised. This study uses the names of ‘board members’ as the procedure to determine their family relationship with shareholders. In his study on corporate governance in Indonesia, Tabaluan (2002a) follows a similar procedure and argues that ‘although imperfect, this method is reasonable given the limited scope of Indonesian corporate disclosure regulation’ (p. 499). Given the focus of this research this data collection method is considered to be appropriate in the circumstances.

There are other reasons for using this kind of data collection method. The database in various editions of ICMD already contains the information needed for this study, particularly on the major owners and financial statements of the company, as mandated by the Capital Market Law. Other regular publications (the PDBI 1994, CIC 1999) also provide information relevant to this study. These data sources provide greater accuracy, are less expensive and save time because such data is legally published. Most importantly, all sources of data utilised in this study are officially published and available to the public. The process of gathering the data is discussed in the next section.

\(^{58}\) This is partly due to the fact that ‘Indonesia, with population around 210 million, is home to more than 250 ethnic groups with an equally wide variety of languages and regional dialects – and surnames’. As such ‘some Indonesian do not have surnames at all’ (like the Indonesian former presidents, “Suharto” or “Sukarno”) and ‘two individuals may have a family relationship that is not reflected by a common surname’ (Tabaluan 2002a, pp 498-499).
Table 5: Sources of Data

<table>
<thead>
<tr>
<th>Sources of Information</th>
<th>Data Type</th>
</tr>
</thead>
</table>
- Financial performance  
- Company size  
- Company’s affiliation |
| The Indonesian Data Business Center/PDBI (1994) | - Ultimate ownership  
- Owner’s involvement in board membership and their familial relationship to the owner of family business groups  
- Company’s affiliation |
| The CIC Consulting Group/CIC (2000) | - Ultimate Ownership  
- Owner’s involvement in board membership and their familial relationship to the owner of family business groups  
- Company’s affiliation |

4.3.2 Data Construction

The analysis in the following chapter is based on assembled data for 161 publicly traded corporations in the JSX. At the end of the year 2000, there are 290 companies listed in this stock exchange\(^{59}\). As a longitudinal study, it is important to assure that only companies that existed for the entire period of this study are included in the observations (see section 4.3.3). Because of this requirement, this study excludes firms that are either delisted or newly listed during this period. The study, however, included in the observations companies that changed their names during the study period (12 companies), as well as 5 companies that also changed their line of businesses.

The study excluded holding companies that have subsidiaries within the group listed in the same capital market. This exclusion is aimed at avoiding double counting on performance indicators, since holding companies financial statements will include

\(^{59}\) Appendix 3 provides information on the Indonesian Capital Market Characteristics, including the number of listed companies in the JSX and other relevant information.
those of its listed subsidiaries. In addition, according to Claessens et al. (2002) the choices of accounting rules and consolidation methods uses could distort company’s financial statements. Consequently, the inclusion of holding companies in this research might create bias in the analysis. For seven years observation, there are 3 companies that have this characteristic identified through ICMD, CIC and PDBI publications.

The study also excluded firms in the financial sector from the data set since the governance of financial institutions may be completely different from industrial firms (Campbell & Keys 2002). Another reason is that the accounting standards for income and profit for these firms are significantly different from those in the other sectors (Claessens et al. 1999; Lemmon & Lins 2001). Valuation ratios for financial firms are not comparable to those of non-financial firms. This was deemed important since accounting profit rate was to be utilised as a performance indicator.

In addition, following the crisis, most banking and other financial institutions were near collapse. Indeed, Widianto and Choesni (1999) revealed that most banks were already undercapitalised and some even insolvent well before the crisis began. Most the banking institutions after the crisis are managed under the Indonesian Banking Restructuring Agency (IBRA). There were 53 financial related companies in the data set, and after this process there were 161 firms remaining (7 x 161 or 1,127 company year observations) left in the data set.

Most prior studies of ownership structures focussed on immediate ownership based on common shares directly owned by individuals or institutions (e.g. Claessens et al. 2000). According to Fan and Wong (2002), the immediate ownership is not sufficient for characterising the ownership and control structure of East Asian firms, as these

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60 Tabaluan (2002a) states that apart from BAPEPAM, the Central Bank (Bank Indonesia) issue ‘sector-specific regulations which govern the individuals and companies operating in that sector’. This institution ‘issues a host of these regulations governing banks and other financial institutions. Although most of these regulations tend to deal with operational issues unique to the particular business sector, from time to time, they also contain specific provisions which affect corporate governance directly’ (p. 496).

61 Claessens et al. (1999) excluded all of financial related firms in their study, such as: banks, insurance, credit agencies other than banks and securities companies.
firms are generally associated with complicated indirect ownership. As such, this study observes the ultimate ownership of a company in the data set in order to provide broader basis for analysis. This is identified through observing indirect holdings through private firms by private persons when they are reported in the data source. If a corporation or foundation owned a company it was checked further to see who were the majority owners.

As the starting point in the data collection of immediate ownership and the percentage of shares held by the owners, this study use the ICMD publications from 1995 through 2001. This database provides the names of the members of both supervisory boards and boards of management on the previous year. In all cases, this study collected the ownership structure data as of the end of the fiscal year from 1994 through 2000. This is because ownership information typically lags by one year in the ICMD. For example, the 1995 edition of ICMD publication reports ownership data for the year 1994 only. When this project was commenced, the latest available data from ICMD publication is for the 2001 edition which contains the 2000 ownership data.

In the majority of the cases, the principal shareholders are themselves corporate entities, foundations, or financial institutions. The immediate ownership of a company’s owners for each year was identified through the ICMD publication. To trace the ultimate owners, this data was crosschecked through the database from PDBI and the CIC. The same procedure was also used to trace the group affiliation of each company through its ownership chain up to the holding company of the group. In cases where more than one business group jointly owned a company, this study considered such a company to have a group affiliation, regardless of the shares owned by each group.

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62 This data source has been widely used by previous researchers for their studies in Indonesia (e.g. Claessens et al. 2000).

63 Both publications contain information regarding the business founder up to three generation (for a company belongs to a family), the heirs, the prominent figures of every company (especially for a company that employed people other than its family members), and the inter linkage between companies through the chain of ownership.
This study was able to trace all of the immediate owners of foreign companies listed in the Jakarta Stock Exchange. However, ultimate owners could not be traced. It could not be determined whether a member of the supervisory board had a family tie with the majority owners. The study was also unable to ascertain group affiliation of foreign owned companies. There is a possibility of tracing these foreign subsidiaries through other data sources; however, this is a very time-consuming process. Additionally, the use of publications on group affiliation other than the abovementioned sources of data may create bias because the definition of group affiliation differs across countries. There are no superior sources of group information (Claessens et al 2000). Therefore, this study will exclude these companies from the data set for certain analysis that utilises monitoring and company’s affiliation variables.

This study also excludes government or state owned enterprises (BUMN) listed in the JSX for some of its analysis. Government-owned companies in Indonesia were managed under the Ministry of Finance prior to 1996 and the Ministry of State-owned Enterprises after that. The ministry designates the members of a company’s supervisory board as representatives of the government as majority owners. However, in relation to this study, this type of board member has no personal ties (i.e. family relationship) with the owners. There are 126 firms from the data set have been identified as either government or foreign owned corporations.

The period of the study covers the year of 1994 through 2000 with the inclusion of 1997 data, the year when the financial crisis occurred. This time span covers both the prior era of rapid economic growth, and after the crisis period. Combining the data set for these two different periods might create bias due to the different environmental circumstances. In order to control this effect, this study split the data into two panels; prior to the crisis (1994 -1996) and post crisis (1998 - 2000). The exclusion of 1997 data (comprising 161 observations) is aimed at avoiding unnecessary confounding effect in the data analysis, since the crisis started in the middle of that year. This leaves the data set with 966 observations (6 observations for each of 161 companies) comprising 483 observations for each period, before and after the crisis. Table 6 describes of the data utilised in this study.
Table 6: Description of the Data Set

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number of companies listed in the JSX (Initial number of observations)</td>
<td>216</td>
<td>238</td>
<td>253</td>
<td>282</td>
<td>288</td>
<td>277</td>
<td>290</td>
<td>1,844</td>
</tr>
<tr>
<td><strong>Minus:</strong> companies that are either delisted or newly listed during the period (i.e. did not exist for the entire period of 1994-2000)*</td>
<td>9</td>
<td>29</td>
<td>42</td>
<td>64</td>
<td>76</td>
<td>66</td>
<td>73</td>
<td>359</td>
</tr>
<tr>
<td><strong>Minus:</strong> finance related companies (banking, insurance, credit agencies other than banks, and securities companies)</td>
<td>43</td>
<td>45</td>
<td>47</td>
<td>54</td>
<td>48</td>
<td>47</td>
<td>53</td>
<td>337</td>
</tr>
<tr>
<td><strong>Minus:</strong> Holding companies that have a company within a group listed in the same market</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td><strong>Number of companies available for observation</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>161</strong></td>
<td><strong>1,127</strong></td>
</tr>
</tbody>
</table>

* Appendix 11 provides detail of these companies based on governance characteristics.

** 161 observations each year are for those companies which there was data for all seven years.
4.3.3 Adequacy of Data Sets

The sample size, together with effect size statistics (i.e. $E_{\text{ta squared}}$) and alpha level set by a researcher, is an indication of the power of statistical tests (Pallant 2001). In a study involving questions on whether there is a difference in means between the groups, the power of the statistical tests assures researchers that they have correctly identified the differences between groups. In other words, it will provide an indication of the confidence level a researcher can have in the results when he/she fails to reject the null hypothesis. The higher the power, the more confident a researcher can be that no real differences exist between the groups.

Aside from financial companies, this study utilises firm level data that covers almost the entire population of companies listed in the JSX. Fortunately, the large size of the sample in this study permit, by virtue of Central Limit Theorem, use of standard techniques of statistical inference which provide information on the statistical significance of any observed differences. The issue of statistical inference is important in specifying the acceptance level of statistical error in interpreting the result of analysis.

There are 359 observations (table 6) which will be excluded from the analysis since these companies did not survive throughout the period of the study (i.e. newly listed or delisted during 1994 –2000). The elimination of these firms could influence the result of the study due to the survivorship bias. However, the characteristics of these companies (appendix 11) were similar to those firms included in the study and may not create a bias in the result. Therefore, given the number of observations available after the deletion process, the remaining firms in the data sets could be considered as adequate for use in the analysis.

4.4 Methodology

There are various statistical techniques available within quantitative research. Pallant (2001) argues that the choice of an appropriate technique depends on research questions a researcher wishes to address and the nature of the data that have been collected. Following this guideline, this study utilises the univariate analysis of variance
aimed at addressing the questions of whether there are statistically significant differences of performance among groups of companies based on several factors.

The statistical techniques used were as follows. The *t*-tests are conducted for both independent sample *t*-test and paired sample *t*-test in comparing the performance of two groups of companies under observations. The former will be used to assess performance of two different or independent groups of companies. A paired sample *t*-test (repeated measure) is utilised to observe the intervention or event effect of the economic crisis in Asia by comparing two sets of data from different times. To compare the mean scores of more than two groups of companies this study will utilise analysis of variance (ANOVA).

In order to separate the effects of different governance characteristics of firms, observations in the data sets are categorised into several independent groups based on the independent variables (factors) of the study. Generally, observations are compared in regard to:

(a) Different levels of ownership concentration (majority, dominant and dispersed ownership) and different type of owners (private-domestic, foreign and government) within majority ownership structure.

(b) Different levels of monitoring via owners’ involvement and the composition of supervisory and management boards (except for foreign- and government-owned firms).

(c) Differences in company affiliation to business groups – affiliated versus independent firms (except for foreign- and government-owned firms).

(d) Differences in firm size (large versus small firms) for all of the above factors (majority, dominant and dispersed ownership; owner involved/not involved in supervisory/management boards membership; degree of owner involvement in supervisory/management boards; affiliated/independent companies), assuming that some of the variations in firm performance can be explained by this factor.
The performance of the same groups of companies at time 1 (before the crisis) was compared against time 2 (after the crisis) across various independent variables, excluding observations in 1997. For this controlling variable, this study excludes the firms that moved between groups of observations over the two periods. For example, in period $t_1$ company $x$ is identified as belong to the group of companies that have majority ownership, while in period $t_2$ the same company belongs to the group categorises as dispersed ownership (or vice versa). The procedure used to assess the results involved analysing each measure by conducting a cross-category analysis with the combined data, and then repeating this step for each measurement. Table 7 describes construct measurement and variable definition used in the study.

<table>
<thead>
<tr>
<th>Construct Measured</th>
<th>Variable Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td>(a) ROA</td>
<td>Net income divided by total assets.</td>
</tr>
<tr>
<td>(b) ROS</td>
<td>Net operating income divided by total sales/revenue.</td>
</tr>
<tr>
<td><strong>Ownership Structure</strong></td>
<td></td>
</tr>
<tr>
<td>(a) Level of concentration</td>
<td>Percentage of shares owned by ultimate shareholders, including family and related companies.</td>
</tr>
<tr>
<td>(b) Type of concentration</td>
<td>Categorisation of the level of ownership concentration based on type of ownership (i.e. majority, dominant and dispersed).</td>
</tr>
<tr>
<td>(c) Owner Identity</td>
<td>Categorisation of majority ownership based on the identity of its ultimate owner (i.e. private-domestic, foreign and government)</td>
</tr>
<tr>
<td><strong>Monitoring</strong></td>
<td></td>
</tr>
<tr>
<td>(a) Board involvement</td>
<td>Set equal to 1 if owner-related members involved in supervisory/management board and 0 otherwise.</td>
</tr>
<tr>
<td>(b) Board composition</td>
<td>The proportion of affiliated board members relative to total number of supervisory/management board members.</td>
</tr>
<tr>
<td><strong>Company’s Affiliation</strong></td>
<td>A dummy variable coded as equal to 1 if a firm is belongs to a business group and 0 otherwise.</td>
</tr>
<tr>
<td><strong>Firm Size</strong></td>
<td>Firm size as represented by natural log of total assets of the firm in million rupiah.</td>
</tr>
</tbody>
</table>
4.5 Concluding Comments

This chapter has elaborated the definition and measurement of variables, as well as the construction of the data utilised in this study based on the research model presented in the previous chapter. In relation to the operational hypotheses offered in Chapter Three and their related measurements detailed in this chapter, table 8 exhibits the summary of hypotheses and their associated analysis.
Table 8: Summary of Hypotheses and Associated Analysis

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1a</td>
<td>All else being equal, corporate performance, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures.</td>
<td>Ownership Type (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>One-way ANOVA</td>
</tr>
<tr>
<td>H-1b</td>
<td>All else being equal, among private domestic companies, majority-ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings.</td>
<td>Ownership Type (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>One-way ANOVA</td>
</tr>
<tr>
<td>H-2a</td>
<td>All else being equal, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in supervisory or management board’s membership.</td>
<td>Owner Involvement in Supervisory/ Management Board (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>Independent Sample t-test</td>
</tr>
<tr>
<td>H-2b</td>
<td>All else being equal, among companies with the owner involved in board membership, corporate performance, measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of the board is high.</td>
<td>Degree of Owner Involvement in Supervisory/ Management Board (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>One-way ANOVA</td>
</tr>
</tbody>
</table>
Table 8: Summary of Hypotheses and Associated Analysis (*continued*)

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-2c</td>
<td>All else being equal, majority ownership will exhibit a higher incidence of owner's involvement, measured by the proportion of owner-related board members to total number of board members, than will the dominant and dispersed ownership firms.</td>
<td>Cross category between; ownership type and the degree of owner involvement in supervisory board membership (Categorical)</td>
<td></td>
<td>Contingency Analysis</td>
</tr>
<tr>
<td>H-3a</td>
<td>All else being equal, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.</td>
<td>Company Affiliation (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>Independent Sample <em>t-test</em></td>
</tr>
<tr>
<td>H-3b</td>
<td>All else being equal, majority ownership firms will exhibit a higher incidence of affiliated companies than those of dominant and dispersed ownership firms.</td>
<td>Cross category between; the type of company affiliation and ownership type (Categorical)</td>
<td></td>
<td>Contingency Analysis</td>
</tr>
<tr>
<td>H-3c</td>
<td>All else being equal, among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.</td>
<td>Ownership Type (Categorical)</td>
<td>ROA and ROS (Continuous)</td>
<td>One-way ANOVA</td>
</tr>
</tbody>
</table>
Chapter 5: Empirical Results and Data Analysis

5.1 Introduction

In this section the empirical results are presented to answer the questions of interest as discussed in Chapter One. Specifically, based on four propositions, hypotheses presented in Chapter Three were tested examining various governance issues in relation to performance. The model presented in Chapter Three provides an overview of the relationships examined in this study.

This chapter is organised as follows. First, a discussion of the basic assumptions of univariate statistical analysis; second, discussion of descriptive statistics of governance variables in the study and the firms in the data sets; third, insights from the exploratory analysis, and finally, confirmatory analysis through hypotheses testing and results.

5.2 Assumptions of the Statistical Tests

This research involving 161 companies as a subject of analysis for a seven-year period. The study uses a longitudinal data set with the aim of observing the pattern of outcomes across the period of the study. Diggle, Liang and Zeger (1994, pp. 17-23) argued the prime advantage of longitudinal data analysis is its effectiveness for studying change. They further argue that this analysis comprises two components: exploratory and confirmatory analysis. The first analysis involves techniques to explore and visualise patterns in the data, while the later relates to gaining evidence in data to be tested against the hypotheses.

In this study a repeated measures design was employed, where the data are collected simultaneously on each subject across seven consecutive periods. Subjects were assigned into separate independent groups based on various conditions. The responses of research subjects (mean scores) for each independent group were compared to observe the effects of different conditions or treatments. Differences among the means of the groups are taken as an indication of possible differences among the effects of
the conditions. Given a single (continuous) measure of dependent variable in the study, univariate statistics were employed to test for significant differences between groups. Prior to statistical tests, it is necessary for a researcher to assess the underlying assumptions of the univariate statistical analysis. The following section describes the major assumptions that have to be met before conducting the analysis.

a. Level of Measurement

The univariate analysis require that the dependent variable be measured using a continuous scale that is at the interval or ratio level (Pallant 2001). This study utilises accounting profit as an independent variable, which is measured by using a ratio (interval) scale. Therefore, this assumption was already met.

b. Random Sampling

As all of the observations in this study cover almost the entire population, except for financial-related companies, it might be argued that this assumption was not violated.

c. Independence of Observations

This assumption states that ‘each observation or measurement must not be influenced by any other observation or measurement’ (Pallant 2001, p. 171). According to Keppel (1991) this assumption is a basic requirement of experimental design in allowing a researcher to avoid the effect of confounding of variables between treatment groups. He further states that this assumption may influence the ability of the researcher ‘to make unambiguous inferences concerning the independent influence of our independent variable on the behaviour we are studying’ (p. 97). It is argued that the data and measurement of this study did not violate this assumption. The Spearman correlation matrix (table 28) also shows that there are no independent variables in this study that have a high coefficient of correlation (i.e. more than .7) (Pallant 2001). This suggests that there is no evidence of multicollinearity among variables in this study (section 5.5.6).
e. Homogeneity of variance

Homogeneity, also known as homoscedasticity for research that has grouped data, is the assumption that samples are obtained from populations of equal variances meaning that the variability of scores for each group is similar (Pallant 2001). The Levene's test for equality of variance between groups in this study reveals that some of the results are significant ($p < .05$). This suggests that variances for each groups under different treatments are not equal and, therefore, violates the assumptions of homogeneity of variances. However, Stevens (1992) and Kleinbaum et al. (1998) argued that analysis of variance is reasonably robust to violations of this assumption, provided there are reasonably similar sized groups under comparison (e.g. largest/smallest = 1.5). Further, the SPSS output for $t$-test also pro-
vided two sets of results both, for equal and unequal variances of the two groups under observation (Pallant 2001). In the test involving one-way ANOVA, for unequal variances and group size, both Welch and Brown-Forsythe robustness tests for equality of means were performed to assess the differences. Additionally, for post-hoc comparison this study will utilise the Games-Howell tests for unequal variance and Tukey HSD tests for equal variance. This enables a researcher to interpret the result for either of both conditions in his/her study.

The central limit theorem (Tabachnick & Fidel 2001) also assures that, given sufficiently large sample sizes, sampling distributions of means are assumed to be normally distributed regardless of the distributions of variables. Since this study did not seriously violated any assumption of univariate analysis of variance, the next statistical analysis and procedure can be conducted using the collected data. In sum, preliminary tests of the data reveal that there are moderate departures from the basic assumptions of the analysis of variances in relation to the assumption of normal distributions and homogeneity of the observations. It is argued that this is due to the large sample size utilised in the study and thus may not adversely affect the result (Kleinbaum et al. 1998).

5.3 Descriptive Statistics

Section 5.3 describes descriptive statistics of firms’ characteristics in the data sets, followed by the governance variable utilised in this study. Table 9 and 10 contains a summary of descriptive statistics. Other relevant statistical data in support of these figures are presented in the appendices (i.e. appendices 5, 6, 7, 8, 9 & 10). It should be noted that the descriptive statistics summarise panel data and the means are calculated for all of observations throughout the period of the study.

5.3.1 Characteristic of the Firms

The average age of companies in the study is 21.73 years, ranging from two to 89 years old. In relation to industry characteristics, most of the companies in the data set (70%) operate in the manufacturing and related industries. The remaining 30 percent are involved in wholesale and retail trade, real estate and property, hotel and travel
services, and others (appendix 8). Interestingly, firms owned by the government operate only in certain industries (i.e. telecommunication and cement) that are considered to be the most highly regulated in Indonesia (Hill 2000). Foreign firms also operate in very specific manufacturing industries, such as pharmaceuticals and consumer products. Only a small number of foreign companies operate in textiles, mining and construction industries, partly because of the 1994 government deregulations (Husnan 2001) which allowed foreigners to own 100 percent of an Indonesian company, except in certain strategic sectors (appendix 9).

For the period of the study, the average total sales of firms amounts to 646,273 million rupiah with the highest (lowest) level of 14,964,674 million (601 million) rupiah. The mean of all firms in the data set present a ratio of operating income to total sales (ROS) of 7.71 percent, and much lower (–44.27%) net profit margin (NPM). The ratio of net income over total assets (ROA) is –0.76 percent with the range from the highest 116 percent to the lowest figure of –262 percent. Selected market-based return indicators consist of average earnings per-share (EPS) 48.82 rupiah with dividend per-share (DPS) of 56.88 rupiah. The mean of the earning/price ratio (EPR) of all firms is –91.48 percent with a very substantial range, from minimum of –10,000 percent to maximum 4,098 percent.

The descriptive statistics show an average (median) value of total assets of 1,377,537 (401,419) million rupiah. These data include very small companies (18,691 million rupiah), as well as large companies (56,635,620 million rupiah). Thus, this study is not restricted to large firms. The mean of the proportion of debt to total assets (leverage ratio) amounts to 66.47 percent, and the proportion of total debt to equity (DER) is on average 346 percent. This average figure is much higher than the one reported in studies by Claessens, Djankov and Xu (2000), ADB (2000) and Husnan (2001).
Table 9: Descriptive Statistics for Sample Firms 1994-2000 ($N = 1127$)

<table>
<thead>
<tr>
<th>Definition</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Governance Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Shares by Public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory Board’s size*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of board seats held by related owners (%)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Board Size*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of management seats held by related owners (%)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of shares owned by the public /total shares outstanding</td>
<td>29.57</td>
<td>27.67</td>
<td>14.63</td>
</tr>
<tr>
<td>Total number of supervisory board members</td>
<td>4.28</td>
<td>4</td>
<td>1.47</td>
</tr>
<tr>
<td>Number of directors related to the owners/Board size</td>
<td>44.71</td>
<td>40</td>
<td>25.34</td>
</tr>
<tr>
<td>Total number of management board members</td>
<td>4.70</td>
<td>4</td>
<td>1.84</td>
</tr>
<tr>
<td>Number of management related to the owners/Management board size</td>
<td>31.30</td>
<td>27</td>
<td>25.63</td>
</tr>
<tr>
<td>B. Firm Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of a company (years)</td>
<td>21.73</td>
<td>20</td>
<td>12.00</td>
</tr>
<tr>
<td>Total Assets (TA, Million IDR)</td>
<td>1,377,537</td>
<td>401,419</td>
<td>3,367,104</td>
</tr>
<tr>
<td>Total Sales (TS, Million IDR)</td>
<td>646,273</td>
<td>222,049</td>
<td>1,395,772</td>
</tr>
<tr>
<td>Annual Earning Per-share (EPS, IDR)</td>
<td>48.82</td>
<td>96.00</td>
<td>1,440.16</td>
</tr>
<tr>
<td>Annual Dividend Per-share (DPS, IDR)</td>
<td>56.88</td>
<td>0</td>
<td>212.23</td>
</tr>
<tr>
<td>Annual Return on Assets (ROA, %)</td>
<td>-0.76</td>
<td>3.27</td>
<td>20.56</td>
</tr>
<tr>
<td>Earning Price Ratio (EPR, %)</td>
<td>-91.48</td>
<td>5.44</td>
<td>579.95</td>
</tr>
<tr>
<td>Annual Return on Sales (ROS, %)</td>
<td>11.01</td>
<td>14.00</td>
<td>46.89</td>
</tr>
<tr>
<td>Net Profit Margin (NPM, %)</td>
<td>-44.27</td>
<td>5.00</td>
<td>421.46</td>
</tr>
<tr>
<td>Debt to Equity Ratio (DER, times)</td>
<td>3.46</td>
<td>1.28</td>
<td>33.46</td>
</tr>
<tr>
<td>Leverage Ratio (LR, %)</td>
<td>66.47</td>
<td>62</td>
<td>45.32</td>
</tr>
</tbody>
</table>

* Excluding foreign- and government-owned companies ($N = 1,001$)

IDR = Indonesian Rupiah (Indonesian local currency)
Table 10: Descriptive Statistics for Sub-sample Firms Before and After the Crisis Period

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>A. Governance Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Shares by Public</td>
<td>28.87</td>
<td>27.10</td>
<td>30.59</td>
</tr>
<tr>
<td>Supervisory Board’s size ^</td>
<td>4.32</td>
<td>4</td>
<td>4.21</td>
</tr>
<tr>
<td>Proportion of board seats held by related owners (%)*</td>
<td>45.80</td>
<td>43</td>
<td>43.08</td>
</tr>
<tr>
<td>Management Board Size^</td>
<td>4.79</td>
<td>4</td>
<td>4.59</td>
</tr>
<tr>
<td>Proportion of management seats held by related owners (%)^</td>
<td>33.88</td>
<td>33</td>
<td>29.13</td>
</tr>
<tr>
<td>B. Firm Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets (TA, Million IDR)</td>
<td>674,452</td>
<td>254560</td>
<td>2,060,371</td>
</tr>
<tr>
<td>Total Sales (TS, Million IDR)</td>
<td>362,490</td>
<td>145,186</td>
<td>969,881</td>
</tr>
<tr>
<td>Annual Earning Per-share (EPS, IDR)</td>
<td>271.81</td>
<td>189</td>
<td>-112.73</td>
</tr>
<tr>
<td>Annual Dividend Per-share (DPS, IDR)</td>
<td>69.86</td>
<td>10</td>
<td>59.16</td>
</tr>
<tr>
<td>Annual Return on Assets (ROA, %)</td>
<td>6.02</td>
<td>5.27</td>
<td>-6.36</td>
</tr>
<tr>
<td>Earning Price Ratio (EPR,%)</td>
<td>8.61</td>
<td>7.95</td>
<td>-194.62</td>
</tr>
<tr>
<td>Annual Return on Sales (ROS, %)</td>
<td>17.35</td>
<td>16</td>
<td>4.48</td>
</tr>
<tr>
<td>Net Profit Margin (NPM, %)</td>
<td>11.43</td>
<td>11</td>
<td>-107.73</td>
</tr>
<tr>
<td>Debt to Equity Ratio (DER, %)</td>
<td>126</td>
<td>106</td>
<td>552</td>
</tr>
<tr>
<td>Leverage Ratio (L.R, %)</td>
<td>46.89</td>
<td>50</td>
<td>84.95</td>
</tr>
</tbody>
</table>

Notes: Annual inflation rates are; 1994 (9.24%), 1995 (8.64%), 1996 (6.47%), 1997 (11.05%), 1998 (77.54%), 1999 (2.01%), 2000 (9.35%)

* Each period consist of 483 company year observations
** Full period consist of 1,127 company year observations (including 1997)
^ Excluding foreign-owned and government-owned firms
5.3.2 Governance Characteristics

The descriptive statistics for governance characteristics are as follows. On average, the percentage of the companies' shares held by the public is less than 30 percent of the total shares outstanding. The mean (median) of supervisory board size is 4.28 (4) and this number ranges between 2 as the smallest and 13 as the largest number of this board size (appendix 5). The average number on the management or executive board is slightly larger than supervisory board (4.70) with the same median. Further, for the group of firms that are owned by private-domestic (non-foreign and government owned) owners, the average supervisory (management) board size is 4.28 (4.70) with the same median for both of the boards. These figures confirm that publicly listed firms in Indonesia have met the minimum requirement\textsuperscript{64} of the number of supervisory board and management board members as mandated by the Company Law (1995).

Figure 2 presents frequency distributions of ownership type for all of the firms in the study. Among 1,127 observations in the data, the majority of the observations or 793 cases (70%) have majority ownership.

![Figure 2: Frequency Distributions by Ownership Type](image)

---

\textsuperscript{64} The Company Law (articles 94 (2) & 79(2) 1995) states that every publicly listed company in Indonesia should have at least two supervisory board member and two members on its management board.
Figure 3 exhibits frequency distributions of firms within majority ownership structure characterised by owner identity. Only 126 observations (16%) of the majority-owned firms are owned by either foreign (14%) or government (2%). Most of the firms in this category are private-domestic owned companies (84%).

![Figure 3: Frequency Distribution of Majority Ownership Firms by Owner Identity](image)

The following figure describes details of the observations based on ownership category of all private-domestic firms (excluding foreign and government companies).

![Figure 4: Frequency Distribution of Private Domestic Firms by Ownership Type](image)
Among private-domestic owned firms, most of them (66%) are majority ownership firms. Of the 334 (34%) remaining cases of non-majority ownership firms, 28 percent are typified by dominant ownership and the remaining (6%) is dispersed ownership.

The private-domestic firms in the data consist of 1,001 observations. Most of these firms (90%) have owner-related members of the supervisory board and 76 percent of these companies have their owner involved in the management team. Table 11 describes the characteristics of these companies based on owner involvement in supervisory and/or management boards.

Table 11: Owner Involvement in Supervisory and Management Boards

<table>
<thead>
<tr>
<th>Supervisory Board</th>
<th>Management Board</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Owner Involve</td>
<td>Owner Involve</td>
</tr>
<tr>
<td>No Owner Involve</td>
<td>51</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>52.0%</td>
<td>48.0%</td>
</tr>
<tr>
<td></td>
<td>21.1%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Owner Involve</td>
<td>191</td>
<td>712</td>
</tr>
<tr>
<td></td>
<td>21.2%</td>
<td>78.8%</td>
</tr>
<tr>
<td></td>
<td>78.9%</td>
<td>93.8%</td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>759</td>
</tr>
<tr>
<td></td>
<td>24.2%</td>
<td>75.8%</td>
</tr>
</tbody>
</table>

Overall, 71 percent of these companies have their owner involved in both management and supervisory boards, while only 5 percent of firms in the sample did not have their owner involved in either board membership. These figures suggest that most of the companies listed in the JSX have their owners involved in the company’s operation. This is supported by the composition of owner related supervisory board membership as a reflection of the degree of owner’s involvement in this board. On average, the ratio between owner related supervisory board members to the total board is 44.71 percent (median 40%). On the other hand, the proportion of owner related members of the management board is much smaller than those of supervisory board (31.30%). These figures support previous findings by Claessens, Djankov and Lang (2000) that in the majority of public companies in Indonesia the owner is involved in the supervisory and/or management board.
In regard to group affiliation, most private-domestic firms are affiliated to one or more business groups compared to the independent or non-affiliated firms (figure 5). Of the 1,001 observations, 85 percent are of companies affiliated with at least one business group (table 21) and most of these observations (47.8%) are large companies. In relation to ownership structure, 67.2 per cent of the affiliated companies observed have majority ownership and larger than average board size (22.3%). This suggests that business groups in Indonesia controlled their affiliate companies through equity ownership. This argument is supported by the fact that 27.3 percent of the observations of affiliated companies show they also appointed a large number of owner related board members. The figure for affiliated companies in this study is much higher than the one reported by Claessens, Djankov and Klapper (2000) based on their sample for the period between 1991-1996.

Figure 5: Frequency Distribution by Company Affiliation

Previous discussion notes that most of companies in the data have majority ownership, and only a small number of companies have their ownership widely dispersed. On average, the size of boards of management is relatively larger than the supervisory boards and most of the firms have their owner involved in these boards. Further, the majority of the firms in the data are also affiliated to one or more business groups suggesting that there exist cross-equity shareholdings between companies in the
5.4 Exploratory Data Analysis

This segment highlights specific aspects concerning the longitudinal data by exploring typical trends and change of firm characteristics and governance variables along the period of the study. The figures presented in the previous part are the average characteristics of firms under observation for the full period of the study, which incorporates periods both before and after the crisis. It is, however, important to clarify similar figures for these different periods as such figures might influence the way the research objectives will be addressed. Prior to confirmatory analysis, the exploratory part was conducted to observe important facts and trends of firms under observation. The main objective of this analysis is to investigate the behaviour of the sample firms during the period of the study, especially in relation to the differing economic environments as a result of the crisis.

5.4.1 Ownership Structure

Figure 6 shows the trends in firm’s performance (ROA) by ownership type over the period of the study. In general, majority ownership (MO) firms outperform both dominant and dispersed ownership companies for the entire period. Prior to the economic crisis (1994-1996) both MO and dominant ownership firms have already experienced the downward trend in their performance, which is continued until 1998. Although in 1999 dominant ownership firms perform slightly better than other group of firms, the average performance of MO firms in the next year (2000) is relatively better than both dominant and dispersed ownership firms. The figure also reveals the significant downturn of performance of all groups of firms during the period of financial crisis. In 1997, the year when the crisis started to hit the Indonesian economy, all groups of firms experienced a strong decrease in their performance, with the lowest performance occurring in 1998. Interestingly, all of the firms have recovered in the 6th year (1999) and then further declined in the year 2000.
Figure 6: Average Return on Assets by Ownership Type-All Firms

Pedersen and Thomsen (2003) point to the importance of observing the impact of different owner identity in a study utilising the ownership variable, particularly in the context where 'most companies are effectively controlled by one single shareholder' (p. 28). Figure 7 presents average annual return for the period of the study after controlling for the impact of owner's identity among the MO firms.

Figure 7: Average Return on Assets of Majority Ownership-Based on Owner Identity

65 Based on owner identity, majority ownership (MO) firms consist of (a) private-domestic (PDO) firms, firms owned by majority private-domestic owners, (b) foreign-owned firms (FO), and (c) government-owned firms (GO).
The figure shows differences in performance between the three groups of majority-owned firms, with foreign (FO) and government (GO) firms outperforming private-domestic (PDO) ownership companies. By controlling the impact of both FO and GO companies, figure 8 shows performance of all private-domestic owned firms.

![Diagram](image)

Figure 8: Average Return on Assets by Ownership Category-Private-Domestic Firms

By comparing figures 8 (private-domestic) and 6 (all firms) it appears that the MO firms perform similarly to those of dominant and dispersed ownership firms, which have a different ownership structure. This suggests that, after controlling for owner identity, private-domestic firms perform almost similarly (except in 1997 and 1998) regardless of their level of ownership concentration. By confirming this comparison to figure 7 (majority ownership based on owner identity) it is clear that, on average, private-domestic firms perform almost similarly and the fact that majority-owned firms outperform dominant- and dispersed-ownership firms (figure 6) was influenced by the performance of both FO and GO firms.

In an almost a similar trend with the ROA measure, all of the firms in the data set also faced a downturn in their performance in the return on sales (ROS) indicator (figure 9). Among private-domestic firms, majority firms also outperformed dominant and dispersed ownership firms during the period of the study. In contrast to the ROA indicator, where the worst performance for all groups of firms occurred in 1998, and then there was an improvement in 1999, the worst performance of firms in the
data set using the ROS indicator happen in 1999, and then improved in 2000. On average, the decrease in performance of dispersed and dominant ownership firms in 1999 is worse than majority-owned firms.

Figure 9: Average Return on Sales by Ownership Category-Private-Domestic Firms

The following figure exhibits comparison of firm performance within majority ownership firms after controlling for owner identity, measured by the ROS.

Figure 10: Average Return on Sales of Majority Ownership-Based on Owner Identity
After controlling for the owner identity it is clear that, among majority ownership group of firms, FO and GO outperform private-domestic (PDO) firms with GO firms having the highest and relatively stable ROS\(^{66}\). The following figures exhibit comparison of both total assets and sales of majority-owned firms.

Figure 11: Average Total Assets of Majority Ownership Firms

Figure 12: Average Total Sales of Majority Ownership Firms

\(^{66}\) All remaining figures in relation the exploratory data analysis are presented in appendix 4.
Among the majority-owned firms, GO companies have the highest level of both total assets and sales (figures 11 and 12). This has a relationship with the industry where these companies operate (telecommunication and cement industries) which could be considered as an industries that require large amounts of invested capital in fixed assets. The government owned company (PT. Indosat (Persero) Tbk.) share the duopoly market in the telecommunications industry in Indonesia with another government owned company (PT. Telekomunikasi Indonesia (Persero) Tbk), while for cement companies, although there are private companies in the industry, their number is limited and the industry is technically controlled by the Indonesian government.

Surprisingly, although on average the patterns of ROA of FO firms are similar to those of GO firms (figure 7) to private-domestic firms, the average total assets and total sales of FO firms are smaller. This suggests that FO firms performed efficiently and took advantage of their advances in technology (Hill 2000) compared to private-domestic firms. Further, given the industries in which they operate (mostly pharmaceutical and consumer products) these companies enjoy the advantage of a huge market of a populous country with more than 210 million people to serve.

In regard to the debt structure of private-domestic firms, figure 13 shows that before the crisis period the leverage ratio of majority- and dominant-owned firms is higher than dispersed-ownership firms. This suggests that, in general, both majority- and dominant-owned firms used more debt to finance their investments in comparison to the dispersed ownership firms. However, starting with the crisis period (1997), the debt level of dispersed ownership firms increased and became higher than majority-owned firms. Although in 1999 there was a slight decrease in this figure, the leverage ratio of all group of firms kept increasing until 2000, particularly those of dominant-ownership firms. This pattern confirms previous reports by Husnan (2001) that prior-
to the crisis corporate debts among publicly listed companies in Indonesia grew significantly because corporate expansion was largely financed by debt. This report also contends that many companies suffered big losses after the financial crisis in 1997 due to their higher exposure to unhedged dollar loans. After the government of Indonesia adopted the free-floating exchange rate system in mid 1997 ‘it is estimated that half of Indonesian corporations became technically insolvent’ (Husnan 2001, p. 1).

In relation to owner identity among the majority-owned firms in the data set, GO firms have the lowest leverage ratio, except in 1996, followed by the FO firms (figure 14). On the other hand private-domestic firms have a relatively high leverage ratio. This pattern confirms the previous study by Claessens and Djankov (1999a) which suggests that Indonesian firms had higher levels of debt financing.
Figure 14: Average Leverage Ratio of Majority-Owned Firms

Previous discussions highlight the trends of various governance aspects of the firms in the data during the period of observation. One important implication from this discussion that should be considered in the next stage of analysis is the need to separate the effect of owner identity, particularly within majority ownership firms. According to Short (1994) and Pedersen and Thomsen (1997, 2003) the issue of owner identity is relevant in the study of ownership, since it may affect the way the owner exercises ownership rights and, subsequently, has important consequences for firm behaviour and performance. Therefore, the examination of the ownership issue in this study should consider differences resulting from the effect of owner identity.

5.4.2 Supervisory and Management Boards

Figure 15 presents a comparison of performance between private-domestic companies that have their owner involved in the supervisory board and the firms that do not have the owner involved. In general both performance measures indicate that the companies with the owner involved have better performance than others. Although facing a downturn in performance after the financial crisis period, a firm with the owner involved in the supervisory board membership still outperformed other firms.
Figure 15: Average Return on Assets by Owner Involvement in Supervisory Board

The following figure shows the comparison of performance between companies with and without their owner involved in management board. The graphical pattern of performance shows that companies with their owner involved in management board outperformed companies without their owner involved in this board, except in 2000.

Figure 16: Average Return on Assets by Owner Involvement in Management Board
To assess the impact of the degree of owners involvement in supervisory board membership, figure 17 presents a comparison of performance between four groups of firms.

![Graph showing Mean Return on Assets over years 1994 to 2000 for 1st, 2nd, 3rd, and 4th Quartile.]  

Figure 17: Average Return on Assets by Degree of Owner Involvement in Supervisory Board

The figure suggests that the firms categorise as the 2nd and 4th quartiles of owner involvement in board membership experienced higher performance than other groups of firms following the financial crisis period. Prior to the crisis, different degrees of owner involvement in supervisory board membership seem to follow a similar pattern. Starting with the crisis period in 1997, the performance of all groups of firms decreased, although companies under the 2nd and 4th faced a smaller downturn in comparison to other firms. Although in certain periods after the crisis (i.e. 1998 & 1999) these companies outperform other firms, in the following year companies under 2nd quartile turned down more than others.

Figure 18 exhibits the pattern of company performance based on the degree of owner involvement in management board. The degree of owner involvement in manage-

---

70 The degree of owner involvement in supervisory board consists of four groups (quartiles) based on the following range; 1st quartile = less than 33 percent, 2nd quartile = between 34 % and 50%, 3rd quartile = between 51% and 67%, and 4th quartile = more than 68 percent.
ment board was also based on four groups of firms. It shows that companies that having degree of owner involvement between 26 and 33 percent outperform other companies with different degree of owner involvement, even after the crisis period.

![Graph: Average Return on Assets by Degree of Owner Involvement in Management Board](image)

Figure 18: Average Return on Assets by Degree of Owner Involvement in Management Board

Descriptive statistics (table 11) have revealed that 90 percent of the private-domestic firms in Indonesia have their owner involved in supervisory board and more than 75 percent of these firms also have their owner involved in management board. On average, the pattern of companies with the owner involved in supervisory or management boards membership outperforms other companies. In relation to the degree of owner involvement, the graphical mean of ROA shows differences in performance of all group of firms based on their degree of owner involvement. Therefore, this observation needs further tests to assess the significance of these differences.

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71 The degree of owner involvement in management board consists of four groups (quartiles) based on the following range: 1st quartile = less than 25 percent, 2nd quartile = between 26 % and 33%, 3rd quartile = between 34% and 56%, and 4th quartile = more than 57 percent.
5.4.3 Company's Affiliation

Prior to the crisis period, average ROA of independent firms indicates that these types of firms performed better than group-affiliated firms (figure 19). Following the crisis, both independent and affiliated companies suffered from the decrease in their performance. However, as opposed to the previous period, independent firms have lowered performance compared to their affiliated counterparts. The most serious decline for both firms is in 1998, with recovery in 1999 followed by a downturn in 2000, with affiliated companies performing less well than independent firms. The outperformance of group-affiliated firms during the period of crisis may have been the result of intervention by the business group to which the company was affiliated.

![Graph showing average return on assets by company affiliation](image)

Figure 19: Average Return on Assets by Company Affiliation

Using the ROS performance indicator (appendix 4, figure 30), both types of firm follow a similar pattern with respect to the ROA indicators, except that the worst conditions occur in 1999 before recovery in 2000. Differences in both figures may be caused by the effect of conditions in 1998, following the crisis, taking effect on revenue in the following year.
5.4.4 Control Variables: Firm Size and Time Specific Effects

Fama and Jensen (1983b) argue that the costs and benefits associated with the use of different governance mechanisms might vary systematically by the size of the firm. Figure 20 shows differences in firm performance in regard to their size. Prior to the crisis period (1994-1997) the performance pattern of both small and large firms was similar. Although the performance of both groups declined following the crisis period, on average, large companies seem to outperform their small counterparts in 1998. However, in the following year small companies tend to show higher performance than the larger companies. This trend is inconsistent with the Fama and Jensen (1983b) prediction and needs further tests. Other factors such as economies of scale, access to sources of financing and changes in market power could be investigated in relation to this issue.

![Graph showing Mean Return on Assets by Company Size]

Figure 20: Average Return on Assets by Company Size

In regard to time specific effects, previous results of exploratory analysis reveal significant changes in firm performance between the periods before and after the crisis. Figure 21 presents a graphical pattern of firm performance indicators during the study period. In general both performance indicators show a downturn in performance during the crisis period there is an interesting conflicting pattern between the: ROA and ROS indicators in 1999 and 2000. This pattern confirms the importance of
observing the separate impact of governance variables on corporate performance between these two periods.

![Graph showing Mean Annual Return from 1994 to 2000 for ROA and ROS](image)

**Figure 21: Comparison of Average Annual ROA and ROS**

Exploratory analysis illustrates the pattern of the companies' performance for the period 1994-2000 from various governance dimensions. The exploration on ownership categories shows the importance of considering the effect of owner identity in further analysis. The graphical illustration shows that, on average, the companies with their owner involved in supervisory or management board membership outperform other companies. Further, the degree of owner involvement in supervisory or management boards also seems to result in differences in firm performance. Prior to the crisis period, independent firms outperformed their affiliated counterparts and during the crisis period, on average, independent firms did better than affiliated companies. In sum, the result of the exploratory analysis provides a clear picture of the behaviour of the firms under observations during the study period. It further provides a signal that the researcher needs to accommodate these patterns in addressing research questions, particularly in the subsequent confirmatory analysis and hypotheses testing.
5.5 Confirmatory Data Analysis

This sub-section describes the second part of the longitudinal study involving the testing of hypotheses presented in chapter 3. Discussion will consider the implications of findings, based on the various constructs employed in this study, in the subsequent chapter.

5.5.1 Ownership Structure

Hypothesis-1,

All else being equal, corporate performance among all companies, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures.

The independent variable, ownership type, is categorical; either the subject is characterised by majority, dominant or dispersed. The dependent variable is the return on Assets (ROA), supported with the return on sales (ROS), which are interval level variables. Based on the nature of these variables, a one-way ANOVA was performed and the result is presented in the following table.

Table 12: Summary of a One-Way ANOVA test for H-1a - Ownership Type and Performance

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority</td>
<td>793</td>
<td>.2148</td>
<td>19.24678</td>
<td>.68347</td>
</tr>
<tr>
<td>Dominant</td>
<td>279</td>
<td>-3.1599</td>
<td>24.25911</td>
<td>1.45235</td>
</tr>
<tr>
<td>Dispersed</td>
<td>55</td>
<td>-2.6049</td>
<td>17.45725</td>
<td>2.35394</td>
</tr>
<tr>
<td>Total</td>
<td>1127</td>
<td>-.7583</td>
<td>20.56044</td>
<td>.61425</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>254760</td>
<td>2</td>
<td>1273.800</td>
<td>3.024</td>
<td>.049</td>
</tr>
<tr>
<td>Within Groups</td>
<td>473448.19</td>
<td>1124</td>
<td>421.217</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>475995.79</td>
<td>1126</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12 shows the result of a one-way analysis of variance in exploring the impact of ownership concentration on firm performance, as measured by Return on Assets (ROA). There was a statistically significant difference at the $\rho < .05$ level in ROA for the three ownership groups [$\text{ROA, } F(2, 1124) = 3.02, \rho = .049$] with the difference in mean score relatively large. The robust tests of means differences for both Welch and Brown-Forsythe tests also support this result ($\rho < .1$). The magnitude of the differences (measured by the effect size) in the means of ROA among the groups of firms is very small ($\text{eta squared} = .005$)$^{72}$. Post-hoc comparisons using Games-Howell test indicated that only the mean score for majority ownership was significantly different from dominant ownership ($\rho < .1$). The performance of dispersed ownership firms did not differ significantly from either dominant or majority ownership structures.

A further test by using Return on Sales (ROS) as a second performance measure, also shows similar result that there was a difference at the $\rho < .005$ level in ROS for the three ownership groups [$\text{ROS, } F(2, 1124) = 14.03, \rho = .000$]. The robust tests of means differences for both Welch and Brown-Forsythe tests also indicate support of this result ($\rho < .05$) with small magnitude of differences ($\text{eta squared} = .02$). Post-hoc comparisons using Games-Howell test indicated that only the mean score for majority ownership was significantly different from dispersed ownership ($\rho < .1$). Consistent with previous result, performance of dominant ownership firms did not differ significantly from either dispersed or majority ownership structures.

**Hypothesis 1.**

Previous exploratory data analysis (figure 7) exhibits differences in performance within the firms categorises as the majority ownership. Thus, it is important to observe whether different owner identity has implications for performance among majority-owned firms. For this reason, the following test was conducted to compare the

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$^{72}$ Since the SPSS does not provide eta squared values for one-way ANOVA, it was computed manually using the information provided in the output with formula of $\text{eta squared} = \frac{(\text{sum of squares between-groups})}{(\text{total sums of squares})}$ (Pallant 2001). Throughout this study the following guideline was used to interpret the eta squared (Cohen 1988; Pallant 2001): .01 = small effect, .06 = moderate effect, and .14 = large effect.
performance of the entire private-domestic-owned firms with the exclusion of foreign (FO) and government (GO) firms under the majority ownership classification.

*All else being equal, among private domestic companies, majority ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings.*

Table 13: Summary of a One-Way ANOVA test for H-1b - Ownership Type and Firm Performance for Private-Domestic Firms

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority</td>
<td>667</td>
<td>-1.7843</td>
<td>19.59002</td>
<td>.75910</td>
</tr>
<tr>
<td>Dominant</td>
<td>279</td>
<td>-3.1599</td>
<td>24.25911</td>
<td>1.45235</td>
</tr>
<tr>
<td>Dispersed</td>
<td>55</td>
<td>-2.6049</td>
<td>17.45725</td>
<td>2.5394</td>
</tr>
<tr>
<td>Total</td>
<td>1001</td>
<td>-2.2132</td>
<td>20.88263</td>
<td>.6637</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>381.012</td>
<td>2</td>
<td>190.506</td>
<td>.436</td>
<td>.647</td>
</tr>
<tr>
<td>Within Groups</td>
<td>435267.25</td>
<td>998</td>
<td>436.577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>435648</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result presented in table 13 shows the result of a one-way analysis of variance in exploring the impact of ownership concentration on firm performance, among private-domestic firms. There was no evidence of significantly differences in performance \((\rho > .1)\) for the three ownership groups \([\text{ROA}; F (2, 998) = .436, \rho = .647]\). The robust tests of means differences for both Welch and Brown-Forsythe tests also support this result \((\rho > .1)\). The effect size calculated using eta squared was also small \((\text{eta} = .000)\).

Subsequent test by using Return on Sales (ROS) as a second performance measure exhibits different result. There was a statistically significant difference at the \(\rho < .005\) level in ROS for the three ownership groups \([\text{ROS}; F (2, 998) = 11.37, \rho = \ldots\)
with the difference in mean score relatively large. The robust tests of means differences for both Welch and Brown-Forsythe tests also support this result (\(\rho < .05\)). The effect size calculated using eta squared was also small (\(\eta = .02\)). Post-hoc comparisons using Games-Howell test indicated that the mean score for dispersed ownership (\(M = -18.42, SD = 112.91\)) was significantly different from either majority (\(M = 13.50, SD = 18.55\)) or dominant (\(M = 7.32, SD = 72.87\)) ownership. The performance of dominant ownership firms did not differ significantly from majority ownership structures.

The result of performance comparison between different ownership types after controlling for owner identity (i.e. foreign, government and private domestic) shows inconsistent result. By comparing table 12 and 13, differences in performance between majority and dominant ownership for all firms might be attributable to the inclusion of foreign- and government-owned firms. By conducting separate tests for private-domestic firms only (table 13) there appear no significant differences in performance among the three groups of firms, measured by ROA, regardless of their ownership structures. Although ROS indicator exhibit significant differences in performance between majority and dispersed ownership firms, differences in mean scores between the two groups are large. Additionally, the standard deviation of ROS indicator for dispersed ownership firms was also large (i.e. more than 100%). This result, therefore, should be interpreted with caution.

A further test was conducted to assess whether, among majority-owned firms, there are significant differences in performance based on the owner identity. A one-way analysis of variance was conducted to explore the impact of owner identity on firm performance, as measure by ROA and ROS. Subjects were divided into three groups according to their owner identity (PDO: private-domestic; GO: government-owned; FO: foreign-owned).

A one-way ANOVA result shows that there was a statistically significant difference in ROA scores (\(\rho < .005\)) for the three groups of firms [ROA; \(F(2, 790) = 23.772, \rho = .000\)]. The effect size, calculated using eta squared, was moderate (\(\eta squared = 0.06\)). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for PDO firms (\(M = -1.78, SD = 19.59\)) was statistically different from GO firms (\(M\)}
= 12.20, \(SD = 8.20\) and FO firms \((M = 10.51, SD = 13.58)\). FO firms did not significantly from GO firms. Further, there was a statistically significant difference on performance among majority-owned firms using the ROS performance indicator [ROS; \(F (2, 790) = 14.10, \rho = .000\)]. The robust tests of means differences for both Welch and Brown-Forsythe tests also support this result \((\rho < .005)\). The effect size, calculated using \(eta squared\), was small \((eta squared = 0.03)\). Post-hoc comparisons using the Games-Howell test indicated that the mean score for PDO firms \((M = 13.50, SD = 18.55)\) was statistically different from either GO firms \((M = 37.71, SD = 12.38)\) or FO firms \((M = 16.49, SD = 10.01)\).

While the above analyses provide limited support for the hypotheses, they do not fully capture the consistency evident in these data. For example, figures 6, 7, 8, 9 and 10 illustrate a simple graphical depiction over time of the comparison for ownership type and category by performance as dependent variables. The pattern of these relationships is not stable, either across measures or across time. It is especially notable that a comparison of periods with relatively high financial returns before the crisis (1994-1996) with those of lower returns (1998-2000) indicates that majority-owned firms still outperformed the dominant- or dispersed-ownership firms. Even after separating the effect of foreign- and government-owned firms (figure 8), in general, this result is still similar for the entire period although the ROA indicators did not support this evidence. Further tests, controlling the time specific effect, are needed to reconfirm these findings.

5.5.2 Monitoring

As noted in the previous chapter (section 4.2.3), the monitoring role of the supervisory board and owner involvement in management board observed in this study will only apply for the non-foreign and non-government owned firms. Consequently, observations in the sample \((N =1,001)\) will involve only all private-domestic-owned firms.
Hypothesis 2a

*All else being equal, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in the supervisory or management board's membership.*

The independent variable, owner involvement, is dichotomous: whether the owner is involved in supervisory/management board membership or not. The dependent variable is the ROA and supported by the ROS performance indicators, which are both ratio (continuous) variables. The *t-test* was performed to confirm the hypothesis.

**Table 14a: Descriptive Data for H-2a, *t-test*-Owners’ Involvement in Supervisory Board and Firm Performance**

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Groups</th>
<th># of Cases</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Owner’s Not-involved</td>
<td>98</td>
<td>-8.26</td>
<td>28.22</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td>Owner’s Involved</td>
<td>903</td>
<td>-1.56</td>
<td>19.83</td>
<td>0.66</td>
</tr>
<tr>
<td>ROS</td>
<td>Owner’s Not-involved</td>
<td>98</td>
<td>2.07</td>
<td>63.36</td>
<td>6.40</td>
</tr>
<tr>
<td></td>
<td>Owner’s Involved</td>
<td>903</td>
<td>10.88</td>
<td>47.72</td>
<td>1.59</td>
</tr>
</tbody>
</table>

Table 14a shows that, on average, firms with owner involvement in supervisory board membership outperformed the firms with no owners involved in their supervisory board for both ROA and ROS indicators. The following table provides the *t-test* result to assess the nature of these differences.

**Table 14b: *t-test* for H-2a, Owners’ Involvement in Supervisory Board and Firm Performance**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Levene’s Test</th>
<th>t-test for equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>F</em></td>
<td>Sig.</td>
</tr>
<tr>
<td>ROA</td>
<td>23.34</td>
<td>.000</td>
</tr>
<tr>
<td>ROS</td>
<td>1.83</td>
<td>.176</td>
</tr>
</tbody>
</table>

The result of *t-test* shows that the Levene’s test for ROA is less than .05 suggesting that the variance of these indicators between the groups is not equal. As a conse-
quence, the data of this result should be read under the equality variances not assumed. The test result for ROA indicator suggests that there is a significance difference between the two groups (t = -2.29, p < .05). On the other, the Levene's test for ROS reveals that the variance of this indicator for between the groups is the same and the equal variances assumed. This second performance indicator also provides a similar result that there is a significant difference of performance between these two groups (t = -1.68, p < .1). However, the effect size of this independent-samples t-test is also small (eta square 73 = .005 for ROA, and .002 for ROS).

The following tests were conducted to confirm whether owner involvement in management board also leads to differences in performance.

Table 15a: Descriptive Data for H-2a t-test-Owners' Involvement in Management Board and Firm Performance

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Groups</th>
<th># of Cases</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner's Not-involved</td>
<td>242</td>
<td>-2.45</td>
<td>18.38</td>
<td>1.18</td>
</tr>
<tr>
<td>ROA</td>
<td>Owner's Involved</td>
<td>759</td>
<td>-2.14</td>
<td>21.63</td>
<td>.79</td>
</tr>
<tr>
<td>ROS</td>
<td>Owner's Not-involved</td>
<td>242</td>
<td>.32</td>
<td>92.18</td>
<td>5.93</td>
</tr>
<tr>
<td></td>
<td>Owner's Involved</td>
<td>759</td>
<td>13.12</td>
<td>22.10</td>
<td>.803</td>
</tr>
</tbody>
</table>

Table 15a shows that, on average, firms with owner involvement in management board membership outperformed the firms with no owners involved in their management board for both ROA and ROS indicators. The following table provides the t-test result to assess the nature of these differences.

Table 15b: T-test for H-2a-Owners' Involvement in Management Board and Firm Performance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Levene's Test</th>
<th>t-test for equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>ROA</td>
<td>.016</td>
<td>.900</td>
</tr>
<tr>
<td>ROS</td>
<td>9.021</td>
<td>.003</td>
</tr>
</tbody>
</table>

73 The formula of eta squared = t² / [t² + (N₁ + N₂ - 2)] (Pallant 2001) was used to measure the 'effect size' statistic (Pallant 2001) and interpreted as .01 = small effect, .06 = moderate effect, and .14 = large effect (Cohen 1988; Pallant 2001).
The result of *t-test* shows that the *Levene's test* for ROA is more than .05 suggesting that the variance of these indicators between the groups is equal. The test result for ROA indicator suggests that there is no significant difference between the two groups ($t = .20, p > .1$). On the other hand, ROS performance indicator provides evidence that there is a significant difference of performance between these two groups ($t = -2.14, p < .05$). However, the effect size of this independent-samples *t-test* is also small (*eta square* = .005 for ROA, and .002 for ROS).

To explore further the implication of owner involvement in the supervisory or management boards, the study compares all of the firms that have their owners involved in supervisory or management boards based on the degree of owner involvement.

**Hypothesis-2b**

*All else being equal, among companies with the owner involved in board membership, corporate performance, measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of the board is high.*

The independent variable is the degree of owner's involvement, which is categorical, based on four quartiles groups of firms. The observations ($N = 903$) will be divided according to four levels (quartiles) of the degree of owner involvement in supervisory board membership.

**Table 16: Summary of a One-Way ANOVA test for H-2b - Degree of Involvement in Supervisory Board and Firm Performance**

<table>
<thead>
<tr>
<th>Degree of Involvement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Less than 33%</td>
<td>329</td>
<td>-1.5168</td>
<td>24.11540</td>
<td>1.32953</td>
</tr>
<tr>
<td>(2) 34% to 50%</td>
<td>248</td>
<td>-2.0390</td>
<td>19.49565</td>
<td>1.23797</td>
</tr>
<tr>
<td>(3) 51% to 67%</td>
<td>167</td>
<td>-2.4785</td>
<td>16.37241</td>
<td>1.27075</td>
</tr>
<tr>
<td>(4) More than 68%</td>
<td>159</td>
<td>.0763</td>
<td>12.57162</td>
<td>.99699</td>
</tr>
<tr>
<td>Total</td>
<td>903</td>
<td>-1.5565</td>
<td>19.83430</td>
<td>.66041</td>
</tr>
</tbody>
</table>
The result presented in table 16 shows there was no evidence of significantly differences in performance ($\rho > .1$) among the various levels of owner involvement in supervisory board [ROA; $F (3, 899) = .527, \rho = .664$]. Return on Sales as a second performance measured, also shows similar result that there was no statistically significant difference ($\rho > .1$) in the ROS among these groups of firms [ROS; $F (3, 899) = .283, \rho = .675$].

A further test was also conducted to assess the impact of the degree of owner involvement in management board. The observations ($N= 759$) will be divided according to four levels (quartiles) of the degree of owner involvement in management board membership.

Table 17: Summary of a One-Way ANOVA test for H-2b-Degree of Involvement in Management Board and Firm Performance

<table>
<thead>
<tr>
<th>Degree of Involvement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Less than 25%</td>
<td>256</td>
<td>-4.2315</td>
<td>23.55186</td>
<td>1.47199</td>
</tr>
<tr>
<td>(2) 26% to 33%</td>
<td>152</td>
<td>-.2586</td>
<td>17.01681</td>
<td>1.38025</td>
</tr>
<tr>
<td>(3) 34% to 56%</td>
<td>164</td>
<td>-3.3225</td>
<td>20.48596</td>
<td>1.60458</td>
</tr>
<tr>
<td>(4) More than 57%</td>
<td>187</td>
<td>.2366</td>
<td>22.96837</td>
<td>1.67961</td>
</tr>
<tr>
<td>Total</td>
<td>759</td>
<td>-2.1371</td>
<td>21.63173</td>
<td>.78570</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2942.019</td>
<td>3</td>
<td>980.673</td>
<td>2.105</td>
<td>.198</td>
</tr>
<tr>
<td>Within Groups</td>
<td>351282.21</td>
<td>755</td>
<td>465.892</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>354224.23</td>
<td>758</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The result presented in table 17 shows that there was no evidence of significantly
differences in performance ($\rho > .1$) among the four groups of owner involvement in
management board [ROA; $F (3, 755) = 2.105, \rho = .198$]. However, ROS perform-
ance indicator suggests that there is a significant difference ($\rho < .05$) in performance
among these four groups [ROS; $F (3, 755) = 3.674, \rho = .012$]. Post-hoc comparisons
using the Tukey HSD test indicated that the mean score of group 4 (degree of owner
involvement more than 57%; $M = 17.63, SD = 20.60$) was significantly different
from group 3 (degree of involvement between 34% and 56%; $M = 10.58, SD = 17.89$).

Hypothesis 2c

All else being equal, majority ownership will exhibit a higher incidence of
owner involvement, measured by the proportion of owner-related board
members to total number of board members, than will the dominant and dis-
persed ownership firms.

Both the independent and dependent variables --ownership type and owner's in-
volveinent in supervisory or management board-- are categorical variables. For this
reason a contingency analysis was used to test this hypothesis for all private-
domestic owned firms. Table 18 in the following page exhibits the result of this
analysis.
Table 18: Contingency Analysis for H-2c-Ownership Type and Degree of Owner Involvement in Supervisory Board

<table>
<thead>
<tr>
<th>Degree of Owner Involvement in Supervisory Board</th>
<th>Ownership Type</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dispersed</td>
<td>Dominant</td>
<td>Majority</td>
<td></td>
</tr>
<tr>
<td>1st Quartile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 33%</td>
<td>12</td>
<td>94</td>
<td>223</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>3.6%</td>
<td>28.6%</td>
<td>67.8%</td>
<td>36.5%</td>
</tr>
<tr>
<td></td>
<td>24.5%</td>
<td>39.5%</td>
<td>36.3%</td>
<td></td>
</tr>
<tr>
<td>2nd Quartile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34% to 50%</td>
<td>16</td>
<td>70</td>
<td>162</td>
<td>248</td>
</tr>
<tr>
<td></td>
<td>6.5%</td>
<td>28.2%</td>
<td>65.3%</td>
<td>27.5%</td>
</tr>
<tr>
<td></td>
<td>32.7%</td>
<td>29.4%</td>
<td>26.3%</td>
<td></td>
</tr>
<tr>
<td>3rd Quartile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51% to 67%</td>
<td>6</td>
<td>38</td>
<td>123</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>3.6%</td>
<td>22.9%</td>
<td>73.5%</td>
<td>18.4%</td>
</tr>
<tr>
<td></td>
<td>12.2%</td>
<td>16.0%</td>
<td>19.8%</td>
<td></td>
</tr>
<tr>
<td>4th Quartile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 68%</td>
<td>15</td>
<td>36</td>
<td>108</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>9.4%</td>
<td>22.6%</td>
<td>67.9%</td>
<td>17.6%</td>
</tr>
<tr>
<td></td>
<td>30.6%</td>
<td>15.1%</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>238</td>
<td>616</td>
<td>903</td>
</tr>
<tr>
<td></td>
<td>5.4%</td>
<td>26.4%</td>
<td>68.2%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sgl. (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.621*</td>
<td>6</td>
<td>.071</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>11.175</td>
<td>6</td>
<td>.083</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.104</td>
<td>1</td>
<td>.748</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>903</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.64.

The Pearson chi-square significance distribution ($X^2 = 11.62, \ p < .1$) provides support for this hypothesis (coefficient of contingency$^7$ = .36). Therefore, there is evidence that majority ownership firms may have higher incidence of owner involvement in supervisory board membership compared to dominant and dispersed ownership firms.

$^7$ Coefficient contingency measures the strength of association between two variables under the contingency table and is computed by using the formula: $C = \sqrt{\frac{X^2}{(X^2 + N)}}$. This measure "[modifies] the chi square statistic so that it is not influenced by sample size and the value falls in the range from 0 to 1, with 0 corresponding no association and 1 to perfect association" (Norusis 2000, p. 352).
The following table shows the result of contingency analysis to assess whether majority ownership firms will exhibit a higher incidence of owner involvement in management board in comparison to dominant and dispersed ownership firms.

Table 19: Contingency Analysis for H-2c-Ownership Type and Degree of Owner Involvement in Management Board

<table>
<thead>
<tr>
<th>Degree of Owner Involvement in Management Board</th>
<th>Ownership Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dispersed</td>
<td>Dominant</td>
</tr>
<tr>
<td>1st Quartile - Less than 25%</td>
<td>10</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>3.9%</td>
<td>21.9%</td>
</tr>
<tr>
<td></td>
<td>21.3%</td>
<td>29.8%</td>
</tr>
<tr>
<td>2nd Quartile - 26% to 33%</td>
<td>19</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>12.5%</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>40.4%</td>
<td>21.3%</td>
</tr>
<tr>
<td>3rd Quartile - 34% to 56%</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>6.1%</td>
<td>23.3%</td>
</tr>
<tr>
<td></td>
<td>21.3%</td>
<td>20.2%</td>
</tr>
<tr>
<td>4th Quartile - More than 57%</td>
<td>8</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>4.3%</td>
<td>28.9%</td>
</tr>
<tr>
<td></td>
<td>17.0%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>6.2%</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>17.978</td>
<td>6</td>
<td>.006</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.215</td>
<td>6</td>
<td>.013</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.801</td>
<td>1</td>
<td>.371</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>759</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.42.

The Pearson chi-square significance distribution ($X^2 = 17.98, p < .05$) provides support for hypothesis 2c (coefficient of contingency = .55). Therefore, there was also evidence that majority ownership firms had a higher incidence of owner involvement in management board membership compared to dominant and dispersed ownership firms.
5.5.3 Company’s Affiliation

This study evaluates whether differences in company affiliation, as suggested by previous exploratory analysis (figures 19 and 29), lead to differences in performance. As noted in the previous chapter, this part of analysis will include only the private-domestic firms (N = 1,001).

Hypothesis 3.

_all else being equal, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms._

The independent variable in this hypothesis is a dichotomous variable: either the firm is affiliated to a business group or not. The dependent variable is both ROA and ROS, which are continuous variables. Based on the nature of these variables, a _t_-test was performed.

Table 20a: H-3a _t_-test-Company’s Affiliation and Firm Performance

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Groups</th>
<th># of Cases</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Independent Companies</td>
<td>153</td>
<td>-3.57</td>
<td>30.54</td>
<td>2.48</td>
</tr>
<tr>
<td>ROA</td>
<td>Affiliated Companies</td>
<td>848</td>
<td>-1.97</td>
<td>18.64</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>Independent Companies</td>
<td>153</td>
<td>7.16</td>
<td>52.51</td>
<td>4.26</td>
</tr>
<tr>
<td>ROS</td>
<td>Affiliated Companies</td>
<td>848</td>
<td>10.53</td>
<td>48.96</td>
<td>1.68</td>
</tr>
</tbody>
</table>

Table 20a shows that, on average, independent firms are have lower performance on both measures than a group of firm affiliated to business groups. The following table provides _t_-test results to assess the nature of these differences.

Table 20b: _t_-test for H-3a-Company’s Affiliation and Firm Performance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Levene F</th>
<th>Levene Sig</th>
<th><em>t</em>-test for equality of Means</th>
<th>t</th>
<th>df</th>
<th>Sig. 2 tailed</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>11.37</td>
<td>.001</td>
<td>- .63</td>
<td>171.72</td>
<td>532</td>
<td>-1.60</td>
<td></td>
</tr>
<tr>
<td>ROS</td>
<td>.43</td>
<td>.510</td>
<td>-.77</td>
<td>999</td>
<td>.439</td>
<td>-3.38</td>
<td></td>
</tr>
</tbody>
</table>
The result of *t*-test shows that the *Levene's test* for ROA is less than .05 suggesting that the variance of these indicators between the groups is not equal. As a consequence, the data of this result should be read under the *equal variances not assumed*. The test result for ROA indicator suggests that there is no significant difference between the two groups (*t* = -.63, *p* > .05). On the other, the *Levene's test* for ROS reveals that the variance of this indicator between the groups is the same and the *equal variances assumed*. This second performance indicator also provides a similar result, that there is no significant difference between these two groups (*t* = -.77, *p* > .05). This suggests that there are no differences between affiliated and independent firms on performance. Further, the effect size of differences of this independent-samples *t*-test is also small (eta square = .000 for ROA, and .001 for ROS).

**Hypothesis 3b**

*All else being equal, majority ownership firms will exhibit a higher incidence of affiliated companies than those of dominant and dispersed ownership firms.*

Both of the independent and dependent variables, ownership type and company affiliation, are dichotomous. For this reason a *contingency analysis* was used to test this hypothesis.

Table 21: Contingency Analysis for H-3b—Ownership Type and Company's Affiliation

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Independent Firms</th>
<th>Affiliated Firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97</td>
<td>570</td>
<td>667</td>
</tr>
<tr>
<td><em>Majority Ownership</em></td>
<td>14.4%</td>
<td>85.6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63.2%</td>
<td>67.2%</td>
<td></td>
</tr>
<tr>
<td><em>Dominant Ownership</em></td>
<td>39</td>
<td>240</td>
<td>279</td>
</tr>
<tr>
<td></td>
<td>14.0%</td>
<td>86.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.7%</td>
<td>28.3%</td>
<td></td>
</tr>
<tr>
<td><em>Dispersed Ownership</em></td>
<td>17</td>
<td>38</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>30.9%</td>
<td>69.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.2%</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>153</td>
<td>848</td>
<td>1,001</td>
</tr>
<tr>
<td></td>
<td>15.2%</td>
<td>84.8%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-Sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.172e</td>
<td>2</td>
<td>.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.215</td>
<td>2</td>
<td>.010</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>4.290</td>
<td>1</td>
<td>.038</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.36.

The Pearson chi-square significance distribution result ($\chi^2 = 11.17, \rho < .05$) indicated that there is a support for this hypothesis (coefficient of contingency = .33). This suggests that majority ownership firms may exhibit higher incidence of affiliated companies than those of dominant and dispersed ownership firms.

Hypothesis 3c

All else being equal, among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.

The independent variable in this hypothesis is categorical variables based on three ownership types. The dependent variable is both ROA and ROS, which are continuous variables. Based on the nature of these variables, a one-way ANOVA was performed.

Table 22: Summary of a One-Way ANOVA test for H-3c -Company’s Affiliation, Ownership Type and Firm Performance

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority</td>
<td>570</td>
<td>-1.3048</td>
<td>15.50234</td>
<td>.64932</td>
</tr>
<tr>
<td>Dominant</td>
<td>240</td>
<td>-2.7189</td>
<td>24.06868</td>
<td>1.51020</td>
</tr>
<tr>
<td>Dispersed</td>
<td>38</td>
<td>-2.6049</td>
<td>17.45725</td>
<td>2.35394</td>
</tr>
<tr>
<td>Total</td>
<td>848</td>
<td>-1.7948</td>
<td>18.48947</td>
<td>.62363</td>
</tr>
</tbody>
</table>
## ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>389.862</td>
<td>2</td>
<td>194.931</td>
<td>.570</td>
<td>.566</td>
</tr>
<tr>
<td>Within Groups</td>
<td>299763.62</td>
<td>845</td>
<td>342.196</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>300153.49</td>
<td>847</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 22 shows the result of a one-way analysis of variance in exploring the impact of ownership concentration within affiliated firms on firm performance, as measured by ROA. There was no statistically significant difference at the $\rho < .1$ level in ROA for the three ownership groups [ROA; $F(2, 845) = .57, \rho = .566$]. The robust tests of means differences for both Welch and Brown-Forsythe tests also support this result ($\rho > .1$). The effect size calculated using eta squared, was very small (eta square = .00).

A further test shows that there was a statistically significant difference at the $\rho < .005$ level in ROS for the three groups of firms [ROS; $F(2, 845) = 10.25, \rho = .000$] with the difference in mean score relatively large. The robust tests of means differences for Brown-Forsythe tests also support this result ($\rho < .05$). The effect size calculated using eta squared, was .02 or small effect size. Post-hoc comparisons using Games-Howell test indicated that only the mean score of majority ownership firms ($M = 13.75, SD = 17.14$) was significantly different from dispersed ownership firms ($M = -18.42, SD = 112.91$) at the $\rho < .1$ level. The performance of dominant ownership firms did not differ significantly from either dispersed or majority ownership structures. This result confirms previous the result of hypothesis 1b.

### 5.5.4 Firm Size

The firm size variable will be treated as a control variable in order to investigate its effect on the result of previous tests. Prior to utilising the firm size effect, it is important, however, to examine whether the firms in the data set itself differ in relation to this variable. The objective of this test is to ascertain whether there is a difference in performance between the small and large firms in the data set. The independent variable is dichotomous: either the firm is large in size or not. A large firm is defined as a
firm that has total assets greater than the median of the total assets of all firms under observations. The dependent variables, on the other hand, are shown by a continuous variable comprising of both ROA and ROS. The \( t \)-test procedure was performed to assess the differences.

The test outcome for ROA indicator suggests there is a significant difference between the large (\( M = -2.21, \ SD = 18.81 \)) and small (\( M = .69, \ SD = 22.11 \)) companies [ROA; \( t (563) = 2.37, \ p = .018 \)]. However, the second performance indicator provides conflicting results, as there is no significant difference between large (\( M = 13.01, \ SD = 54.35 \)) and small (\( M = 9.03, \ SD = 37.99 \)) group of companies [ROS; \( t (563) = -1.42, \ p = .156 \)]. The effect size or the magnitude of differences of this independent-samples \( t \)-test is also small (\( \eta^2 \) square = .005 for ROA, and .002 for ROS).

The following sub-sections will re-examine previous hypotheses on ownership structure, owner involvement in board memberships, and company affiliation, by controlling the size effect.

5.5.4.1 Size Effect, Ownership Structure and Performance

The following test was conducted to observe the possible differences between large and small companies within each type of ownership structure. As has been demonstrated by exploratory analysis and the result of hypotheses 1, there was an influence of owner identity on ownership-performance relationship. Separate tests were also conducted excluding foreign- and government-owned companies from majority ownership groups.

Prior to this test, it is important to assess the different nature of the firms characterised by majority, dominant and dispersed ownership in relation to the firm size factor. Specifically, this test was aimed at understanding whether majority owned firms would have a higher incidence of large firms than their dominant and dispersed ownership counterparts. The Pearson chi-square significance distribution (\( \chi^2 = 6.81, \ p < .05 \)) indicated that there are differences in regard to firm’s size between the groups (not reported). The result implies that most of the majority-owned firms (73.9\%) in the data set are large companies.
The following analysis describes differences in performance between majority, dominant and dispersed ownership firms, after controlling for the size effect factor. Table 23 presents the result of the performance comparison between small and large companies within each ownership type.

Table 23: *T*-test for Size Effect, Ownership Structure and Performance: Comparison of Large and Small Firms within Each Type of Ownership Structure

<table>
<thead>
<tr>
<th>Groups</th>
<th>Levene’s Test</th>
<th>t-test for equality of Means</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
<td>df</td>
<td>Sig</td>
<td>Mean</td>
</tr>
<tr>
<td>Majority Ownership</td>
<td></td>
<td></td>
<td>2.09</td>
<td>790</td>
<td>.037</td>
<td>2.86</td>
</tr>
<tr>
<td>(All Observations)</td>
<td>2.78</td>
<td>.096</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majority Ownership</td>
<td></td>
<td></td>
<td>1.02</td>
<td>465</td>
<td>.306</td>
<td>1.65</td>
</tr>
<tr>
<td>(Private-domestic)</td>
<td>4.52</td>
<td>.034</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominant Ownership</td>
<td></td>
<td></td>
<td>.701</td>
<td>277</td>
<td>.484</td>
<td>2.04</td>
</tr>
<tr>
<td>Dispersed Ownership</td>
<td></td>
<td></td>
<td>3.13</td>
<td>53</td>
<td>.003</td>
<td>15.02</td>
</tr>
<tr>
<td></td>
<td>.028</td>
<td>.868</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result shows that, within majority ownership (MO) firms, there are significant differences ($\rho < .05$) in performance between large ($M = -1.15$, $SD = 14.91$) and small ($M = 1.71$, $SD = 23.06$) companies. However, after controlling for owner identity within MO firms, there are no significance differences between large ($M = -2.53$, $SD = 14.76$) and small ($M = -8.8$, $SD = 24.30$) companies among private-domestic firms ($\rho > .05$). There was also no evidence of difference in the performance between large ($M = -5.22$, $SD = 26.80$) and small ($M = -1.37$, $SD = 19.95$) companies among dominant ownership firms. Comparison between large ($M = -13.26$, $SD = 20.86$) and small ($M = 1.76$, $SD = 13.93$) among dispersed-ownership firms shows significant result ($\rho < .005$) that small companies outperformed their large counterparts.

This result supports previous findings (hypothesis 1b) that there is no significant difference in performance among private-domestic firms, as measured by ROA, regardless of their ownership structure. The facts than majority owned firms as a whole do
better than the dominant or dispersed ownership firms is influenced by the performance of both FO and GO firms within the majority group of firms.

A subsequent crosscheck was also conducted to assess whether there is any difference in performance between different type of ownership, when large and small firms are considered separately. Based on the previous result, this test will only apply to all private-domestic firms. A test for large firms in the data sets reveals that there was no significant difference in performance among majority ownership \((M = -2.53, SD = 14.76)\), and dominant ownership \((M = -4.24, SD = 27.34)\) and dispersed ownership \((M = -13.26, SD = 20.87)\) firms in the data sets [ROA; \(F(2, 512) = 2.678, \rho = .16\)]. The robust tests for equality of means for both the Welch and Brown-Forsythe tests also support this result \((\rho > .1)\). A second performance indicator (ROS) shows significant differences in performance between majority ownership \((M = 15.02, SD = 20.08)\) and dispersed ownership \((M = -20.25, SD = 59.95)\) firms [ROS; \(F(2, 512) = 3.525, \rho = .03\)]. This result is supported by the Welch’s robust test of equality of means \((\rho < .1)\) with the actual difference in mean score was quite large.

Subsequent tests for small size firms generated a similar result for ROA indicator that there was no significant difference among majority ownership \((M = -86, SD = 24.26)\), and dominant ownership \((M = -2.20, SD = 21.22)\) and dispersed ownership \((M = 1.76, SD = 13.93)\) among private domestic firms in the data set [ROA; \(F(2, 482) = .5, \rho = .607\)]. The robust tests for equality of means for both the Welch and Brown-Forsythe tests also support this result \((\rho > .1)\). A second performance indicator (ROS) shows significant differences in performance between majority ownership \((M = 11.62, SD = 16.30)\) and dominant ownership \((M = 6.94, SD = 19.22)\) firms [ROS; \(F(2, 482) = 9.338, \rho = .000\)]. This result is supported by the Welch’s robust test of equality of means \((\rho < .05)\).

After controlling for firm size effect, there was evidence that the performance of small firms is significantly different from large firms for all observations (section 5.5.4). However, there was no evidence of differences in performance (measured by ROA) between large and small firms among private-domestic firms, except for the dispersed ownership firms (table 23). Subsequent tests also indicate similar result,
that there was no evidence that among larger firms, as well as among smaller firms, the performance of private-domestic companies was significantly different as measured by ROA. These findings confirm previous results (page 141/143) for hypotheses 1a and 1b. After controlling for firm size effect, the performance of private-domestic companies, as measured by ROA, was not significantly different. The firm size effect in the ownership-performance relationship for all observations was attributable to the inclusion of FO and GO firms; smaller firms outperformed large firms.

ROS, as a second performance indicator, exhibits different results. The findings suggest that larger firms outperform their smaller counterparts, for all observations including private-domestic majority ownership firms. The result of hypothesis 1a shows that, measured by ROS, private-domestic majority ownership firms perform better than dispersed ownership firms. This subsequent test indicates support for this result; however, it only applies to larger firms ($\rho < .1$). Among smaller firms, only the performance of majority ownership was significantly different in comparison to dominant ownership firms ($\rho < .05$), as measured by ROS.

The results suggest that, regardless of their ownership concentration and firm size, the performance of FO and GO firms was significantly different in comparison to their private-domestic counterparts. Since most of the FO firms are smaller in terms of their assets (figure 11) and sales (figure 12), and total assets is used to determine firm size, it appears that the better performance of smaller firms over large firms was due to the presence of FO firms within this group. This is also supported by the fact that the average ROA (figure 7) and ROS (figure 10) of FO firms are higher than other private-domestic firms. In summary, this result supports previous findings on the importance of observing owner identity in the ownership-performance relationship.

5.5.4.2 Size Effect, Owner Involvement in Supervisory or Management Board and Performance

The results for hypothesis 2a reported in table 14a suggests that there is significant difference in performance between companies with their owner involved in the supervisory board and those without such owner involvement. On the other hand, the
outperformance of owner involvement in management board (table 15b) only evidenced by ROS performance measures. The following test is conducted to assess whether the firm size effect also influences the performance between small and large companies within both groups of companies.

The t-test result shows that there was no evidence ($\rho > .05$) of differences in performance between small ($M = -47, SD = 22.03$) and large ($M = -2.54, SD = 17.62$) companies that have their owner involved in supervisory board membership. There was also no evidence ($\rho > .05$) of performance differences between small ($M = -5.49, SD = 26.91$) and large ($M = -12.27, SD = 29.91$) companies that have no owner involvement in their supervisory board membership. For owner involvement in management board the result shows that there was significant differences in performance, measured between small ($M = 11.19, SD = 17.42$) and large ($M = 14.65, SD = 25.12$) companies ($ROS; t = 743.63, \rho = .026$).

Hypothesis 2 reveals that firms with their owner involved (OI) in supervisory board membership outperformed other firms which did not have their owner involved (NOI) in this board. Controlling for firm size effect, subsequent tests indicate support for this hypothesis, but differences in performance between OI ($M = -2.54, SD = 17.62$) and NOI ($M = -12.27, SD = 29.91$) firms only appear among larger firms ($ROA; t = -2.027, \rho = .049$). This suggests that owner involvement in supervisory board membership only benefited large companies. This finding partly supports the hypothesis that, among larger firms, combining block shareholdings and the involvement of shareholders in supervisory boards leads to effective monitoring. In regard to ROS performance indicator, there was no evidence that the performance between OI and NOI firms is significantly different ($ROS; t = -419, \rho = .675$), controlling for the firm size effect.

Table 15 shows that differences in performance between companies with and without owner involvement in management board only appear for the second performance measures (ROS). Controlling the firm size effect, there was no evidence of differences in performance between OI and NOI firms among larger firms ($ROS; t = -1.122, \rho = .265$). However, within smaller firms, there was evidence of differences in
performance between OI (\(M = 11.19, SD = 17.42\)) and NOI (\(M = .35, SD = 67.75\)) firms (ROS; \(t = -1.93, \rho = .055\)). In sum, there appears inconclusive evidence in regard to the benefit of owner involvement in management board and will be discussed in the next chapter.

The result of hypothesis 2_6 (table 16) shows that degree of owner involvement in supervisory board have no effect on firm performance for both ROA and ROS indicators. Another test in regard to the degree of owner involvement in management board (table 17) shows that only on certain level that this degree of involvement matters (fourth versus third quartiles) as measured by ROS. The one-way ANOVA procedure was conducted to assess these results by controlling firm size factor.

Among large companies that have their owner involved in supervisory board, there was no difference in firm performance as measured by ROA and ROS among the four groups of firms based on degree of owner involvement [ROA; \(F (3, 471) = 2.183, \rho = .182\), and ROS; \(F (3, 471) = .794, \rho = .498\)]. The Welch test for equality of means also support these results (\(\rho > .1\)). Further, among small companies that have their owner involved in supervisory board also exhibit similar results [ROA; \(F (3, 422) = 2.622, \rho = .102\), and ROS; \(F (3, 422) = 1.489, \rho = .217\)]. Both Welch and Brown Forsythe robust tests for equality of means also support these results (\(\rho > .1\)).

Further tests were also conducted to assess the effect of firm size on the degree of owner involvement in management board. Among large companies that have their owner involved in management board, there was no difference in firm performance as measured by ROA and ROS for the four groups of firms [ROA; \(F (3, 419) = 1.517, \rho = .209\), and ROS; \(F (3, 419) = 1.858, \rho = .136\)]. The Welch and Brown and Forsythe tests for equality of mean also support these results (\(\rho > .1\)). Further, among small companies that have their owner involved in management board there was no evidence of differences in performance among four groups, as measured by ROA [\(F (3, 331) = 1.458, \rho = .226\)]. However, ROS performance measure shows that performance of companies with owner involvement more than 57\% (fourth quartile) outperformed companies with owner involvement between 34\% and 56 \% (third
quartile) \( [\text{ROS}; F (3, 331) = 4.349, \rho = .005] \). Both Welch and Brown-Forsythe robust tests for equality of means also support these results \( (\rho < .05) \).

### 5.5.4.3 Size Effect, Company Affiliation and Performance

Although hypothesis 3a already shows that there is no evidence of performance differences between affiliated and independent firms, it is still important to control for the effect of company size in this comparison. The comparison between large \( (M = -3.07, SD = 18.74) \) and small \( (M = -.57, SD = 18.48) \) companies that affiliated with business groups shows no significant differences in their performance \( [t (845) = 1.94, \rho > .05] \). A subsequent test between large \( (M = -6.27, SD = 22.17) \) and small \( (M = -2.70, SD = 32.82) \) independent firms also found no significant differences in their performance \( [t (150) = .62, \rho > .05] \). Further tests comparing the performance between affiliated and independent firms for each of the small and large firm groups also reveal no evidence of performance differences \( (\rho > .05) \). After controlling for the effect size, the result confirmed previous findings that there was no evidence of differences in performance between affiliated and independent firms using both ROA and ROS performance indicators.

Hypothesis 3e shows that, measured by ROA, there was no evidence that among affiliated firms majority ownership exhibit higher performance than dominant and dispersed ownership firms. After controlling for the firm size effect, among larger firms there is no difference in performance between the groups of firms \( [\text{ROA}; F (2, 475) = 2.509, \rho = .082, \text{and ROS}; F (2, 475) = 3.579, \rho = .029] \). Although both of these results show significant value \( (\rho < .1) \), since the means score are not equal, the robust tests of equality means were conducted to reconfirm the results. Both Welch and Brown-Forsythe tests shows that there are no differences in performance between the three groups of firms \( (\rho > .1) \). Further, post-hoc comparisons using the Games-Howell test also indicated that the performance among the three groups was not statistically significant.

A subsequent test was also conducted for a group of smaller firms among affiliated companies in the data set. The result shows that, measured by ROA, there are no evi-
dence on differences in performance between the groups of firms characterised by majority, dominant and dispersed ownership [ROA; \(F(2, 366) = .74, \rho = .478\)]. However, measured by ROS, there was evidence of statistically significant differences in the performance between the three groups of companies [ROS; \(F(2, 366) = 4.543, \rho = .011\)]. This result was also supported by the robust tests for equality of means using the Welch test (\(\rho < .05\)). Post-hoc comparisons using the Games-Howell test indicated that the mean score for majority ownership (\(M = -10.83, SD = 16.07\)) was significantly different from dominant ownership (\(M = 5.54, SD = 20.52\)). However, this result did not support hypothesis 3c as the dominant ownership firms outperformed majority ownership firms.

### 5.5.5 Time Specific Effect

Previous exploratory analysis reveals that the firms in the data set experienced a decrease in their performance during the period of the crisis. To support the analysis for the entire period of the study, it is also important to compare the performance of the firms along various governance dimensions between the period before and after the crisis. For this analysis, observations in the data set will be divided into two sets of panel data with the exclusion of observations in 1997 (\(N = 161\)). Panel A comprises 483 firm-years to represent the period before the financial crisis (1994-1996), and panel B also comprises 483 firm-year observations to represent the period after the financial crisis (1998-2000). Therefore, the data sets for this analysis consist of 966 observations or 483 paired samples.

Prior to conducting a series of tests to reconfirm previous findings on hypotheses 1, 2 and 3, the first step in this analysis is to investigate whether there is a significant change in firm performance between these periods. For this reason, the independent variable is the time frame \((t_1\) and \(t_2\)), to classify the period of the study before \((t_1)\) and after \((t_2)\) the crisis. Both ROA and ROS were used as performance indicators. Based on the nature of the data, paired sample t-tests were utilised to assess the difference of the subjects between the two periods.
Table 24a: Descriptive Data for H-5a t-test-Time Specific Effect and Performance

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Groups</th>
<th># of Cases</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Crisis ((t_1))</td>
<td>483</td>
<td>6.02</td>
<td>5.84</td>
<td>.27</td>
</tr>
<tr>
<td>ROA</td>
<td>After Crisis ((t_2))</td>
<td>483</td>
<td>-6.35</td>
<td>28.25</td>
<td>1.29</td>
</tr>
<tr>
<td>ROS</td>
<td>Before Crisis ((t_1))</td>
<td>483</td>
<td>17.35</td>
<td>12.63</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>After Crisis ((t_2))</td>
<td>483</td>
<td>4.55</td>
<td>69.12</td>
<td>3.15</td>
</tr>
</tbody>
</table>

Table 24a presents means of both performance indicators that show the performance of companies deteriorated in comparison to the period before the crisis. As such, these figures confirm previous graphical analysis presented in the exploratory part of the longitudinal analysis. The following table 24b provides t-test to assess the nature of these differences.

Table 24b: Paired-sample T-test for H-5a-Time Specific Effect and Performance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Paired Differences</th>
<th></th>
<th></th>
<th></th>
<th>df</th>
<th>Sig. 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Std. Error Mean</td>
<td>t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>12.38</td>
<td>27.89</td>
<td>1.27</td>
<td>9.76</td>
<td>482</td>
<td>.000</td>
</tr>
<tr>
<td>ROS</td>
<td>12.80</td>
<td>69.86</td>
<td>3.18</td>
<td>4.03</td>
<td>482</td>
<td>.000</td>
</tr>
</tbody>
</table>

The paired-sample t-test for both indicators shows significant difference in the performance of firms for the periods before and after the crisis \((p < .0005)\). Based on mean scores for each of the two sets of scores from table 24a, there was a significant decrease in performance between the two periods, for both the ROA and ROS indicators. Therefore, this result supports the notion that there was a statistically significant decrease in companies’ performance scores after the period of crisis. Further, the effect size of differences is large on ROA \((\eta square = .16)\), but relatively small for ROS \((\eta square = .03)^{75}\).

---

^{75} The formula of \(\eta squared = \frac{t^2}{(t^2 + N - 1)}\) was used to measure of the effect size statistic (Pallant 2001) and interpreted as \(.01 = \text{small effect}, \ .06 = \text{moderate effect}, \text{and} \ .14 = \text{large effect}\) (Cohen 1988; Pallant 2001).
The result from hypothesis 1b suggests that there is a significant effect of owner identity within majority-owned firms in the data sets. Separate tests were also conducted to control the effect of different owner identity in relation to the time specific effect. By controlling for the effect of foreign and government owned companies, the tests provide similar results. namely, that the performance of domestic-private companies after the crisis was deteriorating compared to the pre-crisis period [ROA, $t(418) = 9.92, \rho < .005$; ROS, $t(418) = 3.94, \rho < .005$]. In summary, controlling for time specific effects, all firms in the data set experienced a decrease in performance subsequent to the crisis, in comparison to performance prior to the crisis period.

5.5.5.1 Time Specific Effect, Ownership Type and Performance

Although performance of all firms in the data sets declined after the financial crisis, it is important to assess the time specific effect for all firms with different ownership type separately. For this reason, the following tests were aimed at comparing the performance of each group between these two periods. In performing this test, companies that have changed their ownership structure category during the period of the study were excluded from the data sets. The partitioning of the sample for this procedure resulted in a sample size of 367 pairs of cases from the original of 483 pairs.

Prior to this test, it is important to investigate whether the performance of majority, dominant and dispersed ownership firms differed from each other before the crisis period. Further tests are also needed to assess differences in performance of these groups of companies after the crisis period. Before the crisis period, only the performance of majority-owned ($M = 6.52, SD = 6.11$) and dominant-owned ($M = 4.65, SD = 5.20$) firms have significant differences in their performance by [ROA; $F(2, 480) = 4.662, \rho = .01$]. This result shows that, on average, majority-owned firms outperform dominant ownership firms during this period on the ROA indicator. However, by using ROS indicator the performance of the three groups of firms is not statistically different [ROS; $F(2, 480) = 2.242, \rho = .107$].

A similar procedure was also used for the period after the financial crisis. The result reveals that there is no significant difference between performances among majority, dominant and dispersed ownership firms as measured by ROA. The second perform-
ance indicator also supports this finding that there is no significance difference among the three groups of firms based on their ownership type [ROS; $F (2, 480) = 10.342, \rho = .73$]. The Welch and Brown-Forsythe robust test of equality of means also support this result ($\rho > .1$).

The above finding reveals that before the crisis period, there was evidence that majority-owned firms outperform dominant ownership firms and the nature of differences in their performance is statistically significant. However, after the financial crisis, differences in the performance of both groups of companies are not statistically significant. In relation to the result of previous test (table 24) that all firms in the data sets experienced a decrease in performance after the crisis, it appears that the majority-owned firms were more seriously affected during the crisis period than their dominant or dispersed ownership counterparts. Therefore, this result confirms the graphical illustration of figures 6 and 24 for average ROA and ROS for firms in the data sets during the period of the study.

Further statistical testing is needed to determine the effect of the financial crisis on each ownership type by comparing performance of both sets of firms between these two periods. Table 25 presents the result of paired-sample $t$-test, for the three groups of firms based on their ownership type. Tested separately, it shows a consistent result that the performance of majority-owned firms deteriorated after the financial crisis ($\rho < .005$) for both ROA and ROS measures. Performance of dominant-ownership firms only deteriorated as measured by ROA indicators. Meanwhile, performance of dispersed ownership firms did not differ significantly between the period before and after the crisis. However, the $t$-test result for dispersed ownership firms should be interpreted with caution, since this group was represented by small number of firms.
Table 2.5: Paired-sample T-test - Time Specific Effects, Ownership Type and Firm Performance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>12.48</td>
<td>26.87</td>
<td>1.61</td>
<td>7.77</td>
<td>279</td>
<td>.000</td>
</tr>
<tr>
<td>ROS</td>
<td>7.64</td>
<td>24.46</td>
<td>1.46</td>
<td>5.23</td>
<td>279</td>
<td>.000</td>
</tr>
<tr>
<td>Dominant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>8.00</td>
<td>30.90</td>
<td>3.80</td>
<td>2.10</td>
<td>65</td>
<td>.039</td>
</tr>
<tr>
<td>ROS</td>
<td>6.05</td>
<td>31.52</td>
<td>3.88</td>
<td>1.56</td>
<td>65</td>
<td>.124</td>
</tr>
<tr>
<td>Dispersed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>10.48</td>
<td>23.59</td>
<td>7.46</td>
<td>1.41</td>
<td>9</td>
<td>.193</td>
</tr>
<tr>
<td>ROS</td>
<td>-.80</td>
<td>9.35</td>
<td>2.96</td>
<td>-.27</td>
<td>9</td>
<td>.793</td>
</tr>
</tbody>
</table>

Subsequent tests were conducted to control the effect of owner identity by observing the performance of the foreign- and government-owned companies in the sample separately. Surprisingly, among majority-owned firms, the performance of both foreign and government firms were not significantly different before and after the period of the crisis. There was no significant difference in the performance of government owned (GO) firms between the period before \((M = 12.99, SD = 7.67)\) and after \((M = 11.72, SD = 9.80)\) the financial crisis [ROA; \(t(5) = .46, \rho > .05\)]. Similarly, there was also no evidence of performance differences among foreign owned (FO) firms from the period before \((M = 12.77, SD = 10.53)\) and after \((M = 9.90, SD = 17.65)\) the financial crisis [ROS; \(t(38) = .46, \rho > .05\)]. The ROS as a second performance measure (not reported) also shows that there is no evidence that either of the ownership categories (GO and FO firms) have significantly different performance before and after the crisis period. This result suggests that although overall firm performance in the data sets deteriorated during the period of the crisis, foreign and government-owned companies were not affected by this event.

Separate tests also assessed the time specific effect on ownership-performance relationship among private-domestic majority-owned firms. There was evidence of significant difference in performance among these firms before \((M = 5.33, SD = 4.56)\)
and after \(M = -7.99, SD = 28.20\) the financial crisis [ROA; \(t(313) = 8.35, \rho < .005\)]. Similarly, ROS as a secondary performance indicator also exhibits there was differences in performance among private-domestic firms before \(M = 18.05, SD = 13.13\) and after \(M = 6.78, SD = 42.81\) the financial crisis [ROS; \(t(313) = 4.50, \rho < .005\)]. Both performance indicators reveal that all private-domestic firms, regardless of their ownership type, experiencing deteriorated performance following the crisis period.

In summary, majority firms outperform dominant and dispersed ownership firms before the onset of the crisis and this advantage disappears during the crisis period for all companies in the observations. However, all of these firms experienced reduced performance during the crisis, in comparison to the period before the crisis. Separate tests for both foreign (FO) and government (GO) firms in the data set show that both FO and GO firms did not experience performance deterioration between these periods. This suggests that the downturn in performance among all firms in the observations was attributable by private-domestic owned firms. Further tests support this finding that private-domestic owned firms experienced a downturn in performance after the financial crisis period, regardless of their ownership category.

5.5.5.2 Time Specific Effects, Owner’s Involvement in Supervisory/Management Board and Firm Performance

The result of hypothesis 2 reveals significant differences in performance between the firms with owner involvement in their supervisory boards and companies without such involvement. The following test aimed at reconfirming this result by controlling the time specific effect for all private-domestic firms in the data sets. To assure the assumption of group independence, all companies that had changed their pattern in regard to owners’ involvement during the period of the study are excluded from this analysis. The partitioning of the sample for this procedure resulted in a sample size of 356 pairs for supervisory board (consist of 344 OI and 12 NOI firms) and 349 pairs for management board (consist of 281 OI and 68 NOI firms) from the original of 483 pairs of observations.
Table 26: Paired-sample *t*-test-Time Specific Effects, Owners Involvement in Supervisory/Management Board and Firm Performance

<table>
<thead>
<tr>
<th>Group</th>
<th>Paired Differences</th>
<th></th>
<th>T</th>
<th>df</th>
<th>Sig. 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Std. Error Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory Board</td>
<td>12.51</td>
<td>26.17</td>
<td>1.41</td>
<td></td>
<td>8.87</td>
</tr>
<tr>
<td>OI</td>
<td>27.89</td>
<td>50.02</td>
<td>14.44</td>
<td></td>
<td>1.93</td>
</tr>
<tr>
<td>Management Board</td>
<td>12.92</td>
<td>27.21</td>
<td>1.62</td>
<td></td>
<td>7.96</td>
</tr>
<tr>
<td>NOI</td>
<td>12.27</td>
<td>28.25</td>
<td>3.45</td>
<td></td>
<td>3.56</td>
</tr>
</tbody>
</table>

The test result (table 26) suggests that all companies, with or without their owners involved in supervisory or management board membership show their performance to have deteriorated significantly ($\rho < .1$) after the period of the crisis. This result should be interpreted more cautiously, since observations on group of firms that have no owner involvement in supervisory board have been deleted$^{76}$ before the tests as a result of change in the pattern of owner involvement. This procedure was aimed at maintaining the comparability of companies under observation, and leaves only 12 observations to represent NOI firms for the analysis of supervisory board. The bias of the result could be attributable to the small numbers of cases remaining in the data set to represent this group. Further, another source of potential bias in interpreting the result could also come from the large standard deviation in the performance (table 24) of OI and NOI firms.

Further tests were conducted for each period, before and after the crisis, by comparing performance between a group of firms with and without owner's involvement in supervisory board. For the period prior to the crisis (1994-1996), there is no significant difference in performance between companies with owner involvement ($M = 5.14$, $SD = 4.56$) and without owner involvement ($M = 1.49$, $SD = 7.15$) on supervi-
sory board membership [ROA; \( t (361) = -1.93, \rho > .05 \)]. The second performance indicator also exhibits similar result [ROS; \( t (481) = .239, \rho > .1 \)]. Similarly, after the crisis period (1998-2000) there is no significant difference in performance of companies that have their owner involved (\( M = -7.47, SD = 26.75 \)) and not involved (\( M = -14.79, SD = 29.49 \)) in supervisory board membership [ROA: \( t (361) = -1.26, \rho > .05 \]). ROS indicator also reveals similar result [ROS; \( t (415) = -1.157, \rho > .1 \)].

Further tests were also performed for owner involvement in the management board. The result shows that during the period before the crisis both of companies with (\( M = 7.62, SD = 8.01 \)) and without (\( M = 5.41, SD = 4.63 \)) owner involvement in the management board exhibit differences in performance [ROA: \( t (168.23) = 3.004, \rho = .003 \)]. The ROS performance measure indicated support for this result and it appears that companies with their owner involved (\( M = 18.27, SD = 13.09 \)) outperform other companies that have no owner involved (\( M = 14.96, SD = 11.05 \)) in the management board [ROS; \( t (481) = -2.599, \rho = .010 \)]. After the period of the crisis, there appears no difference in performance between companies with and without owner involvement in management board for both indicators [ROA: \( t (415) = .316, \rho = .752 \) and ROS: \( t (107) = -1.734, \rho = .86 \)].

The result of hypothesis 2b indicated no significant difference in performance between companies with and without their owner involved in supervisory or management boards. After controlling for the time specific effect, before the crisis period ROA indicator suggests that there was no difference in performance between the four levels degree of owner involvement in supervisory board membership [ROA; \( F (3, 402) = .821, \rho = .483 \)]. Using the ROS as performance measure indicated that there was significant difference in performance [ROS; \( F (3, 402) = 4.052, \rho = .007 \)]. Post-hoc comparisons using the Games-Howell test indicated that the mean score for the 4th quartile group (\( M = 12.90, SD = 10.82 \)) is significantly different from the other three groups (1st quartile; \( M = 16.80, SD = 12.33 \), 2nd quartile \( M = 19.36, SD = 12.49 \), and 3rd quartile \( M = 17.73, SD = 13.32 \)). This suggests that the performance of firms with higher degree of involvement of the owner in the supervisory board will be lower, compared to that of other groups. For the period after the crisis, the result of a one-way ANOVA test for the degree of owner involvement in the supervisory board
shows no difference ($\rho > .1$) in performance for the four groups of firms [ROA; $F(3, 358) = .866, \rho = .459$, and ROS; $F(3, 358) = .622, \rho = .601$].

Separate tests were also conducted for the degree of owner involvement in the management board, after controlling for the time specific effect. Prior to the crisis period the result indicated no significant differences in performances among the four groups of firms [ROA; $F(3, 336) = 1.881, \rho = .132$]. On the other hand, the ROS measurement indicates there are, in fact, differences in performance among these groups of firms [ROS; $F(3, 336) = .12.797, \rho = .000$]. Post-hoc comparisons test using the Tukey HSD test indicated that the mean score for the 4th quartile ($M = 22.90, SD = 13.72$) was significantly different from the other groups (1st quartile; $M = 18.12, SD = 12.05$, 2nd quartile $M = 16.33, SD = 9.67$, and 3rd quartile $M = 11.25, SD = 12.09$).

For the period after the crisis, the result of the one-way ANOVA test for the degree of owner involvement in the supervisory board shows no difference ($\rho > .1$) in performance for the four groups of firms [ROA; $F(3, 308) = .859, \rho = .463$, and ROS; $F(3, 308) = .566, \rho = .638$].

In summary, before the crisis period there were no differences in performance between those firms with their owner involved in supervisory or management board memberships and those without. A similar result also held for the period after the crisis. Previous statistical results on hypothesis 2a, however, suggest that there is a significant difference in performance of both sets of firms for the whole period. This earlier result reveals that during the period of the study, firms with their owner involved in their supervisory or management boards outperformed firms that had no owner on this board. This conflicting result might attributable to the exclusion of the observations for 1997. Further tests, by controlling for the time specific effect (table 26) suggest that only firms with owner involvement experienced a downturn in performance. Overall, this result suggests that there are performance problems for companies that had their owner involved in supervisory or management board membership during the period of the crisis. It appears that the time specific effect does affect the relationship between owner involvement in supervisory board membership and firm performance.
5.5.5.3 Time Specific Effect, Company Affiliation and Firm Performance

The result of hypothesis 3a suggests that there is no significant difference in performance between affiliated companies and independent firms. Given that the performance of private-domestic companies in the data sets deteriorated after the onset of the financial crisis, it is important to observe performance of both groups of firms after this event. In performing this test, only private-domestic firms are included in the analysis. To meet the assumption of independence of observation, companies that are identified as changing their pattern of affiliation during the period of this study are excluded from the tests. The partitioning of the sample for this procedure resulted in a sample size of 367 pairs (consist of 331 AF and 36 IF firms) from the original of 483 pairs of observations.

Table 27: Paired-sample t-test-Time Specific Effects, Company’s Affiliation and Firm Performance

| Dependent Variable | Paired Differences |  |  |  |  |  |  |
|--------------------|-------------------|---|---|---|---|---|
|                    | Mean              | Standard Deviation | Std. Error Mean | t   | df | Sig. 2 tailed |
| **Affiliated Firms (AF)** |                   |               |               |     |    |               |
| ROA                | 12.75             | 23.89          | 1.31           | 9.71| 330| .000          |
| ROS                | 12.58             | 75.16          | 4.13           | 3.04| 330| .003          |
| **Independent Firms (IF)** |                   |               |               |     |    |               |
| ROA                | 12.24             | 22.05          | 3.67           | 3.33| 35 | .002          |
| ROS                | 11.17             | 32.38          | 5.40           | 2.07| 35 | .046          |

Table 27 summarises the result of the paired sample t-test for both types of firms through separate analysis. It exhibits that the result is consistent with the exploratory analysis that performance of both affiliated and independent firms significantly deteriorated after the financial crisis ($\rho < .05$).

Further investigations were also conducted for companies in the data for each period, before and after the crisis, in regard to company affiliation, with the exception of 1997 observations. Before the crisis period ($t_1$) performance of affiliated ($M = 5.15$, $SD = 4.19$) and independent ($M = 10.76$, $SD = 7.70$) companies was not significantly
different [ROA; $t(7) = 2.05, \rho > .05$]. However, after the crisis period ($t_2$) the difference in performance of affiliated ($M = -8.07, SD = 23.96$) versus independent ($M = 10.17, SD = 13.81$) firms is statistically significant [ROA; $t(328) = 2.27, \rho < .05$]. This result suggests that, on average, independent firms outperformed their affiliated counterparts after the crisis period.

The result of hypothesis $3_c$ shows that, among affiliated companies, there was no difference between performance of the majority ownership versus dominant and dispersed ownership structured firms. After controlling for the time specific effect it reveals that prior to the crisis period, there was a difference in performance among the three groups of firms [ROA; $F(2, 366) = 2.897, \rho = .056$]. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the majority ownership group ($M = 5.41, SD = 4.40$) was significantly different from dominant ownership ($M = 4.17, SD = 4.90$) firms. On the other hand, the ROS performance indicator did not show evidence of significant differences among the three groups of firms [ROS; $F(2, 366) = .897, \rho = .409$]. Subsequent tests for the period after the crisis also show that performance of majority versus dominant and dispersed ownership firms was not statistically significant [ROA; $F(2, 349) = .098, \rho = .907$ and ROS; $F(2, 349) = 4.690, \rho = .174$].

In summary, after controlling for the time specific event of the crisis, both affiliated and independent firms experienced a downturn in performance after the onset of the crisis. During the period before the financial crisis, there are no significant differences in performance between independent and affiliated firms. However, after the financial crisis independent firms outperform affiliated firms. This suggests that there is no evidence of any benefit resulting from group affiliation during the financial crisis.

Time specific effects as a control variable exhibit different impacts on the variables in the study on firm performance. Among companies in the data set, foreign- and government owned firms experienced less impact from the financial crisis than did the different categories of private-domestic firm. However, the degree of impact differs markedly between variables in the study. The companies with their owner in-
volved in supervisory board membership experienced a significant decrease in their performance compared to the firms that have no owners involved in their board membership. Likewise, independent and affiliated companies encountered different effects following the crisis period, with the former outperforming the latter after the crisis.

5.5.6 Interactive Effects

After conducting confirmatory analysis, the next relevant question concerns the extent to which potential interactive effects between independent variables contribute to firm performance as a dependent variable. Prior to this test it is important to examine the correlation among variables in the study. Table 28 presents the Spearman correlation matrix and this method is ‘ideal for use when you have data that is measured on nominal (categorical) and ordinal (ranked) scales’ (Pallant 2001, p.255). As the data in this study comprises data measured in both categorical and interval scales, this method is appropriate to describe the strength and direction of relationship between the two variables. Previous governance studies (e.g. Daily 1991) also utilise this method to illustrate the relationship of variables in their study.

Among governance variables in the study, the Spearman correlation coefficient indicates no independent variables in this study have a high coefficient of correlation (i.e. more than .7, Pallant 2001; Tabachnick & Fidell 2001), except for firm size and total assets.\textsuperscript{77} This suggests that there is no evidence of high multicollinearity between the governance variables in the study. The Spearman correlation matrix describes the relationship between individual independent variables and the performance indicator. It is also interesting to find out the interaction effects between two independent variables and their relationship to the dependent variable. Although interactions may occur among higher numbers of independent variables (i.e. more than two) ‘the interactions among three or more are usually considered less likely than those among two

\textsuperscript{77} The high correlation between these variables is expected because total assets were used to determine the firm size.
Table 28 Spearman Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Return on Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Return on Sales</td>
<td>.185**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ownership Structure</td>
<td>.170</td>
<td>.122**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Number of Supervisory Board</td>
<td>.059</td>
<td>.070*</td>
<td>.067*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Owner’s Involvement in Supervisory Board</td>
<td>.095**</td>
<td>.053</td>
<td>.085*</td>
<td>.072*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Proportion of Owner-related Supervisory Board</td>
<td>.062</td>
<td>.056</td>
<td>.047</td>
<td>-.089*</td>
<td>.582*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Number of Management Board</td>
<td>.072*</td>
<td>.053</td>
<td>.071*</td>
<td>.494**</td>
<td>.039</td>
<td>-.041</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Owner Involvement in Management Board</td>
<td>.006</td>
<td>.111*</td>
<td>.051</td>
<td>.020</td>
<td>.214**</td>
<td>.193**</td>
<td>.115**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Proportion of Owner-related Management Board</td>
<td>.046</td>
<td>.098*</td>
<td>.025</td>
<td>-.102**</td>
<td>.150**</td>
<td>.260**</td>
<td>-.118**</td>
<td>.687**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Company’s Affiliation</td>
<td>.025</td>
<td>.133**</td>
<td>.066*</td>
<td>.162**</td>
<td>.067*</td>
<td>.091**</td>
<td>.156**</td>
<td>-.051</td>
<td>-.137**</td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>Total Assets</td>
<td>-.030</td>
<td>.044</td>
<td>.010</td>
<td>.287**</td>
<td>.023</td>
<td>-.042</td>
<td>.436**</td>
<td>.147**</td>
<td>-.025</td>
<td>.131**</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Firm Size</td>
<td>-.070*</td>
<td>.042**</td>
<td>-.013</td>
<td>.212**</td>
<td>.071*</td>
<td>.064*</td>
<td>.371**</td>
<td>.151**</td>
<td>.006</td>
<td>.231**</td>
<td>.866**</td>
</tr>
<tr>
<td>13</td>
<td>Industry Type</td>
<td>-.59*</td>
<td>-.071*</td>
<td>-.150**</td>
<td>.141**</td>
<td>.082*</td>
<td>.043</td>
<td>-.053</td>
<td>.020</td>
<td>.066*</td>
<td>.052</td>
<td>.079**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)
factors' (Condra 1993, p. 61). To observe the interactive effect among independent variables, a series of univariate regression analyses were performed to observe the contribution of these interactive terms to the dependent variable, using the following formula (Kleinbaum et al. 1998),

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 X_2 + \epsilon_i \]

Where \( X_1 \) and \( X_2 \) refer to each independent variable under investigation, and \( X_1 X_2 \) represents the interaction effects of both variables. Firm performance, as the dependent variable, will be tested separately for both ROA and ROS. The coefficient of the interaction variables provides an indication of the strength of interaction effects and whether their presence affected firm performance.

Table 29 presents the result of the interaction tests for both ROA and ROS as dependent variables. Although some of the individual independent variables, as indicated by the Spearman correlation coefficient, do have a strong relationship with firm performance, in general, there is no evidence of strong interaction effect among independent variables in this study. Based on these results, the only observed interaction effect (\( \rho < .05 \)) is between ownership structure and owner involvement in supervisory or management board using the ROS indicator of performance.
Table 29: Individual Interactive Effects between Independent Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Return on Assets (ROA)</th>
<th>Return on Sales (ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t-value</td>
<td>Sig. of t</td>
</tr>
<tr>
<td>a. Ownership Structure by Owner Involvement in Supervisory Board</td>
<td>-1.655</td>
<td>.098</td>
</tr>
<tr>
<td>b. Ownership Structure by Owner Involvement in Management Board</td>
<td>-.670</td>
<td>.503</td>
</tr>
<tr>
<td>c. Ownership Structure by Company Affiliation</td>
<td>1.796</td>
<td>.073</td>
</tr>
<tr>
<td>d. Owner Involvement in Supervisory Board by Company Affiliation</td>
<td>1.077</td>
<td>.282</td>
</tr>
<tr>
<td>e. Owner Involvement in Management Board by Company Affiliation</td>
<td>.298</td>
<td>.766</td>
</tr>
<tr>
<td>f. Owner Involvement in Supervisory Board by Owner Involvement in Management Board</td>
<td>1.600</td>
<td>.110</td>
</tr>
<tr>
<td>g. Ownership Structure by Firm Size</td>
<td>1.529</td>
<td>.127</td>
</tr>
<tr>
<td>h. Owner Involvement in Supervisory Board by Firm Size</td>
<td>1.010</td>
<td>.313</td>
</tr>
<tr>
<td>i. Owner Involvement in Management Board by Firm Size</td>
<td>-1.876</td>
<td>.610</td>
</tr>
<tr>
<td>j. Company Affiliation by Firm Size</td>
<td>.227</td>
<td>.820</td>
</tr>
</tbody>
</table>

* p < .05
Table 30: Coefficient of Interaction Effect-Ownership Structure by Owner Involvement in Supervisory or Management Board membership

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Beta</strong></td>
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<tr>
<td><strong>Supervisory Board</strong></td>
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<tr>
<td>Constant</td>
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<td>-4.443</td>
<td>.000</td>
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<tr>
<td>Ownership Structure</td>
<td>.607</td>
<td>6.768</td>
<td>.000</td>
</tr>
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<td>Owner Involvement in Supervisory Board Membership</td>
<td>.236</td>
<td>5.316</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction Effect of Ownership Structure &amp; Owner Involvement</td>
<td>-.595</td>
<td>-6.088</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Management Board</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>-2.732</td>
<td>.006</td>
</tr>
<tr>
<td>Ownership Structure</td>
<td>.219</td>
<td>3.677</td>
<td>.000</td>
</tr>
<tr>
<td>Owner Involvement in Management Board Membership</td>
<td>.201</td>
<td>4.040</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction Effect of Ownership Structure &amp; Owner Involvement</td>
<td>-.186</td>
<td>-2.546</td>
<td>.011</td>
</tr>
</tbody>
</table>

The result of coefficient of interactions between ownership structure and owner involvement in supervisory or management boards indicates the interaction effect between ownership structure and owner's involvement in supervisory board ($t = -6.088$, $p < .005$) and management board ($t = -2.546$, $p < .05$). This result is consistent with hypothesis 2a (table 14 and 15) that the firms with owner involvement in supervisory or management boards exhibit higher performance than those without, measured by ROS. However, the coefficient of interaction suggests that the interaction between ownership structure and owner involvement in supervisory/management board may lead to the negative effect on firm performance. In other words, there is evidence that the involvement of the company's owner might potentially affect performance (ROS) negatively.

The remaining pair of independent variables suggests that there is no evidence of linear relationship, in addition to their interaction effects, between these variables and either performance indicators.
Although investigating the interaction effect between independent variables and their impact on firm performance provides some insights, the use of bivariate regression analysis in this relationship requires careful interpretation. One of the main reasons is that regression analysis requires the assumption of normality of distribution and is very sensitive to the present of outliers on the dependent variables (Pallant 2001). Since the data sets in this study departed moderately from normal distribution and there are possibilities of outliers in the dependent variable, this result should be interpreted cautiously.

5.5.7 Multiple Regression

This sub-section describes the relationship among variables in the study by incorporating all variables into one model. Particularly, this analysis aims to determine how well a set of independent variables is able to predict a particular outcome and which independent variables are the best predictors of an outcome.

Figure 21 and table 10 shows different pattern of firm performance before and after the crisis periods started in 1997. Appendix 12 further explains that the patterns of dependent variables during the study period, particularly after the crisis, have standard deviations larger than the mean. Incorporation of the data (i.e. 1994-2000) for this analysis may create bias in the result, as the pattern of the data exhibits large differences. Deletion of outliers and transformation of variables failed to adequately correct the non-normality. On the other hand, the pattern of the data before the crisis period shows smaller variance in comparison to the period after the crisis. As a result, the multiple regressions procedure will utilise only data during the pre-crisis period (i.e. 1994-1996).

To test the relationship between governance variables and firm performance, the following model is utilised:

\[ \text{Regression 1:} \quad \text{ROA} = \beta_0 + \beta_1 \text{OWN}_1 + \beta_2 \text{OWN}_2 + \beta_3 \text{OISB} + \beta_4 \text{OIMB} + \beta_5 \text{SBP} + \beta_6 \text{MBP} + \beta_7 \text{AFFL} + \beta_8 \text{LAS} + \varepsilon_i \]
Regression 2: \[ ROS = \beta_0 + \beta_1 OWN_1 + \beta_2 OWN_2 + \beta_3 OISB + \beta_4 OIMB + \beta_5 SBP + \beta_6 MBP + \beta_7 AFFL + \beta_8 LAS + \epsilon_i \]

Where,

- \( \beta_0 \) = Intercept
- ROA = Return on Assets, as measured by net income/total assets
- ROS = Return on Sales, as measured by operating income/total sales
- OWN_1 = Ownership type category 1, equal to 1 for majority ownership firms and zero otherwise.
- OWN_2 = Ownership type category 2, equal to 1 for dominant ownership firms and zero otherwise.
- OISB = Owner involvement in supervisory board: equal to 1 if the owner is involved as a member of supervisory board and zero otherwise.
- OIMB = Owner involvement in management board: equal to 1 if the owner is involved as a member of management board and zero otherwise.
- BBP = The number of owner-related members of the supervisory board as a percentage of total board membership.
- MBP = The number of owner-related members of the management board as a percentage of total board membership.
- AFFL = Company affiliation: equal 1 if a firm is affiliated to business groups and zero otherwise.
- LAS = Firm size based on natural logarithm of total assets.

As has been argued in section 4.2, some variables in the study (i.e. owner involvement in the boards and company affiliation) only apply to private-domestic firms. This analysis will consider only this group of firms by excluding foreign- and government-owned firms (45 firms). This procedure will leave 438 firms from originally 483 firms in the data sets. Deletion of outliers consisting of 18 firms with the largest and smallest ROA and ROS measures reduced the final sample to 420 firms (appendix 12).

The correlations table of SPSS results shows that there are no two independent variables in both models that have high correlation (i.e. more than .7) (Tabachnick & Fidel 2001). The result indicates no multicollinearity problems as the correlations are relatively low. The two measures of firm performance (i.e. ROA and ROS) are significantly correlated, but far from perfectly, since Spearman correlation coefficients are well under twenty-percent (table 28).
Analysis of residuals, plots of residuals against prediction value as well as the plot of the regression standardised indicate no problem of homoscedasticity and linearity (appendix 13). Further, the results of the standard tests on skewness and kurtosis (appendix 12) also indicate there was no problem with normality assumptions. The following table presents the regression results.

Table 31: Regression results (N = 420)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Predicted sign</th>
<th>β (t-value)</th>
<th>β (t-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OWN1^</td>
<td>+</td>
<td>.109 (1.024)</td>
<td>-0.30 (-.312)</td>
</tr>
<tr>
<td>OWN2^</td>
<td>+</td>
<td>-.012 (-.111)</td>
<td>-.048 (-.498)</td>
</tr>
<tr>
<td>OISB^</td>
<td>+</td>
<td>.032 (.551)</td>
<td>.061 (1.145)</td>
</tr>
<tr>
<td>OIMB^</td>
<td>+</td>
<td>-.055 (-.796)</td>
<td>-.081 (-1.298)</td>
</tr>
<tr>
<td>SBP</td>
<td>+</td>
<td>-.093 (-1.549)</td>
<td>-.198 (-3.641)**</td>
</tr>
<tr>
<td>MBP</td>
<td>+</td>
<td>.127 (1.895)*</td>
<td>.322 (5.259)**</td>
</tr>
<tr>
<td>AFFL^</td>
<td>+</td>
<td>-.039 (-.739)</td>
<td>-.002 (-.034)</td>
</tr>
<tr>
<td>LAS</td>
<td></td>
<td>-.111 (-2.063)**</td>
<td>.343 (7.028)**</td>
</tr>
</tbody>
</table>

**, ** and * are respectively 1, 5 and 10 percent significant level
^ categorical variables

Table 31 presents the regression results linking governance and control variables to firm performance, based on both ROA and ROS measures. Ownership type (OWN) of firms is found to be insignificant in both models, supporting previous empirical findings that there was no performance benefit of concentrated ownership among private-domestic owned companies (hypothesis 1a). The sign of coefficient correlation for majority ownership firms (OWN1) varies depending on the performance measurement employed. Measured by ROA, the relationship between majority own-
ership and firm performance shows a positive relationship as predicted, although statistically insignificant. However, ROS performance measure shows that the relationship between ownership and performance is negative and insignificant. Further, the coefficient on OWN3 is negative and insignificant.

The direction of relationship between owner involvement in supervisory boards (OISB) and firm performance is positive as predicted, implying better return from effective monitoring by owners of firms through their involvement in this board. On the other hand, the involvement of owner in management board (OIMB) shows a negative relationship which possibly indicates that owner involvement in the management board may be detrimental to firm value. However, both OISB and OIMB variables show insignificant effect on firm performance as measured by ROA and ROS.

The results on the relationship between the proportion of owner-related members on supervisory (SBP) or management (MBP) boards are also inconsistent. The proportion of owner involvement in the supervisory board (SBP) has a negative sign for both models; however, only coefficients in firm performance measured by ROS are significant ($p < .01$). On the other hand, the proportion of owner involvement in management board (MBP) has positive signs and it appears to have a significant relationship to firm performance. However, owner involvement in the supervisory board (SBP) appears to lead to negative performance, while owner involvement in the management board (MBP) may lead to a positive effect on firm performance. A significant relationship between owner involvement in board membership and firm performance was evident only in regression 2.

The estimated coefficient of group affiliation (AFFL) is negative and statistically insignificant in both models. The results support the previous hypothesis (H-3b) that there are no performance benefits of being an affiliated firm in Indonesia. Consistent with the findings of Claessens et al (2000), this evidence may suggest that group affiliation is associated with a value loss for an affiliated firm.

It is worth noting that the signs for coefficient for firm size (LAS) as a control variable vary depending on the performance measure employed. Firm size is negatively
related to ROA ($\rho < .05$), but positively related to ROS ($\rho < .01$). The result suggests that firm size may possibly lead to an increase in firm performance (ROS) but may produce a value loss as measured by ROA.

Overall the regression model explains approximately 4 percent (regression 1) and 20 percent (regression 2) respectively of the variation in the dependent variables. Only two independent variables in the regression model 2 (i.e. MBP and LAS) demonstrate a modest unique contribution (i.e. $\beta > .30$) to explaining the ROS, when the variance explained by all other variables in the model is controlled for. Although for some variables the signs of coefficient correlation for both regression models are contradictory (i.e. OWN1 and LAS), research findings indicate support of previous results on univariate statistics. Differences in the result might be attributable to the characteristics of performance measurement used in this study, since the ROA performance indicator utilises net-income in comparison to net-operating income in ROS.

5.6. Concluding Comments

This chapter has presented the empirical result of operational hypotheses developed in Chapter Three. It also includes additional tests, including interactive effects, to support major findings. There are some findings that should be interpreted cautiously, particularly in relation to the control variables, due to the elimination process on some of the observations aimed at maintaining comparability of the firms under some statistical tests (i.e. match-paired methods). This problem and other limitations will be discussed in detail in the last chapter. Table 32, 33 and 34 summarise the research findings to be discussed in the following chapter.
<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Results</th>
<th>Others*</th>
</tr>
</thead>
</table>
| H-1a  | All else being equal, corporate performance among all companies, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures. | Supported (Majority vs. Dominant)  
Supported (Majority vs. Dispersed)                                                                 | -       |
| H-1b  | All else being equal, among private-domestic companies, majority-ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings. | Not Supported  
Supported (Majority vs. Dispersed)                                                                                      | -       |
| H-2a  | All else being equal, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in supervisory board membership.                                                                 | Supported  
Supported                                                                                                                   | -       |
|       | All else being equal, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in management board membership.                                                                                 | Not Supported  
Supported                                                                                                                      | -       |
| H-2b  | All else being equal, among companies with the owner involved in supervisory board membership, corporate performance, measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total number of supervisory board is high. | Not Supported  
Supported                                                                                                                      | -       |
Table 32: Summary of the Results of Hypothesis Testing (continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H-2b</td>
<td>All else being equal, among companies with the owner involved in management board membership, corporate performance, measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total number of management board is high.</td>
</tr>
<tr>
<td></td>
<td>H-2c</td>
<td>All else being equal, majority ownership will exhibit a higher incidence of owner involvement, measured by the proportion of owner-related board members to total number of board members, than will the dominant and dispersed ownership firms.</td>
</tr>
<tr>
<td></td>
<td>H-3a</td>
<td>All else being equal, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.</td>
</tr>
<tr>
<td></td>
<td>H-3b</td>
<td>All else being equal, majority ownership firms will exhibit a higher incidence of affiliated companies than those of dominant and dispersed ownership firms.</td>
</tr>
<tr>
<td></td>
<td>H3c</td>
<td>All else being equal, among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.</td>
</tr>
</tbody>
</table>

* Represent the result of hypotheses testing employing Contingency Analysis
Table 33: Summary of the Results for Control Variable-Firm Size Effect

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Return on Assets (ROA)</th>
<th>Return on Sales (ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Large (Majority vs. Dispersed)</td>
<td>Not Supported (Majority vs. Dispersed)</td>
</tr>
<tr>
<td><strong>H-1a</strong></td>
<td>After controlling for size effect, corporate performance among all companies, measured by ROA and ROS, will be better in majority-ownership firms relative to those with the dominant and dispersed ownership structures.</td>
<td>Supported</td>
<td>Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large (Majority vs. Dispersed)</td>
<td>Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td><strong>H-1b</strong></td>
<td>After controlling for size effect, among private-domestic companies, majority-ownership firms will exhibit higher performance, measured by ROA and ROS, than those with the dominant and dispersed shareholdings.</td>
<td>Not Supported (Majority vs. Dominant)</td>
<td>Not Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large (Majority vs. Dispersed)</td>
<td>Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td><strong>H-2a</strong></td>
<td>After controlling for size effect, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in supervisory board membership.</td>
<td>Supported</td>
<td>Not Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td></td>
<td>After controlling for size effect, corporate performance, measured by ROA and ROS, will be higher in firms where the owner is included in management board membership.</td>
<td>Large (Majority vs. Dispersed)</td>
<td>Not Supported (Majority vs. Dominant)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supported</td>
<td>Not Supported (Majority vs. Dominant)</td>
</tr>
</tbody>
</table>
Table 33: Summary of the Results for Control Variable-Firm Size Effect (continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Return on Assets (ROA)</th>
<th>Return on Sales (ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>Small</td>
</tr>
<tr>
<td>H-2b</td>
<td>After controlling for size effect, among companies with the owner involved in supervisory board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of supervisory board is high.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>After controlling for size effect, among companies with the owner involved in management board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of management board is high.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H-3a</td>
<td>After controlling for size effect, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H-3c</td>
<td>After controlling for size effect, among affiliated firms, majority-ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
Table 34: Summary of the Results for Control Variable-Time Specific Effect

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Return on Assets (ROA)</th>
<th>Return on Sales (ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Before Crisis</td>
<td>After Crisis</td>
</tr>
<tr>
<td>H-1a</td>
<td>After controlling for time specific effect, corporate performance</td>
<td>Supported (Majority vs. Dominant)</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>among all companies, measured by ROA and ROS, will be better in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>majority-ownership firms relative to those with the dominant and dispersed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ownership structures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H-1b</td>
<td>After controlling for time specific effect, among private-domestic</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>companies, majority-ownership firms will exhibit higher performance,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>measured by ROA and ROS, than those with the dominant and dispersed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>shareholdings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H-2a</td>
<td>After controlling for time specific effect, corporate performance,</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>measured by ROA and ROS, will be higher in firms where the owner is</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>included in supervisory board membership.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>After controlling for time specific effect, corporate performance,</td>
<td>Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>measured by ROA and ROS, will be higher in firms where the owner is</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>included in management board membership.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 34: Summary of the Results for Control Variable-Time Specific Effect *(Continued)*

<table>
<thead>
<tr>
<th>#</th>
<th>Hypotheses</th>
<th>Return on Assets (ROA)</th>
<th>Return on Sales (ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Before Crisis</td>
<td>After Crisis</td>
</tr>
<tr>
<td>H-2b</td>
<td>After controlling for time specific effect, among companies with the owner involved in supervisory board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total members of supervisory board is high.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>After controlling for time specific effect, among companies with the owner involved in management board membership, corporate performance as measured by ROA and ROS, will be better in firms where the proportion of owner-related board membership to total member of management board is high.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H-3a</td>
<td>After controlling for time specific effect, affiliated firms will exhibit higher performance, measured by ROA and ROS, than independent firms.</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H-3c</td>
<td>After controlling for time specific effect, among all affiliated firms, majority ownership firms will demonstrate higher performance, measured by ROA and ROS, than the dominant and dispersed ownership firms.</td>
<td>Supported (Majority vs. Dominant)</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
Chapter 6: Results and Discussion

6.1. Introduction

The preceding chapter has presented the empirical results and this chapter will summarise and discuss the implication of these results for corporate governance implementation in Indonesia. It is organised as follows; first, the summary of empirical results; second, discussion on the implications of these results, and finally, the concluding comments.

6.2. Summary of Empirical Results

6.2.1 Proposition 1: Ownership Structure and Performance

The first proposition states that ownership structure determines the nature of agency problems and hence will determine the distribution of power and control within an organisation (Jensen & Warner 1988). In the absence of control mechanisms prevalent in developed economies, majority shareholders could serve as an alternative governance mechanism in mitigating agency problems (Shleifer & Vishny 1997; Burkart & Panunzi 2001). The incentives for shareholders owning large blocks of shares to protect their investment and consequently monitor management can be expected to increase with the level of their share ownership (La Porta et al. 2000; Pedersen & Thomsen 2003). All else being equal, ownership concentration may reduce agency costs (Jensen & Meckling 1976), as it is easier for a few holders to monitor management than when ownership is widely dispersed. As a result, lower monitoring costs will lead to better performance which is favourable for shareholders.

Descriptive statistics suggests that most of the publicly listed corporations in Indonesia (70%) have a majority ownership structure; only 5 percent of these companies are characterised by dispersed ownership. After controlling for owner identity, the private-domestic owned firms are also typified by concentrated ownership (66%), with large shareholders or family owning more than 51 per cent of shares.
Exploratory data analysis (figure 6) for all companies shows that majority ownership firms outperform both dominant- and dispersed-owned companies for the entire period. Empirical findings support the hypothesis that there is a significant difference in the performance, between majority ownership and dominant ownership firms for ROA and between majority and dispersed ownership for ROS (table 12). However, figure 7 shows different pattern of firm performance in relation to ownership category, based on owner identity. A further test suggests that the outperformance of all majority ownership firms over dominant and dispersed ownership firms for the entire set of observations was due to the relatively high performance of FO and GO (i.e. non private-domestic) firms, in comparison to private-domestic companies. The result of hypothesis 1b (table 13) suggests that, among private-domestic firms, there was no advantage of concentrated ownership and ownership concentration does not affect firm performance. This is also supported by the insignificant result of regression analysis between ownership structure and firm performance (section 5.5.7). Although ROS indicator shows differences in performance between majority and dispersed ownership structure (section 5.5.1), this result might be bias due to large differences in means score between the groups of firms.

Tests were also conducted to assess the impact of firm size. The Pearson chi-square significance distribution test reveals evidence that majority-owned firms consist of larger firms than do dominant and dispersed ownership firms ($X^2 = 6.81, p < .05$). The result presented in section 5.5.4.1 indicates support for hypothesis 1a, that there was a difference in performance between companies with different ownership type for all observations, after controlling for firm size effect. The result also exhibits that there were no differences in performance between large and small firms within majority, dominant and dispersed ownership among private-domestic firms. In considering larger and smaller private-domestic firms, it was found that the two groups did not perform differently, except for ROS performance indicator, which indicates support for hypothesis 1b.

In summary, after controlling for the firm size factor, taking all observations, majority owned companies performed better than both dominant and dispersed ownership firms. However, taking only private domestic firms, there was no significant difference in performance, controlling for firm size and ownership
structure. This suggests that firm size only matters for non private-domestic owned (i.e. government and foreign ownership) firms.

Exploratory data analysis (section 5.4.1) exhibits that the performance of all groups of firms deteriorated following the Asian economic crisis (figure 6). This is supported by the subsequent confirmatory data analysis (table 24) that there was statistically significant decrease in companies’ performance scores before and after the period of crisis. The result presented section 5.5.5.1 regarding the performance of all firms in the sample as measured by ROA, suggests that prior to the financial crisis that majority-owned firms performed better than both dominant and dispersed ownership companies. However, the performances of all groups of firms were not significantly different following the crisis period. This suggests that the advantage of concentrated ownership appears not to have influenced firm performance during the financial crisis. Further tests are needed to specify the performance of each ownership type between these two periods. Table 25 (section 5.5.5.1) provides the summary of empirical findings of firms performance during the periods before and after the crisis.

The result confirms hypothesis 1b that owner identity matters in the relationship between ownership and performance within companies in Indonesia. This is evidenced by the fact that the performance of both FO and GO firms did not differ significantly before and after the crisis. In contrast, all of the private-domestic firms, regardless of their ownership structure, exhibit deterioration in their performance following the crisis period.

The conflicting result shown by the ROS indicator (figure 8 and 9) highlights the sensitivity of this measure which represents the ratio between sales and operating profit (sales minus cost of goods sold and operating expenses) in comparison to ROA as a ratio of net income to total assets. The differences in the result may be attributable to the differential asset valuation methods, and the impact of new investment and depreciation methods used across firms (Li & Ye 1999). This result suggests the need for further research to assess the causes of this difference. This will be discussed in the following chapter.
From the view of ROA as the primary measure, one simple explanation of this finding is the entrenchment effect due to the dominance of concentrated or majority ownership. As has been suggested by Pedersen and Thomsen (2003), ownership concentration could be seen as facilitating controlling owners' expropriation of minority shareholders' rights. Apparently, the negative effect of concentrated ownership among private-domestic firms in Indonesia exceeds the potential positive effects of incentive alignment (section 1.1.3). It would appear, therefore, that among private-domestic firms, ownership concentration does not affect firm value.

Holderness and Sheehan (1988) also found no significant differences between the accounting rates of return of paired majority-owned and diffusely held corporations. Likewise, they did not find significant differences between the Tobin's Q ratios for these paired firms. By using the Demsetz and Lehn (1985) argument on endogenously determined ownership structure, it could be interpreted that the optimal ownership level varies by firm, and that the firms are at their optimal ownership structure.

6.2.2 Proposition 2: Monitoring and Performance

Proposition 2 states that the extent of the monitoring and control, through the involvement of majority owners in the board, should be reflected in reduced agency costs (Lins 2003). The suggestion is that shareholders could minimise asymmetric information and apply effective control when they have superior information through involvement on boards of directors (La Porta et al. 2000; Morck, Shleifer & Vishny 1988). If owners' involvement in the board as an internal control mechanism is effective in minimising monitoring costs, a positive relationship should exist between their involvement and corporate performance (Pedersen and Thomsen 2003). The majority owners with a larger stake in a company have the incentive (i.e. high cash flow rights) and the power (high voting rights) to exercise tight control and influence over management and thus might enhance firm performance.

Among private-domestic firms in the data set, 90 per cent have owner-related members appointed to supervisory boards and 75 percent have such persons as management board members. Exploratory data analysis (figures 15 and 16) shows
that the companies with their owner involved in supervisory or management board membership outperform companies without their owner involved in these boards. Consistent with this figure, subsequent confirmatory analysis (table 14b) also reveals that there was evidence of differences in performance between the firms with and without owner involvement in supervisory board membership. However, there was no significant difference on firm performance in regard to owner involvement in management board measured by ROA (table 15b).

It has been previously argued in section 3.2.2 that the proportion of owner-affiliated board members to the total board membership could influence the effectiveness of internal governance mechanisms. Figure 17 shows the outperformance of companies with high (4th quartile) and medium (2nd quartile) degree of owner involvement in supervisory board in comparison to other companies only appears in 1998-1999. The result of hypothesis testing (table 16) exhibits that there was no evidence that the degree of owner involvement had different impacts on firm performance. This suggests that, regardless of their proportion on board membership, the level of owner involvement does not affect the firm performance.

In regard to owner involvement in management boards, figure 18 shows that prior to the crisis period all groups of firms performed relatively similarly regardless of their proportion of owner involvement. Consistent with the result of previous testing (table 15) differences in performance between companies with and without owner involvement in management board are only evidenced by using ROS indicators. These findings provide weak support on the importance of the degree of owner involvement in enhancing firm performance.

A further test was performed to assess differences in the relationship between owner involvement in supervisory or management board membership and firm performance, controlling for firm size. Research findings partly support hypothesis 2a that only in larger firms will owner involvement on the supervisory board have an affect on the performance, measured by ROA. This implies that differences in performance between companies with and without their owner involved in supervisory board membership were only evidenced in large companies. Further, the findings also demonstrate that only within smaller firms will owner involvement in
the management board have an affect on performance, measured by ROS. In regard to firm size effect, the evidence offers inconclusive results.

Subsequent tests were also performed to assess the effect of the financial crisis on the relationship between owner involvement in supervisory or management board membership and firm performance. Findings reveal a significant difference between companies with and without their owner involved in supervisory board membership for the period before and after the crisis. Tested separately, the performance of companies with their owner involved in the management board was significantly different from that of companies without their owner involved in this board before the period of the crisis. After the crisis period, performance of the two groups of firms was not significantly different. In summary, it appears that performance of both groups of firms with and without their owner involved in the supervisory or management boards was influenced by the effect of the crisis. This can be seen from the inconsistent research findings between observations for the full period and after controlling for the time specific effect.

In relation to the ownership structure, it is suspected that the more concentrated the ownership of the firms, the higher the degree of owner involvement in the firms to secure their investment (section 3.2.2). A further test was conducted to assess whether majority ownership firms exhibit a higher degree of owner-related supervisory or management board membership (hypothesis 2c). The result of contingency analysis (tables 18 and 19) shows that the Pearson chi-square significance distributions provide support for this hypothesis (supervisory board; \( \chi^2 = 11.62, \rho = .071 \), and management board; \( \chi^2 = 17.98, \rho = .006 \)). This suggests that there is evidence that majority ownership firms have higher incidence of high owner involvement in supervisory or management board membership.

In summary, there was evidence that private-domestic firms with their owners involved in supervisory board outperformed those without their owners involved in this board. However, after controlling for time specific effect as a result of the crisis it appears that there was no advantage in such owner involvement. The advantage of owner involvement in the management board was only evidenced among small firms using ROS performance indicator and only appears before the crisis period.
However, among companies that have the owner involved, there was no evidence that their degree of involvement has a significant effect on performance. In relation to ownership structure, there was sufficient evidence that majority-owned companies demonstrate a higher degree of owner involvement in supervisory or management board in comparison to dominant and dispersed ownership firms.

The involvement of the owner in the supervisory or management board could be seen as representing the owner-managers' view of family businesses. Despite its inconclusive result, one simple explanation of the findings is that there is an indication of collective action within this affiliated board membership, as has been suggested by Claessens, Djankov and Klapper (2003). Additionally, they argue that within the family business, assuming that the business must perform to create value for the family and the family must add value to the business, the owner-related board should follow the best interests of the family.

6.2.3 Proposition 3: Company Affiliation and Performance

The third proposition states that in the absence of a liquid capital market in emerging economies, a firm will find an alternative for financing needs. The existence of company affiliation to other companies within the group might be a potential way to resolve this problem (Claessens, Djankov & Klapper 2000; Joh 2003). Business groups to which a company belongs, and the group's banking affiliation, could be seen as an internal capital market in providing financing needs (Leff 1978). All else being equal, this market will offer lower financing costs (Banerjee, Leleux & Vermaelen 1997) and easy access to capital sources and hence might increase firm performance.

Descriptive statistics (figure 5) exhibit that most (85%) of private-domestic owned corporations in Indonesia are affiliated to one or more business groups, and 67 per cent of private domestic owned corporations have a majority ownership structure (table 21). This figure is slightly higher than the one reported by Claessens, Djankov and Klapper (2000) for their comparative study among seven Asian economies between 1991-1996.
Exploratory data analysis (figure 19) shows that prior to the crisis independent firms performed better than group-affiliated firms. Following the crisis period, although both groups of firms suffered from a decrease in performance, affiliated firms outperformed their independent counterparts. Hypothesis 3a was posited to evaluate whether differences in regard to the company's affiliation lead to differences in the company's performance. The empirical result presented in table 20 suggests that there was no evidence of differences in performance between affiliated and independent firms. This result is robust after controlling for firm size and time specific effects. This may suggest that the benefit of being a member of a group of companies, compared to being an independent firm does not exist in Indonesia.

In relation to the firms' ownership structure (hypothesis 3b), descriptive statistics suggest that affiliated companies are dominated by firms characterised by majority ownership structure. The Pearson chi-square significance distribution reveals that majority ownership firms are more affiliated than those of dominant and dispersed ownership firms ($\chi^2 = 11.17, p < .005$). This suggests that to control their affiliated firms, business groups in Indonesia seek to have a majority ownership in that firm. In this context, it is important to assess whether among all affiliated firms in the data set, these majority ownership firms outperformed their dominant and dispersed ownership counterparts (hypothesis 3c).

The result of hypothesis testing (table 22) reveals that there was also no evidence that the majority ownership firms outperformed dominant and dispersed ownership firms within the affiliated companies as measured by ROA. This suggests that, although majority ownership firms dominated the affiliated companies, ownership structure did not affect the affiliated company performance. This finding is consistent after controlling for firm size effect and during the period after the crisis. On the other hand, the ROS performance measure indicates that, among affiliated companies, there was significant difference between majority-owned and both the dominant and dispersed ownership firms. However, this result was not robust after controlling for firm size and time specific effects.

Subsequent tests were also performed to observe the impact of the financial crisis on the company affiliation-performance relationship by partitioning observations into
two sub-samples. The result (section 5.5.5.3) shows that performance of both affiliated and independent firms significantly deteriorated after the crisis, compared to the period before the crisis. Consistent with previous results in regard to the time specific effect, all of the private-domestic firms, regardless of their types of affiliation, experienced downward performance following the crisis period.

In summary, this study finds that there was no evidence that affiliated companies perform significantly differently from the independent firms, even after controlling for the firm’s size factor. Both affiliated and independent firms experienced deteriorated performance following the financial crisis. However, there was weak evidence that independent firms outperformed affiliated firms after the crisis. Additionally, there was evidence that majority-owned firms are more likely to be affiliated to business groups than their dominant and dispersed ownership counterparts. There was also weak evidence that among affiliated firms, the performances of all three groups of firms are significantly different. This result suggests that there is no advantage in being an affiliated company. This finding might also support the view of Johnson et al. (2000) that the strong owners diverted their affiliated companies’ resources, through family business groups, to other companies within the group.

6.3. Discussion

Based on the summary of findings presented in previous section, the implication for corporate governance implementation in Indonesia will be discussed in the following section.

6.3.1 Ownership and Performance

The findings show that ownership of majority companies in Indonesia is heavily concentrated in the hands of individuals, families or companies. In the case of private-domestic owned companies, the controlling family shareholders might have almost complete control over all firms within their family business group. This suggests that there is little separation between ownership and control in this country; this differs from Berle and Means’ (1932) thesis of separation of ownership and
control in the modern corporation. The result is consistent with the findings of La Porta et al. (1998) and Das (2000) that corporate ownership is heavily concentrated in emerging market economies, with families typically controlling corporations. The evidence suggests that there are no performance benefits from majority ownership among private-domestic firms in Indonesia. Although majority companies are usually large, further evidence shows that majority-owned firms did not perform differently from either dominant- and dispersed-owned firms. Following the financial crisis, all private-domestic firms suffered from deteriorated performance, regardless of their ownership type. This suggests that, after controlling for firm size and time specific effects, the result is robust that there was no evidence that majority ownership firms outperform dominant and dispersed ownership companies. In sum, the findings suggest that there are no advantages to the concentrated ownership structure in enhancing firm performance as predicted by the agency theory.

Previous studies by Demsetz & Lehn (1985) and Holderness & Sheehan (1988) found that concentration of ownership tends to be inversely related to firm size. A more recent study by Pedersen and Thomsen (2003) also found that increased company size tends to lower the percentage of ownership concentration, as the absolute risk of holding a given fraction of the shares is larger in large companies. This study found that majority-owned firms include a higher incidence of large companies than their dominant and dispersed ownership counterparts. The reason may be that company size plays a different role in Indonesia and does not function as the theory predicts because the institutional setting differs with regard to the level of ownership concentration, the governance structure, and legal system.

Demsetz and Lehn (1985) hypothesise that ownership concentration of a firm is endogenously determined. From this point of view, they argue that firms will adopt a certain ownership structure that is appropriate to their own characteristics. Consequently, ‘the concentration of ownership should vary systematically across firms depending on the characteristics of each firm that is related to the shared and private benefit of block ownership’ (Holderness 2003, p. 56). In the case of Indonesia, the dominance of majority ownership patterns could be seen as following this argument, in order that the controlling owners can retain their private benefits in a company. In relation to family ownership, since private-domestic majority-owned
firms are controlled by family, it might be argued that holding a large amount of shares in the company could protect the familial wealth.

The fact that there is no performance advantage in majority ownership over other non-majority (dominant and dispersed) forms of ownership may suggest that given the risks inherent in not diversifying wealth, an alternative motivation might exist, for example expropriation by the controlling owner. Further, the use of pyramidal ownership structures across shareholdings and the appointment of supervisory or management board members who are related to the founder or owning families are both the means and consequences of concentrated ownership. Taken together, these factors might be seen as shaping the expropriation process of corporate wealth by controlling shareholders. According to Das (2000, p. 5) this expropriation can be achieved by ‘selling output or assets at below market prices to firms controlled by majority or controlling shareholders or managers, but which outside investors have financed’. These practices may discourage market-based transactions and direct the corporation into paying more than necessary for services provided to the firms in which they are interested. Further, more detailed discussion of majority/concentrated ownership and its relation to family ownership will be found in section 6.4.3.

6.3.1.1 Owner Identity

Exploratory data analysis (section 5.4.1.) and subsequent hypothesis testing (section 5.5.1.) suggests the importance of owner identity in studying and analysing ownership-performance relationships. Figure 8 shows the fact that majority-owned firms outperform their dominant and dispersed ownership counterparts was influenced by the existence of both foreign and government ownership within the majority group of companies. This result confirms previous studies by Holderness and Sheehan (1988), Short (1994) and Pedersen and Thomsen (2003) that the identity of the large shareholder is important. In this case, it relates to the means of exercising corporate control and the degree of monitoring by controlling shareholders of company operations.

The following sections discuss the implication of the findings for each majority ownership type based on its owner’s identity.
6.3.1.1 Foreign Ownership

The finding that foreign ownership matters in the relationship between ownership and performance is important and interesting. Globerman, Ries and Vertinsky (1994) argue that the performance of foreign owned firms is superior to that of domestic firms due to the possession of firm specific advantages. One of the main reasons for such advantage is that ‘tangible and intangible assets are profitably deployed abroad after being developed domestically’ and ‘the transaction costs associated with managing single organisation across countries are lower than transaction costs of multiple organisations with different owners’ (Boardman, Shapiro & Vining 1997, p. 296). Consequently, it be could expected that the performance of foreign-owned (FO) firms will be relatively different from that of other private-domestic owned firms.

Previous studies in the emerging and developing economies by Chhibber and Majumdar (1999) among companies in India, and Wiwattanakantang (2001) among publicly listed firms in Thailand found that foreign controlled firms exhibit superior firm performance. In theory, the same agency and control mechanisms underlie the ownership concentration and performance relationship of all companies, whether ownership is domestic or foreign. Yet the findings of this study show that the performance of FO firms is significantly different from that of domestic owned companies. One possible explanation is that the governance of companies controlled by foreign ownership is different from the local firms due to certain regulations imposed by the firm's original country.

In the case of Indonesia, the outperformance of FO firms in comparison to domestic companies is in accordance with the predictions of the standard industrial organisation theory of foreign investment (Hill 2000). This theory states that ‘within given country and industry contexts firms in which there is a higher share of foreign ownership will on average perform better than their domestic counterparts’ (Boardman, Shapiro & Vining 1997, p. 295). With the majority ownership (i.e. equity ownership more than 51 percent) foreign investors are able to control their subsidiary and, as a result, simplify monitoring activities and lower agency costs (Demsetz and Lehn 1985). In a similar vein, foreign investors tend to be long-term
investors and are single block shareholders (Douma, George & Kabir 2002) giving
them both the capability and strong incentives to monitor the company they have
invested in.

The current study found that foreign firms operate in selected industries (i.e.
pharmaceutical and consumer products), which can be identified through the
company’s name (e.g. Procter & Gamble). This is consistent with the Douma,
George and Kabir (2002) hypothesis that foreign companies holding large share-
ownership tend to invest in industries related to their core business. These foreign
companies may have superior access to technical capabilities and financial resources,
and be endowed with superior managerial capital. This can be seen from the fact that,
although having high ROA, the total assets and sales of foreign firms in the data set
are smaller than other private-domestic firms (figures 11 and 12) This suggests that
FO firms perform efficiently, taking advantage of their advanced technology in
comparison to domestic firms.

Efficient monitoring by foreign investors is possible for a number of reasons. First,
increase in the informational symmetry due to the reduction in the problems of
hidden actions, adverse selections and invisibility of managerial actions (Chhibber &
Majumdar 1999). Second, increasing economies of scale through acquiring and
utilising information (Estrin & Perotin 1991). Third, head office managers face
performance pressures that force them to monitor the performance of the company’s
subsidiaries seriously (Boardman, Shapiro & Vining 1997). In sum, foreign firms
have different governance from that of other majority-owned firms with different
owner identity, due to their specificity that leads to reduced agency costs and
enhanced firm performance.

6.3.1.1.2 Government Ownership

Claessens and Fan (2002) consider government enterprises as a specific type of
corporation that may lead governance practices that differ from those of other type of
firms. Specifically, they argue that the issue of performance of government-owned
(GO) companies is more complicated, since the state is the controlling owner. They
clarify several reasons for this statement (p. 9). Firstly, the state is not the ultimate
owner but rather the agent of the ultimate owners (the citizen). Moreover, the state as owner faces many conflicts of interest as it is also the regulator and enforcer of laws, regulates and often controls the banking system. Secondly, there can be different types of governmental agencies that control the equity stakes of companies. For government-owned companies in Indonesia are managed under the coordination of Ministry of State-owned Enterprises, although the Ministry of Finance represents the government ownership.

In the case of Indonesia, Husnan (2001) reports that the involvement of the state in businesses goes back to the era of the country’s struggle for independence through the nationalisation of Dutch-owned firms. Government involvement is in accordance to the country’s 1945 Constitution (article 33) which specifies that,

(2) the state will control (menguasai) branches of production which govern the lives of the masses; and (3) the earth, water and the natural resources they contain will be controlled by the state, and used, as much as possible, for the welfare of the people” (translated by Chalmers 1997, p. 9).

According to Chalmers (1997), the term menguasai implied the “ownership” or “control” and may also be interpreted as giving the state a direct role in the economy. The significance of this constitution could be seen from the fact that all state-owned enterprises (Badan Usaha Milik Negara)⁷⁸ are managed under the coordination of the Ministry of State-owned Enterprises. The establishment of this ministerial body enables the involvement of government in businesses practices through owning, as well as controlling, all state-owned companies. This includes the appointment and dismissal of both management and supervisory board members.

At the end of 1995 there were 165 state-owned companies⁷⁹ in Indonesia operating in various sectors (Husnan 2001). Similar to their private-domestic firm counterparts,

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⁷⁸ There are three categories of State-owned Enterprises: Ministry Agencies (Perjain), Public Corporations (Perum), and Public State Companies (Persero). The vast majority of the official state enterprises were organised under the last category as limited liability companies whose shares were owned wholly or partly by the Ministry of Finance representing the government. They were expected to operate as profit-oriented ventures under the same legal provisions governing private limited liability companies’ (Habir 2002, p. 13).

⁷⁹ Husnan (2001) describes sectoral distribution of the Indonesian state-owned enterprises as follows. Non-financial (143 companies), banks (7 companies), insurance (11 companies) and finance (4 companies).
fifty eights of these firms have around 459 subsidiaries and affiliated companies. The current study finds that GO firms performed better than private-domestic firms, with average return on assets of 12.35 per cent, and supports the efficiency view of GO companies. However, this result is in contrast with Husnan (2001) who concludes that, although having higher ROA than the findings of this study, the performance of GO companies in Indonesia is lower than those of publicly listed companies.

According to Husnan (2001) there are six Indonesian government-owned firms listed in the Jakarta Stock Exchanges (JSX), which accounted for only 3.6 percent of all companies listed in this capital market. Their performance, therefore, might not reflect the overall performance of the GO companies. In this study, only two firms represent GO companies (i.e. PT. Indosat (Persero), Tbk. and PT. Semen Gresik (Persero), Tbk.)\footnote{To distinguish government-owned and other companies listed in the capital market, the name of each state-owned enterprises should added by the suffix "Persero" and "terbuka (Tbk)" which literally means “Public State Companies” and “open” corporations respectively.} The exclusion of other GO companies\footnote{There are five government-owned firms that are newly-listed in the JSX during the period of the study; PT. Kimia Farma (Persero) Tbk., PT. Aneka Tambang (Persero) Tbk., PT. Tambang Timah (Persero) Tbk., and PT. Telekomunikasi Indonesia (Persero) Tbk.} in the preliminary data process was aimed at avoiding research bias, since these firms are not listed in the JSX for the entire period of the study. Based on these factors, it might be argued that the finding of this study – that GO firms outperform their private-domestic firms—could not be generalised to represent the performance of all state-owned enterprises.

6.3.1.1.3 Private-Domestic (Family) Ownership

Although there are variations in the pattern of ownership concentration, the ‘Asian corporations generally never accepted the principle of widely held ownership’ (Das 2000, p. 5). Ownership of public companies in Indonesia is highly concentrated in the hands of family, which may control and manage them as sources of personal and family wealth enhancement (Carney & Gedajlovic 2002b). The evidence of this entrenchment was also supported by ‘non-transparent accounting practices, non-market-based transactions, interlocking ownership, strong controlling shareholder groups, and weak minority shareholder rights’ (Das 2000, p. 5). For these motives,
the family controlling shareholders will fight to protect their private benefits of control against any proposed changes that would threaten their interests (La Porta, Lopez-de-silanes & Shleifer 1999; Bebchuk & Roe 1999).

In line with previous research in this area (e.g. La Porta, Lopez-de-Silanes & Shleifer et al. 1999; Claessens et al. 2000), the present study also found that a large shareholding and the concentration of ownership and control is associated with family ownership. Concentrated ownership, particularly with the closely held corporations by families in Indonesia, may reduce the effectiveness of external control mechanisms due to the potential for opportunistic behaviour. In line with this argument, Schulze et al. (2001) believe that this type of ownership 'compromises the efficiency of the firm's factor markets and the external governance that these markets provide' (p. 100) to protect the interests of others from owner opportunism.

A recent study by Nenova (2003) among 30 countries around the world concludes that the legal framework has enormous impact on private benefits of control. Specifically, her results show that about 75 per cent of systematic differences in these private benefits are explained by legal rights of non-controlling shareholders. She refers to the quality of general protection, minority shareholders rights and the standard of law enforcement as the dominant factors in explaining this result. In the case of Indonesia, stronger legal protections could restrict opportunities currently enjoyed by controlling shareholders for extracting company resources. Additionally, Dyck and Zingales (2002) propose "extra-legal mechanisms" provided by extra-legal institutions such as internal pressure from organised labour, internal policing of moral norms, and potential impact of the press, as other important factors in limiting the negative impact of private benefits of control.

The preceding discussion already provides a strong argument that the existence of majority ownership structure, particularly through family-based concentrated ownership, was aimed at protecting and preserving familial wealth. The fact that majority-owned firms with family ownership did not perform differently across firm size, suggest that there are no apparent evidence that they have a performance advantage over dominant and dispersed ownership firms. Indeed, during the financial
crisis period the three groups of firms experienced deterioration in performance, regardless of their ownership structures and size.

In summary, this study supports the importance of separating the impact of owner identity in ownership-performance relationships. It is based on the fact that the governance of these companies (i.e. foreign-, government-, and private-domestic-owned firms) differs and the dissimilarities may have impact on firm performance. For example, FO firms might gain advantages through investing in industries related to their core business, while GO firms can benefit from government protection on market entry, direct subsidies and monopolistic competition. Private-domestic firms with majority ownership have the advantage of the private benefits of control due to the weak legal and regulatory environments.

6.3.2 Monitoring and Performance

This study finds that, among private-domestic owned companies, most of the firms appointed family members to the supervisory or management boards. Furthermore, it was found that having an owner and/or members of the family on a board carries implications for control of the company concerned. This is important for understanding the involvement of shareholders in exercising their monitoring role, particularly for majority-owned firms. Both DeAngelo and DeAngelo (1985) and Fama and Jensen (1983a) argue that family involvement can provide an important constraint on managerial behaviour. Further, family reputation considerations can help force managers to take actions that are in the long-run interests of the firm. As such, the theory proposes that majority control with family involvement is more likely to be a value-maximising organisational structure for firms.

The involvement of owner-related board members suggests that owner do not want to risk their investments and will therefore closely monitor and influence corporate decisions. In these companies, it is not the executives and their associates who dominate boards of management, as in the Anglo-Saxon governance models, but the controlling shareholders. The findings show that large firms in Indonesia are generally owner-monitored firms with a predominance of majority ownership, with involvement of owners in supervisory and/or management boards.
The fact that an owner sits on the supervisory or management boards (but not necessarily their degree of involvement) does have implications for firms' performance is an interesting finding. Das (2000) argues that in these companies ownership is synonymous with control, suggesting that family controlled corporations exercise tight monitoring roles which are expected to reduce agency costs and enhance firm performance. However, the controlling owner does not necessarily have to appoint a large number of relatives to supervisory or management board membership. Rather, it appears that even with a small number of owner-related supervisory board members, the controlling shareholders are able to influence corporate decisions.

According to Husnan (2001), even if family members are not actively involved in daily operations of the companies, majority owners can still control a company through its supervisory board. Indeed, the two-tier board structure in Indonesia also allows these owners to exercise their control through the board of management (appendix 2). This provides direct access to corporate resources and decisions and is consistent with the hypothesis that majority owners are able to consume corporate resources. The involvement of an owner in board activities, regardless of their degree of involvement, suggests that shareholder related board membership allows them to closely monitor and influenced corporate decisions.

The findings also suggest that the advantage of having owner involvement on the supervisory board only appears to hold for large companies. Owners with a larger stake in a company want to secure their investments. Surprisingly, in relation to the financial crisis, the performance of companies with their owner involved in supervisory or management board membership deteriorated after the crisis. On the other hand, the performance of firms that had no owner involved in the supervisory or management board was not significantly different before and after the crisis.

In their survey on corporate governance in Asia, Claessens and Fan (2002) report that internal governance, such as board monitoring, is typically weak as a disciplining device on controlling shareholders. This might be attributable to the fact that monitoring board member are the controlling owners' family members, relatives or trusted business associates in a powerful position to influence board decisions. In
the case of Indonesia, controlling owners also have the power to nominate and assign their family members to the management board. This relationship can, perhaps, be explained by cultural dimensions that are unique to Indonesia.

Hofstede (1980) categorised Indonesia as a country with high score in power distance and characterised by collectivism. Smith et al. (1998, p. 352) argues that, in most cases, ‘the collectivist countries also have higher score on power distance dimension’. There are several cultural attributes that derive from these dimensions, such as respect for age and social position, group orientation, preservation of “face” and importance of relationships within a community (Redding 1990; Brown 1995).

Family members that have been assigned as a member of supervisory/management board believe they should protect and preserve their trust and interest for the benefit of the entire family. The high power distance cultural dimension suggests that identities and loyalties are vertical in direction and highly personalised within social group or family. It reflects the high respect family members have for their own family hierarchy and for the people leading the family. In this regard, Tabalujan (2002a, p. 512) states that

‘[It is not uncommon to find examples...[among companies in Indonesia] ...where individual family members are placed in positions of family authority although in practice, they may not exercise their authority on their own volition’

In summary, this study finds that the presence of more owner-related persons on the supervisory or management boards does not relate to firm performance. One interpretation of this finding is that although not involved in supervisory board membership, powerful leaders outside the firm but within the family group can have power of control over a company. The power to make decisions is exercised by one or relatively few individuals, who have special position and influence within the group, which relates to the centralisation of decision-making. It is not, therefore, necessary for a family to have a large number of members on a supervisory or management board, since the true centre of control may lie elsewhere. Family members on a board may, in fact, be carrying out the wishes of other, superior family members who are not on the board. The cultural aspect of corporate ownership will be discussed in detail in section 6.4.3.
6.3.3 Company Affiliation and Performance

Claessens and Fan (2002) argue that, relative to independent firms, affiliated companies within the business group structure are associated with greater use of internal factor markets, including financial markets. In the case of Indonesia, Chui, Titman and Wei (2001) believe that affiliated companies, through their group firms, have potentially valuable political connections. However, Chui, Titman and Wei (2001) further argue that the value of business groups and the relative size of the benefits and the costs of internal markets in turn may depend on institutional factors that shape the relative costs of using external financial market versus internal markets. This suggests that the effectiveness of the business group structure might also depend on institutional factors external to the groups.

A cross-country study by Claessens, Djankov and Klapper (2000) documents that the market risk of group-affiliated firms in East Asia was also influenced by group characteristics, aside from other company specific factors. Accordingly, they argue that 'group-affiliation allows for internal financial markets to spread risks, which can be valuable when external markets are imperfect' (p. 98). However, they did not find that group-affiliated structures lead to lower market risk. This suggests that group structures are not used to diversify risks internally or are not an effective means for lowering firm risk.

Claessens, Djankov and Klapper (2000) argue that group-affiliated firms operate as independent entities, and they did not benefit from the internal capital market offered by the group. Another study by Khanna and Palepu (2000) on business groups in India finds that diversified business groups outperform unaffiliated firms using both accounting and stock market-based performance indicators. However, they did not find systematic differences in the sensitivity of investment on cash flow for group-affiliated firms compared to independent firms. Based on this finding, they suggest that the wealth effect from group affiliation is not attributable to internal financial markets.

In sum, previous studies indicate that, although business group structures can be beneficial in mitigating undeveloped capital markets and in diversifying a company’s
risks, the positive impact of business group affiliation works differently in East Asian countries. One possible explanation is the differences in institutional factors that could influence the relative costs of using external financial market versus internal markets, as has been suggested by Chui, Titman and Wei (2001).

This study shows no difference in performance between group-affiliated and independent firms in Indonesia and this result is robust after controlling for firm size and time specific effects. It might be argued that there is no economic benefit for group affiliation as have been suggested by Khanna and Palepu (2000) and Chang and Hong (2000). This implies that business groups and their affiliated firms did not take advantage of the internal capital market within the groups. The findings confirm the observation conducted by Chui, Titman and Wei (2001) that there are no significant differences between affiliated and independent companies in Indonesia for the period between 1985-1999.

This evidence supports the views advanced by Johnson et al. (2000), Claessens, Djankov and Klapper (2000), and Campbell and Keys (2002) that business groups provide controlling shareholders with power and incentives to engaged in transferring (tunnelling) company's resources for their own benefit. In this regard, the expropriation hypothesis could be seen as the motivation for the existence and continuation of business group practices in Indonesia (Bebchuk, Kraakman & Triantis 2000). In the case of Indonesia, another explanation would be that the use of business group structure is to facilitate intra-group revenue transfer. However, wealth transferring practices may result in expropriation the rights of minority shareholders for the benefit of the controlling owners. This could be made possible by the lack of law and regulatory enforcement preventing such practices (section 6.4.1).

Another explanation may come from the lack of substitute monitoring by institutions external to the business group. A cross-country study by Claessens, Djankov and Xu (2000) reveals that creditor's rights were weakly enforced in East Asian countries because the judicial system in these countries was often inefficient. Further, they added that some evidence supports the proposition that weak corporations rely excessively on new financing. Claessens, Djankov and Lang (2000) show that about two-thirds of the publicly listed corporations in East Asian countries belong to larger
groups, many of which include one or more financial institutions. These financial institutions were often owned directly by the families of large shareholders or through another company within the group. Such links remove the disciplinary role that would otherwise be played by external financiers, who have an incentive to monitor their investments carefully.

In sum, the lack of significant differences in performance between affiliated and independent companies means there is no support for the notion that the former are in a better position to reduce agency costs. Further, the finding is not inconsistent with the proposition that expropriation practices within business groups generate private benefits to controlling shareholders. Due to these benefits and lack of law and legal enforcement, it might be expected that the controlling shareholders will to continue these practices as long as there is no clear legal framework that might prevent them from doing so.

Previous discussion of research findings reveal that, among private-domestic firms, concentrated ownership structure does not affect firm value. Similarly, there is no benefit for being member of a group of companies in comparison to being an independent firm. However, an owner’s involvement on supervisory or management boards (but not their degree of involvement) does have implications for firms’ performance. Taken together, these findings are not fully consistent with theory and deserve further explanations. One possible explanation could be based on the issue of context specificity (section 1.4.1), particularly in regard to the Indonesian corporate environment.

6.4 Implication for Corporate Governance Implementation in Indonesia

Previous discussion has already signalled that there are interrelations between the various variables utilised in this study. Concentrated ownership structure, particularly within a family was usually associated with the involvement of controlling shareholders in supervisory or management board membership to safeguard their familial wealth. It is then followed by the establishment of family business groups and their affiliates to enable the controlling family to retain majority control of companies within the group. In this regard, the focus of family business group
enterprise is the family unit and, consequently, these firms have strategic goals related to creating and preserving familial wealth as opposed to organisation building or other strategic goals (Redding 1990; Wong 1985). With the existence of majority shareholders, particularly in family-controlled corporations, voting rights could be exploited by controlling shareholders to foster their own interests. Because of this, there is a need for legal protection to cover the interests of all of a company’s stakeholders.

According to La Porta et al. (1998) there are connections between investors’ legal rights in each country and the structure of capital markets and corporate finance in that country. Such an issue becomes more important when one considers the appropriateness of certain corporate governance models adopted, especially for transition economies and developing countries. Several researchers (e.g. Bebchuk & Roe 1999; Licht, Goldsmith & Schwartz 2001; Gorga 2003) mention culture as one of the factors that may engender path dependence for existing corporate governance in a country. Consequently, the legal rules that are established to govern business practices in such a country might also depend on cultures and the source of corporate law.

The following section describes the implications of the findings of this study in relation to corporate governance implementation in Indonesia. It addresses the importance of cultural aspects in explaining the findings, particularly in relation to the country’s legal framework set against the dominance of family ownership and family business groups. It will also serves as a basis for formulating policy implications to be offered in promoting governance reform in Indonesia.

6.4.1 Legal Environment and Governance Practices

La Porta et al (1998) introduced the integrated approach of law and finance in understanding corporate governance. Their study found a connection between investors’ legal rights in each country and the structure of capital markets, as well as corporate finance. La Porta et al. (1998) characterised Indonesia as a country that follows the French legal tradition. Table 35 summarise their findings on the legal environment in Indonesia in comparison to other East Asian countries. These figures
show that Indonesia does have quite poor Anti-director Rights, Judicial Efficiency and Rule of Law and Corruption. On average, the legal environment of Indonesia is the second lowest score among nine East Asian countries, after the Philippines which also adopted the French legal tradition.

Table 35: Legal Environment in Indonesia

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Indonesia Score</th>
<th>Comparison with other East Asian Countries</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Standards</td>
<td>65</td>
<td>78/62</td>
<td>Among the lowest</td>
</tr>
<tr>
<td>Anti Director Rights</td>
<td>2</td>
<td>5/2</td>
<td>The lowest</td>
</tr>
<tr>
<td>Efficiency Judicial</td>
<td>2.5</td>
<td>10/2.5</td>
<td>The lowest</td>
</tr>
<tr>
<td>Creditor Rights</td>
<td>4</td>
<td>4/0</td>
<td>Among the highest</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>3.98</td>
<td>8.98/2.73</td>
<td>Among the lowest</td>
</tr>
<tr>
<td>Corruption</td>
<td>2.15</td>
<td>2.15/8.82</td>
<td>The worst</td>
</tr>
<tr>
<td>Risk of Expropriation</td>
<td>7.16</td>
<td>5.22/9.67</td>
<td>Medium</td>
</tr>
<tr>
<td>Risk of Contract Repudiation</td>
<td>6.09</td>
<td>4.8/9.69</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: Extracted from La Porta et al. (1998, pp.1132-1145)

A more recent study by Credit Lyonnais Securities Asia (CLSA 2001) uses a different measure of the country's legal environment from La Porta et al. (1998), yet exhibits similar findings (table 36). This study indicates three important variables that signify the quality of the regulatory framework in Indonesia, which are Rules and Regulations, Law Enforcement, and Institutional Mechanism and Corporate Governance culture. This study concludes that, on average, the corporate environment in Indonesia scored the lowest among nine East Asian countries.

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82 The East Asian countries in the comparison consist of: Japan, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand.
Table 36: Corporate Environment in Indonesia

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Country’s Score</th>
<th>Comparison with other East Asian Countries&lt;sup&gt;83&lt;/sup&gt;</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules and Regulation</td>
<td>4</td>
<td>9/4</td>
<td>The lowest</td>
</tr>
<tr>
<td>Enforcement</td>
<td>2</td>
<td>7/2</td>
<td>The lowest</td>
</tr>
<tr>
<td>Political/Regular Environment</td>
<td>5</td>
<td>6/2</td>
<td>Medium</td>
</tr>
<tr>
<td>Adoption of International Generally Accepted Accounting Principles</td>
<td>4</td>
<td>9/4</td>
<td>The lowest</td>
</tr>
<tr>
<td>Institutional Mechanism and Corporate Governance Culture</td>
<td>2</td>
<td>7/2</td>
<td>The lowest</td>
</tr>
</tbody>
</table>

*Weight of Score* 3.2 7.4/3.2 The lowest

Source: Extracted from Credit Lyonnais Securities Asia (2001, pp. 58-173)

Both studies already indicate poor corporate governance implementation in Indonesia from the view of law and the regulatory environment that is necessary for promoting corporate governance practices.

As has been discussed in chapter two (section 2.4.4) there are incentives for stockholders to hold a large number of shares because there are substantial private benefits of control. From the view of Bechuk’s (1999) rent-protection theory of corporate ownership structure, this type of shareholder will tend to lock up control when the private benefits of control are substantial. Private benefits of control are the value that controlling shareholders are able to extract from a company at the expense of other shareholders. According to Bechuk (1999) these private benefits of control are higher when the protection of minority rights is weaker. As a result, in countries where concentrated ownership structures are dominant, there will be less pressure for the adoption of the standard model of corporate law that favours all shareholders, and enhances shareholder value (Gorga 2003).

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<sup>83</sup> Also consist of nine East Asian countries similar to table 35.
Section 2.7 already discussed the law and regulatory reforms in Indonesia through introducing new regulations, including corporate and capital market laws during the mid of 1990s. Although the basic regulatory structure for the corporate sector appears to be already in place, poor compliance and enforcement appear to be major problems, apart from gaps and loopholes that lead to complications in the implementation of corporate governance mechanisms (Lukviarman 2001). In spite of efforts to improve efficiency of corporate governance structures, inefficiency that could constrain the performance of the market and, hence national economic outcomes, still persists within this framework. This issue is particularly relevant in the context where strong controlling shareholders tend to extract perquisites from the companies, and make inefficient decisions because of their “amenity potential”.

There are several points that relate to the effectiveness of law and regulations in promoting good corporate governance in Indonesia in relation to the law and regulations. First, Indonesia does not yet have a culture of compliance with disclosure since there are no strong rules for disclosure. Second, controlling shareholders face limited risks of lawsuits and civil sanctions due to insufficient procedural controls and weak protection of minority shareholders. Third, there is a problem with enforcing law and regulations. Finally, although Indonesia already has an accounting standard body (the Indonesian Institute of Accountants) and has adopted the International Accounting Standard, the role of this institution is still limited.

In conclusion, the discussion on corporate governance and legal environment in Indonesia can be seen as following Friedman’s argument (cited in Tabaluan 2002b, p. 161) that,

‘[t]he missing element which gives life to a legal system is ‘legal culture’.... the attitudes, values, and opinions held in society, with regard to law, the legal system, and its various parts. ...those parts of general culture -customs, opinions, ways of doing and thinking- that bend social forces toward or away from the law and in particular ways’

This statement highlights the importance of considering the country’s legal culture in order for the legal system to work effectively.
6.4.2 Legal Cultures, Law and Regulations

Lev (1972) notes the importance of "legal system" and "legal culture" concepts to understand essentially 'how men get things done in the society, how they manage their conflicts, what kinds of roles they rely upon for assistance, how these roles are related systematically, and what resources of authority they have' (p. 246). He elucidates that a legal system consists of formal processes, which constitute formal institutions, together with the informal processes surrounding them. Legal culture, on the other hand, consists of procedural legal values and substantive legal values, which serve as a cultural basis of the legal system. Therefore, legal culture and legal system are interrelated in shaping the rule of law and its related institutions in one society.

Tabalujan (2002b) argues that there is a critical role of legal culture in the developing and transitional countries due to the practice of importing 'codes or even entire legal systems from Western nations legislation in their attempt to modernise their domestic legal frameworks' (p. 168). He further believes that the problem arises when these practices are in conflict with the local legal culture, which may result in the ineffectiveness of legal system implementation in that society. Tabalujan (2002b) proposes "patrimonialism" as the key element in the Indonesian legal culture that is capable of affecting corporate governance behaviour in Indonesian society.

"[Patrimonialist], as a sociological concept, owes much to the ideas of Max Weber and refers to a patriarchal system of relationships where a father-figure, similar to that found in a family, exerts authority in social business or political contexts' (Tabalujan 2002b, p. 170). In relation to corporate governance, this statement relates to the importance of network and familial relationships in one company rather than other formal (legal) relationships. From this point of view, a corporation could be seen as an institution that should be governed based on familial relationships. In regard to the relationship between legal culture and legal systems within the patrimonialist society in Indonesia, Tabalujan (2002a, p. 282) states that,
'[I]f kekeluargaan [family spirit] is manifested in the corporate sphere, then the relationships among board members may end up being characterised more by family values rather than legal values. Legal duties will be superimposed by family obligations. Legal ethics will be superimposed by family ethics. If so, then the typical Indonesian company will be operating on an 'organisational logic' different from companies in the West.'

This statement argues that family interests serve as a legitimate authority and the traditional family values, rather than the institutionalised and formal corporate law, serve as the dominant rules. This may have a profound impact on corporate governance practice among companies controlled by families since individuals within the group will view the obligations, loyalty and responsibility to the family above others.

Das (2000) argues that controlling shareholders, particularly in relation to family business groups, may discourage market-based transactions and direct the corporation into paying more than necessary for services provided to the firms in which they are interested. As a result there is a need for legal system to protect outside or minority investors from their expropriations. However, Das (2000) argues that in Asia the family owners of the corporations are known to have close ties with political persons, which insulate them from external interference, monitoring and supervision. This position allows them to indirectly influence the process of economic reforms designed to move towards current models of good corporate governance. Concentrated ownership, together with this relationship, may hinder the effectiveness of the legal system in protecting the interests of minority shareholders.

Previous discussion implies there is a strong influence of culture on corporate behaviour, particularly with the dominance of family ownership and family business groups in Indonesia. According to Licht, Goldsmith and Schwartz (2001) there is a need to consider cultural aspects as the foundation of legal rules which underlie corporate governance practices East Asian countries. In a similar vein, Gorga (2003) argues that 'law is not the whole story, and that social norms play an important role in shaping corporate governance' (p. 49). This implies that any effort to improve corporate governance in Indonesia should consider the local culture. For instance, the agency problem that exists in Indonesia is different from the one suggested by the standard agency literature. In this country, the significant agency problem relates to
the accountability of “strong” controlling shareholders to “weak” minority shareholders, and might be attributable to the country’s legal culture and the absence of protection of minority shareholder rights. Figure 22 exhibits the relationship between various governance variables, particularly cultural and regulatory framework, in the pattern of corporate behaviour in Indonesia.

6.4.3 Cultural Aspect of Family Ownership

Following Hofstede (1991), culture can be defined as ‘the collective programming of the mind which distinguishes the members of one group or category of people from another’ (p. 5). In this regard, Van Oudenhoven (2001) distinguishes collective programming at the national level (national cultures), which distinguish one nation from another, and the organisational level (organisational cultures) to differentiate one organisation with the others. Therefore, cultures consist of certain beliefs, values and practices that are shared by most members of an organisation or by the majority of people belonging to a certain nation.

The Indonesian national culture relies on the gotong royong (mutual cooperatives for an agreed objective) principle, which is the dominant mode of decision-making among Indonesians (Chalmers 1997). Indeed, the spirit of mutual cooperation in relation to economic matters was incorporated in the 1945 constitution. Specifically, article 33 (1) of this constitution states that ‘the economy will be organised collectively on the basis of the family principle’ (translated by Chalmers 1997, p.9). As a result, business culture as well as corporate cultures and values among Indonesians are influenced by this principle. Since the establishment of the “new order” era by President Suharto in 1965, the spirit of collectivism and cooperatives has become more personalised.

The mutual cooperation culture is also apparent at the organisational level through the interaction process between individuals within the organisations concerned. In this regard, Abdat and Pervan (1999) provide an example of the process by which Indonesian people arrive at certain decisions,
Figure 22: Model of Corporate Governance Practices in Indonesia

- Law & Finance Approach (La Porta et al. 1997)
  - Indonesia's Legal Origin
    - French Civil Law (La Porta et al. 1997)
      - Legal Structure
        - Weak legal and regulatory framework (La Porta et al. 1998)
          - Relatively weak legal and regulatory enforcement (ADB 2000; 2001)
            - Low Protection of Minority Shareholders
              - Corporate governance mechanisms
                - ‘Unique’ Agency Problems (i.e. “Strong majority” VS “Weak minority” shareholders)
      - Institutional Foundation
        - Undeveloped Capital Market and Code of Conduct (ADB 2000)
          - Inactive product, labour & capital markets for corporate control
            - Path Dependence Theory (Bechuck & Roe 1999)
              - Corporate Structure
                - Continental European Model of Corporate Governance
                  - Concentrated Ownership
                    - Owner Involvement
                      - Family Business Group
                        - Strong Controlling-Majority Shareholders
                          - Cultural Foundation
                            - The Spirit of Cooperation
                              - Confucianism
                                - High Power Distance
                                  - Low Individualism (Hofstede 1980)
                                    - Collectivism Value (i.e. the family interests above others)
                                      - Controlling Family & Family Business Groups
                                        - Controlling owners have the power (i.e. voting rights) & incentives (i.e. cash flow rights) to secure their investments and minimise risks.
                                          - Close monitoring through owner involvement in businesses (i.e. reducing information asymmetry).
                                            - Pyramidal ownership & business group practices.
                                              - Expropriation of minority shareholders’ rights.
'Indonesians' people prefer to arrive at major meetings with all details negotiated so that there are no surprises (which may lead to "loss of face"). The term "loss of face", related to protecting your "face", is actually one of Confucian work dynamism....These face-to-face meetings are usually attended by a large number of people, including many only loosely related to the task, which reflects the "high collectivism" attitude of Indonesians where there is a conscious desire to get everyone involved (and is so related to high context)' (p. 3, emphasis added)

The above example suggests that Indonesian people could be categorised as having highly collectivist cultural dimension, which plays a pivotal role in driving the decision-making process of any social group. The compatibility between the Indonesian and Confucian values is due to the similarities in most of their cultural characteristics, particularly those of collectivistic values. Ambler (1995) suggests that the interconnected networks of personal, social and business relationships are also found in other collective societies. In a similar vein, Lasserre and Schutte (1995) also believe that close family ties and business networks between family members in Indonesia are also prevalent among non-Chinese (pribumi) communities. Therefore, it should not be assumed that the tendency of Chinese-owned firms to involve their families in their boardroom activities is in any way imetical to the Indonesian way of doing things.

Tsui-Auch and Lee (2003) states that 'as Asian businesses are embedded in closely knit business networks that are forged by family and personal ties, in which insiders (family and friends) are trusted and outsiders are distrusted, a reliance on kin and friends in running family businesses yields not only legitimacy, but also efficiency' (p. 511). The role of the elders is also regarded as including trusteeship of the family estate. Elders must create an endowment to ensure that there are valuable assets for their family for social status and prestige in the wider community (Wong 1988). This is part of the importance task of preserving familial wealth for the benefit of all members of the family. These values may in turn lead to the tendency towards concentrated ownership in the hands of family, direct family involvement in business matters and the existence of family business groups.

In Indonesia, there is a dichotomy between corporations owned by indigenous (also called pribumi) and non-indigenous (mainly Chinese and Indian) business people.
According to Husnan (2001), during 1988-1996, non-indigenous groups owned a larger proportion of the top 300 Indonesian conglomerates. Most of them are Chinese business groups. Although the ethnic Chinese constitute relatively small minority in this country, they control a large proportion of the country's leading businesses (table 37). Since Chinese own the biggest part of private sector assets and larger firms, it might be argued that the current practices of businesses in Indonesia are a reflection of their culture. In discussing publicly-listed companies in Indonesia, therefore, one should consider the fact that nearly all such companies are owned by ethnic Chinese.

Table 37: Ethnic Chinese Companies' Performance in South East Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (millions)</th>
<th>% Ethnic Chinese Population</th>
<th>Ethnic Chinese % Ownership of Private Sector Assets</th>
<th>Number of Largest Firms Controlled by Ethnic Chinese (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>182</td>
<td>2.8</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>Malaysia</td>
<td>60</td>
<td>33</td>
<td>65</td>
<td>44</td>
</tr>
<tr>
<td>Philippines</td>
<td>66</td>
<td>1.5</td>
<td>40</td>
<td>33</td>
</tr>
<tr>
<td>Thailand</td>
<td>56</td>
<td>11</td>
<td>90</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Source: Carney and Gedajlovic (2002b, p. 3)

Tsui-Auch and Lee (2003) believe that the success of Chinese businessmen, through the persistence of family control, rule, and management is attributed to Confucian values. These values influence the nature of relationships among people within an organisation or social group, which influenced the internal integration of the group. Additionally, strong integration within Chinese communities might also attributable to the nascent environment they faced as an ethnic minority in South East Asian region. Discrimination and economic policies encouraged the Chinese family business to cultivate personal connection (guanxi) in order to secure lucrative production franchises and other licenses (Mackie 1992). In short, the business pattern among the Indonesian Chinese seems to be adapted to their environment.

The existence of family business groups as the form of business enterprises in Indonesia reflects the domination of both high power-distance and high levels of
collective orientation within the society. Abdat and Pervan (1999) argue that these values do not dominate only the Chinese community but can also be found among indigenous Indonesians. According to Lesserec and Schulte (1995) the similarity of collectivism culture between the Chinese and indigenous Indonesian arises from the fact that the Asia-Pacific region is at the crossroads of several cultural and religious traditions. They believe that, across this region, business practice is ‘influenced by two dominant cultural contexts: a homogeneous concept of social organisation and the pervasiveness of Confucian values’ (p. 129).

This section discussed the importance of ‘the family’ within the Indonesian corporate governance context, since a large proportion of the country’s economic activity is controlled by a small group of wealthy and powerful family groups (Claessens, Djankov & Lang 2000). The values and culture of these families may have an affect on how their companies are governed. Culture provides an important ingredient for the development of governance practices in Indonesia.

6.4.4 Family Ownership and Business Groups

The structure and practice of family business groups is based upon both the primacy of the family interests and the distrust of outsiders. The adoption of this structure meant that no outsider could become indispensable to the family business group and in a position to challenge the interests of the family (Wong 1985; Redding 1990). This structure would also provide a means of protection for any threats or challenges to the interests of the family.

The emergence of family business groups might also be seen as a rational response to an institutional context characterised by undefined property rights, cronyism, underdeveloped capital markets, weak or non-existent product liability laws and a shortage of managerial expertise (Ghemawat & Khanna 1998). A family group structure allows the owner to exploit new business opportunities and respond to their hostile environments, increasing their familial wealth and limiting their family’s exposure to risk.
Figure 23 exhibits the model of development stages of companies in Indonesia, created from research findings and previous discussions. At the initial stage (the founders) companies start up, characterised by privately owned and managed firms. These are family-owned and involved in single line of business and acquire financing through family or a tight-knit social group. At the second stage (the sibling partnership) the company sells its shares in the capital market, but the family-owners maintain their position as majority shareholder in order to control the company’s resources and to secure the family wealth. To fill the need for professional managers, the controlling owner will employ family members or trusted business associates on the principle of kin-based networks and as a basic defence mechanism against potential threats. At the third stage (the family dynasty) the company has become the holding company of the family business group, with a diversified line of business. The family owners still maintain their position as controlling shareholders through the practice of pyramidal ownership and owner involvement in board membership. An example of cross-shareholding and pyramidal-ownership structures among family business groups in Indonesia is provided in appendix 1.

The pattern of company development in Indonesia could be seen as incorporating all variables in the study; ownership structure, owner involvement in supervisory board and business group affiliation. Interdependencies between these variables operate in a cohesive manner so as to they provide strong family-controlling shareholders and facilitate the establishment of a family dynasty. With strong personal ties combined with paternalistic values, the relationship between individual members of the group will influence internal integration of the family business group. Following their path dependent development from entrepreneurial firms up to the establishment of business groups, the role of family owners is significant, especially through family involvement in the supervisory/management board and the chain of control through cross-shareholdings with their affiliated companies.
Figure 23: Stages of Business Development Model in Indonesia: Ownership Based

**Phase I: Start-up (The Founders)**

- **Title**: PT. X
- **Type**: Pure entrepreneurial firm
- **Size**: Small and growth
- **Line of businesses**: Single and focus on core business
- **Type of ownership**: Private owned
- **Category of Ownership**: Purely family owned
- **Member of Supervisory board**: Purely family
- **Member of Management Board**: Purely family
- **Type of financing**: Families and other social knot sources (family network)
- **Type of business groups**: -
- **Practices of business groups**: -

**Phase II: Listed (The Sibling Partnership)**

- **Title**: PT. X Tbk.
- **Type**: Semi Professional
- **Size**: Relatively large and growth
- **Line of businesses**: Diversified into related industries
- **Type of ownership**: Publicly Listed (Sell only limited amount of shares)
- **Category of Ownership**: Majority/concentrated Ownership within family
- **Member of Supervisory board**: Family and trusted (professional) business associates
- **Member of Management Board**: Family and professional from close social ties
- **Type of financing**: Banking and network-based financial sources
- **Type of business groups**: -
- **Practices of business groups**: -

**Phase III: Listed with Family Business Groups (The Family Dynasty)**

- **Title**: PT. X Tbk.
- **Type**: Professional
- **Size**: Large and mature
- **Line of businesses**: Diversified into other lines of business, including setting up financial companies (i.e. bank and insurance) within family business group (FBG).
- **Type of ownership**: Publicly listed (Still owned majority shares)
- **Category of Ownership**: Majority/concentrated Ownership within family and offer small amount of shares to loyal professional employees
- **Member of Supervisory board**: Family and more professional from loyal employees and trusted business associates
- **Member of Management Board**: Family and professional from loyal employees and close social ties
- **Type of financing**: Banking, networks, and proceeds from selling shares of another affiliated business in capital markets
- **Type of business groups**: Family business groups with a holding company at the top of corporate structure
- **Practices of business groups**: Cross-shareholding via pyramidal ownership among affiliated companies within the group and other groups.
In agency theory members of boards as representatives of the shareholders were
elected by and responsible to shareholders and act as a “bridge” between
shareholders and the executives in charge of running the company. This function is
important when ownership of a company is broadly dispersed across a large number
of shareholders and these owners cannot exercise real power to oversee managerial
performance. Behind this theory is the assumption that there are no owners who have
both power and incentives to exercise their monitoring role.

In Indonesia, in a legal company according to the 1995 Company Law (articles 74 &
94), both management and supervisory boards are elected and dismissed through the
general meeting of shareholders (section 2.7.1.3). Both boards are under direct
scrutiny from shareholders. The board of management is responsible to shareholders
and not to the supervisory board as in the other two-tier board regimes, such as the
Netherlands (appendix 2). Consequently, controlling shareholders can have a direct
relationship to the board of management and involvement of their family members in
the supervisory board could serve to safeguard their influence on operational
decisions.

The preceding discussion reveals that the emergence of family business groups in
Indonesia usually starts with purely entrepreneurial firm owned by a family. Such a
business follows a predictable pattern of business development (figure 23), which is
characterised by highly concentrated ownership within the family, even if the
company is already listed in the capital market. Through a pyramidal ownership
structure and owner involvement in supervisory and/or management board
membership, the family owners maintain their strong position in controlling the
company. This is heightened by the collectivist and paternalistic values that
emphasise the importance of in-group solidarity in preserving familial wealth.

6.4.5 What Determines Ownership Structure?

There remains one important question in regard to what determines the ownership
structure in Indonesia. In particular this question relates to whether the observed
pattern of ownership structure (i.e. the dominance of ownership concentration within
a family) is a response to the lack of law and regulatory framework, or these
ownership patterns bring about the ineffectiveness of legal and regulatory enforcement in this country.

The issue of the determinant of the pattern of ownership structure in Indonesia is important, since it will influence corporate governance reform initiated by the Indonesian government. It is already apparent, based on the previous discussions, that the concentration of ownership in the hands of a small number of families in Indonesia could endanger efforts to institute more transparent business practices and the protection of minority shareholders' rights. The following part describes various views in regard to the determinant of ownership structures in Indonesia.

Demsetz and Villalonga (2001, p. 210) hypothesised 'the ownership structure of a corporation should be thought of as an endogenous outcome of decisions that reflect the influence of shareholders and of trading on the market for shares'. This implies that certain ownership structures that emerge are appropriate, given the firm's own characteristics. Their argument is based on the result of previous studies in the U.S. that failed to generate ownership-performance relationships. In sum, Demsetz and Villalonga (2001) suggest that a firm's ownership structure reflects the decisions made by those who own the company and 'ought to be influenced by the profit-maximising interests of shareholders' (p. 210).

As has been argued in section 1.1.2 (page 4), the development of corporate structures in Indonesia can be seen as following a theory of path dependence. The applicability of the construct of a path dependent ownership structure to companies in Indonesia is consistent with the pattern of their development stages (figure 23). There is domination by concentrated-family ownership, even where the company is already listed in the capital market. Majority or concentrated ownership structures are path determinative as a result of the original structures that were established in the early stages of development.

The rule driven path dependence focuses on 'how the initial structure of corporate ownership and the initial stage of legal rules shape future legal rules' (Gorga 2003). In relation to this study, the initial legal rules in Indonesia and the new laws introduced in the mid-1990s (i.e. new Company Law 1995) are still inherited from
the legal rules invented by the Dutch (section 2.7.1). The application of both structure and rules driven by the issue of concentrated ownership can be seen from the following statement,

‘Rules that enable controllers to extract large private benefit of control are beneficial to controllers of existing publicly traded companies. In a country in which ownership structure is largely concentrated at T₀ (with or without such rules), controlling shareholders of existing companies will be a powerful interest group with substantial resources. The influence of this group will make it more likely that this country will have or maintain such rules at T₁. And because such rules encourage the use or retention of concentrated ownership, the presence of such rules at T₁ will in turn help maintain or even strengthen the initial dominance of concentrated ownership’ (Bebchuk & Roe 1999, p. 159).

The path dependence theory, therefore, assumes that ownership structure is endogenously determined and this structure will persist, as it is perceived to be consistent with profit maximisation for existing shareholders.

On the other hand, Denis and McConnel (2003, p. 30) argue that the emergence of a concentrated ownership structure could also be seen as ‘the equilibrium response to lack of investor protection around the world’. They argue that weak legal protection in most developed countries has made companies turn to ownership concentration because of the lack of appropriate governance mechanisms. They argue ‘it appears that only ownership concentration can overcome the lack of protection’ (p. 30).

The implication of this statement in the case of Indonesia could be seen from two points of view. First, it relates to the findings of previous studies by La Porta et al. (1998) and C.L.S.A (2001) that Indonesia is among these countries with the lowest score on legal protection among the East Asian countries. The lack of investor protection encourages the company’s owners to protect themselves internally by exercising tight control via concentrated ownership within family business groups. Furthermore, most companies in Indonesia, especially the largest of them, are Chinese owned through family business groups. Despite their economic success, they are a minority ethnic group in this country and have suffered official discrimination from the nationalist economic policy (Mackie 1992). Consequently, they have been confronted by a fundamentally hostile environment where they could only trust close family members (Redding 1990; Kao 1993). This has forced them to utilise tightly
controlled family-owned and managed operating structures as the basis for their business activities. In either case, in the absence of a legal and regulatory framework to protect the interests of shareholders, ownership concentration with kin-based networks arises as a basic defence against the hostile environment.

The co-evolution theory views ‘organisations, their populations, and their environments as the interdependent outcome of managerial actions, institutional influences, and extra institutional changes (technological, socio-political, and other environment phenomena)’ (Lewin et al. 1999, p. 535). The theory posits that exogenous and endogenous forces shape the environment and trigger the organisation to adapt in different ways to ensure its survival. This process continues, so that organisational environments will interact and create endogenous responses to environmental change. In such environments, ‘the responses taken by firms are expected to have a significant impact on their subsequent evolution and to some extent that of their environment as well’ (Rodrigues & Child 2003, p. 2137).

The co-evolutionary framework, therefore, could be argued as accommodating both endogenous and exogenous determinant factors of ownership structure. This theory synthesises both views, based on the fact that both factors are interrelated. From the standpoint of company owners, it is necessary to be aware of the relevant exogenous factors and be prepared to adjust to them as necessary, and conversely, the culture as a whole will be influenced by the governance mechanisms generally adopted by the corporate sector. According to Pfeffer and Salancik (1978) interdependence between exogenous and endogenous variables within organisations means that firms are influenced by, and use, the same environments to shape their own environments. Importantly, ‘the notion of interdependence reflects the fact that by employing purposive strategies in pursuit of their self-interested objectives, human agents can play a profound role in shaping their environment’ (Carney & Gedajlovc 2002b, p. 7). Therefore, this view proposes that existing organisations will adapted to changes in their environment and make adjustments in response.

The finding of this study suggests that, in the case of Indonesia, determinants of the ownership structure of companies follow the co-evolutionary views. However, based on the development stages of companies in Indonesia (figure 23), it might be argued
that it started with the endogenously determined ownership structure. It follows the path-dependence structure driven from entrepreneurial firms up to the “family dynasty” stage. During their development, the companies were able to accommodate environmental changes so that they are able to survive and reach this final stage.

One important point during these development processes is that the family owners still maintain their position as controlling shareholders to protect their family interests. This position allows them to enjoy private benefit from control that could harm the interests of minority shareholders, particularly in the absence of strong legal and regulatory protection to prevent their actions. As a result, any attempts to improve governance practices, which they perceive as threatening their ability to extract such benefit, make them resistant or motivate them to ask compensation to accept the changes. This is based on the fact that in most Asian countries, controlling shareholders are influential people within their economies and have a special relationship with government. In the case of Indonesia, Husnan (2001, pp. 19-20) argues that,

‘...[t]he concentration of corporate control in the hands of few families is a major determinant of the evolution of an inefficient legal and judicial system, as well as the existence of corruption. Legal and regulatory developments may have been impeded by the concentration of corporate wealth in the small number of families and the tight links between companies and the Government. If the role of limited number of families in the corporate sector is so large and the Government is heavily involved in and influenced by business, the legal system is less likely to evolve in a manner that protects minority shareholders’.

In summary, ownership structure among corporations in Indonesia could be seen as endogenously determined and consistent with path-dependence theory. It is characterised by the dominance of concentrated ownership in the hands of family during the development stages of enterprise. These companies were able to adapt to the changes in organisational environments and could also influence business practice and corporate governance implementation.
6.5 Concluding Comments

This chapter has presented a summary of empirical results and a discussion of the findings. The research findings reveal that, among private-domestic firms, concentrated ownership structure does not affect firm value. Similarly, being a member of a group of companies in comparison to being an independent firm does not influence firm value in Indonesia. On the other hand, owner involvement in supervisory or management boards does have implications for firm performance, which implies effective control provided by controlling shareholders. Taken together, these findings are not consistent with theoretical predictions. The implication is that this should be viewed in the context of Indonesian corporate environment.
Chapter 7: Conclusions, Limitations and Areas of Further Research

7.1 Introduction

This chapter provides conclusions drawn from the findings and discussion presented in the previous chapter, followed by policy implications for corporate governance reform in Indonesia. Included is an assessment of the potential limitations present in this study and this chapter concludes with a discussion of possible future directions for research.

7.2 Conclusions

This study investigates the effect of large block shareholders on publicly listed firms in Indonesia by examining the impact of different patterns of ownership structure on performance. In approximately 80 per cent of the majority-owned firms there is substantial family involvement in either the supervisory or management boards. As such, family involvement in board activities seems to be almost a necessary condition for these firms, in order to facilitate close monitoring and tight control on a company's decisions. Further, the internal corporate structure specific to Indonesia could also facilitate the ability of the controlling owner to perform direct monitoring of the management board (appendix 2). It might be argued that family involvement can provide an important constraint on managerial self-dealing and owner's realisation of private benefits from control of their corporation.

For the most part, the evidence suggests that financial crisis did have a strong differential effect on companies, particularly after the onset of the crisis. All of the private-domestic firms presented in this study, regardless of their governance characteristics, experienced deteriorated performance following the crisis. This may have exacerbated problems both before the crisis, by allowing firms to over borrow and/or over expand, and after the crisis as investors/lenders felt unable to prop up firms. The crisis itself, however, would have affected even the most well-run operations. This event did highlight the institutional weaknesses in the regulatory framework in Indonesia resulting in poor compliance on business practices (La Porta et al. 1998).
The evidence in this study corroborates the uniqueness of corporate governance practices in Indonesia and the findings support the supremacy of controlling shareholders. There is growing debate concerning the costs and benefits of controlling-large shareholders. The empirical findings of this study reveal that the active involvement of these shareholders cannot be demonstrated to improve shareholder value as a whole. The agency problem that exists in Indonesia may be between “strong” controlling shareholders and “weak” minority shareholders.

Using the agency theoretical framework, which views a firm as a nexus of contracts with various parties, the problem is “who will protect the interests of corporate constituents other than large shareholders?” In this case, large-controlling shareholders are in principle able to appoint supervisory and/or management board members representing their interests. In relation to the effective monitoring of large shareholders and their affiliated board members, the problem seems to extend to “who monitors the monitor”.

The evidence presented here suggests there is a need for the government of Indonesia to consider specific features of the country’s business and legal practices in adopting governance reform. One important inference from this finding is that cultural values might impede legal reforms that conflict with them. The analysis in this study points out that a particular corporate governance system should be fully compatible with a country’s national culture and efficient in promoting sound business practices.

Finally, the practical reality of corporate governance is one of great diversity across countries and corporations. Differences in cultural context, law and regulation and business pattern given rise to the importance of finding a corporate governance system that best suits the context where it would be applied. The effectiveness of corporate governance codes itself depends on the regulatory environment. Shareholder activism is needed following the adoption of corporate governance codes and principles in an effort to push companies to adopt and implement the codes of best practice. However, shareholder activism is only likely to work where legal enforcement of minority rights is in place and the companies rely on stock market financing.
7.3 Policy Implications

The specificities of corporate practices in Indonesia could be seen as rooted in the values and spirit of mutual cooperation in achieving specified objectives. Corporate governance implementation in this country is also characterised by lack of institutional and regulatory framework protecting property rights. In this regard, it is appropriate to consider the role of the state, as one of the primary stakeholders, yet being outside the firm’s governance system, in providing “rules of the game”. This includes setting regulatory standards and ensuring their enforcement, thus protecting minority shareholders and other stakeholders’ rights as well as defining governance principles. The following section discusses the implications of the research findings for governance reforms initiated by the Indonesian government.

The discussion on the research findings suggested that the three variables in this study (ownership structure, owner involvement in a company’s supervisory board and the existence of business groups) are interrelated and cohesive parts which characterise specific governance structure in this country (figure 23). Majority ownership allows inside shareholders to acquire enough power to influence business decisions and business groups will strengthen their power by developing long term relations with other members of the group. All of these variables can be seen as contingent factors, which serve as a foundation in the choice of a firm’s appropriate structure. In short, the most basic factor inhibiting the effectiveness of corporate governance implementation in Indonesia is the existence of powerful large family shareholders. Governance reform, therefore, should seek to reduce the supremacy of these shareholders, while at the same time empowering other stakeholders.

There are already initial steps toward limiting the powerful controlling shareholders, mandated by corporate governance code of conduct, which have initiated independent supervisory board membership. This seat on the supervisory board should be allocated to primary stakeholders (e.g. employee representation). However, independent board members in a company with powerful-controlling shareholders cannot perform their duties without the intervention of controlling shareholders. In particular, corporate board structure in Indonesia (appendix 2) allows controlling shareholders to have direct access to the board of management. As a result, the role of independent
board members would not be effective in restraining the domination of controlling shareholders. Since there is no penalty for non-compliance and no reward for adopting the guidelines, it is not possible to enforce the code.

Another possibility might be to instigate stakeholder governance models to balance the power of controlling shareholders. According to Freeman (1983) a firm’s shareholders can be defined broadly as individuals and entities that can be influenced by, or can impact on, a firm. As suggested by Wright et al. (2003) one possible way is through increasing the power of market governance (i.e. product, labour and financial markets). However, this mechanism still depends on the effectiveness of legal and regulatory frameworks to guarantee that every claim is secure, to give stakeholders rights protected by the law. Informal norms, such as social norms and cultural beliefs, and the political environment in Indonesia would need to be supportive for this mechanism to work properly.

The importance of market mechanisms in providing corporate control should be enhanced, despite the fact that the current environment does not seem to support such mechanisms. Protecting stakeholder interests, for example, with legal enforceable rules might persuade companies to acquire more external financing with the impact of higher valued and broader capital markets. Such a policy would need to be followed by encouragement of disclosure practices among companies, thus enabling public to be well informed on company business practices. Opening a company to public scrutiny will enable market mechanisms to work effectively in disciplining various parties engaged in a company’s affairs. In relation to business groups practices, increased public scrutiny may make it more difficult for group firms to divert resources from their publicly traded companies, which the families partially own, to their private firms.

Another institutional stakeholder that can make a contribution in providing monitoring activities is the banking institutions. In the case of Indonesia, their role is important due to the heavy reliance of companies in this country on bank financing. However, the effectiveness of sharing control with a banking institution depends on the relative benefit of this mechanism. Banking institutions may provide a substitute form of monitoring, particularly in a company with relatively high debt ratios. This
view is based on the hypothesis that highly leveraged firms are more likely to maximise firm value in order to avoid financial distress. However, the effectiveness of this mechanism depends on the independence of the banks from any relationship (i.e. affiliation) with their debtors and the active roles of banking regulators (i.e. the central bank).

The preceding discussion reveals that any reform of corporate governance in Indonesia relates to the entire regulatory system of the country. All of the proposed mechanisms promoting sound governance practices lead to the need for strengthening the legal and regulatory frameworks and their enforcement. As one Indonesian legal scholar states 'Indonesia has enough laws and legal institutions. In a sense, Indonesia does not need more law, but less. What is needed is a changed legal culture that will put to work these laws and institutions as they are designed to be used' (Tabalujan 2002b, p. 168).

7.4 Limitations of the Study

As has been discussed in section 4.3, this study observed almost the entire populations of companies listed in the JSX for seven years period. Difficulties arose from the data collection processes due to the limitation of company information, since Indonesia does not yet have a strong culture of compliance with disclosure. The information available through the Jakarta Stock Exchange website does not provide sufficient information, as it covers only limited information on certain accounting indicators. A researcher should rely on the publication by the Institute for Economic and Financial Research on Indonesian Capital Market Directory (ICMD), which is available only in hardcopy. However, this source of information was also limited and has to be supported by other publications.

Although much time has been spent in collecting and cleaning up huge amount of the data, there are still limitations that might influence the result of this study. The limitation of the research from the view of data, methodological and variable measurements issues are described below.
7.4.1 Data and Methodological Issues

1. Most of the data utilised in this study are end of financial year figures due to the ready availability of such information. The problem arises from the use of ownership data that represent the proportion of share ownership and the name of the owner for a certain period. As such, there is a possibility that information on ownership structure, although exactly sourced from exactly the same sources at the same date, have changed during the period. This problem might have no significant effect for companies owned by block shareholders, since the pattern of this ownership structure was quite stable over the period of the study. However, changes in the pattern of ownership structure and the owner of the firms might have significant effect for companies characterised by dominant and dispersed ownership structure without controlling shareholders.

2. Another issue of concern is the choice of univariate analysis of variance utilised as the statistical procedures in this study. One possible shortcoming is related to the use of categorical variables, as opposed to continuous variables, in categorising firm size based on the median split of total assets. Although previous researchers have utilised similar procedure (e.g. Daily 1991; Evans 2000), the problem might arise since the firms at the bottom of the largest firms group may be very close to the upper lines of the companies categorised as small companies.

3. This study utilised longitudinal data for seven consecutive periods. Consequently, each company will be treated as an independent observation for each financial year during the period of the study. Although this study has excluded from the observations some companies that changed their governance characteristics during period of the study, the repeated measurement of companies for the entire period still might possibly have created bias in the results. Additionally, the result of the deletion processes leaves few observations for some of the groups under comparison. Consequently, it causes difficulties for hypothesis rejection at any reasonable level of statistical significance.
7.4.2 Variable Measurements

1. This study employs categorical variables to classify firms by percentage of shareholdings, as has been done in previous empirical studies on the ownership-performance relationship. However, this study did not separate private-domestic firms characterised by majority ownership structure and owned by family into a more refined category. In this regard further categorisation could be based on whether or not the founders are still involved in directing the company’s affairs. This issue is important in accommodating the differential effect of the motivations of large shareholders to retain their control over the firms.

2. The use of a definition based on the Company Law (1995) for “family relationships” in this study was aimed at covering various aspects within this relationship, including the Indonesian cultural values. As such, it did not understate the incidence of family relationships within the company under observation, particularly in relation to identifying the involvement of family owners on the company’s supervisory board. However, this definition is wide and might create bias as it includes both marriage and blood relationships.

3. Although the present study covers all non-financial listed companies in Indonesia, it does not control for the industry effects between companies under comparison. This might create bias in the result as some companies might have certain advantages over the other due to industry specific effects. If a researcher wishes to obtain a more robust result in comparing performance of companies based on their owner identity (i.e. foreign- versus domestic-owned), pair-matched comparison based on related industrial sectors for both firms under the observation might reduce the bias.

4. This study does not separate joint venture companies with the ownership by foreign investors of less than 51 per cent of shareholdings. The firms are categorised as foreign-owned firms if the proportion of ownership by these investors is more than 51 per cent, otherwise the firms will be regarded as belonging to the non-concentrated ownership structure. This procedure might
also create bias in the result, since the presence of foreign investors, even with ownership less than majority, could also have differential effects in comparison to other purely domestic-owned firms.

5. The use of accounting profit as an indicator of firm performance measurement in this study may impede some important facts that could be obtained through other measurements (i.e. stock market-based measures). Therefore, the result of this study may not reflect the true performance effects as perceived by the market. However, it might be argued that accounting profitability is likely to be a better performance measure than stock based measures due to the market inefficiencies in developing countries.

6. Another shortcoming may also come from the variable measurement of affiliated companies. Following Claessens et al. (2002) this study identified group membership broadly by including all firms in the same group if they are part of a set of firms linked through pyramiding or if they have cross shareholding with other firms. Although this broad definition provides a conservative measurement in capturing and limiting any group effect, it fails to observe the effect of different types of company affiliation.

7.5 Areas for Further Research

There remain other theoretical as well as empirical issues in regard to governance practices in Indonesia. The following section describes areas for further research based on the findings.

1. The findings suggest that there is no benefit to measured performance from ownership concentration among private-domestic firms in Indonesia. Following Thomsen and Pedersen (2003) this might be the result of the controlling owners' expropriation of minority shareholders rights. Therefore, there is a need for additional study to address the issue of the degree of expropriation of minority shareholders occurring among companies in Indonesia.
2. Although the study controls for the effect of the 1997 financial crisis on various degrees of ownership concentration, it did not specifically address the issue of the stability of shareholding structures. Further study is needed to observe the stability of company holding structures by controlling shareholders over time, particularly among family owned companies.

3. The finding that owner's involvement in supervisory or management boards, but not their degree of involvement, does have implications for firms performance is worthy of further research. The issue is particularly relevant in view of the role of cultural matters in influencing the actual operation of supervisory or management boards within family firms. With the dominance of patrimonialist culture, it might be argued that the powerful leaders outside the firms but within the group could dictate every decision in these boards.

4. It is also interesting to observe the function of the supervisory board from another theoretical point of view, such as resource dependence theory (Pfeffer & Salancik 1978). This theoretical perspective suggests that having large numbers on the board is related to the intention of a company to secure financial resources outside the firm. Consequently, it is predicted that large board size may have positive effects on firm performance. In the case of Indonesia, the important aspect of the study will be on the compatibility issue between this perspective and the existence of family business groups.

5. This study shows no advantage of a company's being affiliated to a business group in comparison to remaining independent. Further research is needed to assess whether the establishment of business groups leads to the possibility of exploitation of minority shareholders by the controlling owners. Furthermore, additional studies are also needed to address the issue of whether companies affiliated to a highly diversified business group will perform differently from those affiliated to groups that focus on a single activity. This separation is needed, since single-segment business groups are more like independent firms than are multi-segment group structures.
6. Since this study is limited to non-financial listed companies, it may also be worthwhile observing the specific governance of finance-related companies listed in the same capital market, particularly with a specific reference to whether financial companies that are affiliated to business groups perform differently from other independent banks. As banking institutions, for example, are among the most highly regulated firms in Indonesia, their corporate governance practices should be different from other non-financial firms. The result will provide another angle on corporate governance practices in this country and can be expected to support of the current study.

7. The empirical findings exhibit differences in the results of hypothesis testing by using a secondary measure (i.e. return on sales) compared with the primary measures (i.e. return on assets). This suggests the need for further empirical research to assess the causes of these differences. Further research might also be beneficial to confirm the results of the present study by using the combination of accounting and market-based performance indicators through the use of simplified Tobin's $Q$. Such research would provide a different point of view whilst retaining similar theoretical constructs and frameworks, despite the underdevelopment of the Indonesian capital market.
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APPENDIX
Appendix 1:
The Suharto Group: an Example of Cross-shareholdings and Pyramidal Ownership within family Business Groups

Source: Husnan (2001)
Appendix 2:

Typical Internal Organisational Structure Within the Two-tier Board Structure

Indonesia

Shareholders

Board of Directors
(*Management Board*)

Managers

Employees

Board of Commissioners
(*Supervisory Board*)

the Netherlands

General Meeting of Shareholders

Board of Commissioners

Board of Directors

Source: Husnan (2001) and The Forum for Corporate Governance in Indonesia (2001)
Appendix 3:

The Indonesian Capital Market Characteristics 1994-2000 (currency in millions rupiah)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of listed companies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jakarta Stock Exchange (JSX)</td>
<td>216</td>
<td>238</td>
<td>253</td>
<td>282</td>
<td>288</td>
<td>277</td>
<td>290</td>
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<tr>
<td><strong>Market Capitalization</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Rupiah (1/1000)</td>
<td>103,835</td>
<td>152,247</td>
<td>215,026</td>
<td>159,930</td>
<td>175,279</td>
<td>45,815</td>
<td>259,621</td>
</tr>
<tr>
<td>In U.S. dollars</td>
<td>47,241</td>
<td>66,585</td>
<td>91,016</td>
<td>29,105</td>
<td>22,104</td>
<td>64,087</td>
<td>26,534</td>
</tr>
<tr>
<td><strong>Trading Value</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Rupiah (1/1000)</td>
<td>25,448</td>
<td>32,358</td>
<td>74,385</td>
<td>120,385</td>
<td>99,685</td>
<td>147,372</td>
<td>117,117</td>
</tr>
<tr>
<td>In U.S. dollars</td>
<td>11,801</td>
<td>14,403</td>
<td>32,142</td>
<td>42,927</td>
<td>10,611</td>
<td>19,903</td>
<td>14,311</td>
</tr>
<tr>
<td>Turnover ratio (%)</td>
<td>29.4</td>
<td>25.3</td>
<td>40.7</td>
<td>64.2</td>
<td>59.4</td>
<td>47.0</td>
<td>32.9</td>
</tr>
<tr>
<td><strong>Local Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSX Composite</td>
<td>469.6</td>
<td>513.8</td>
<td>637.4</td>
<td>401.7</td>
<td>398.0</td>
<td>676.9</td>
<td>416.3</td>
</tr>
<tr>
<td>Change in Index (%)</td>
<td>-20.2</td>
<td>9.4</td>
<td>24.1</td>
<td>-37.0</td>
<td>-0.9</td>
<td>70.1</td>
<td>-38.5</td>
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<tr>
<td><strong>S&amp;P/HFCG Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Stock</td>
<td>47</td>
<td>50</td>
<td>50</td>
<td>62</td>
<td>58</td>
<td>55</td>
<td>66</td>
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<tr>
<td>Share of Market Capitalization (%)</td>
<td>47.0</td>
<td>36.6</td>
<td>69.4</td>
<td>67.1</td>
<td>70.7</td>
<td>59.7</td>
<td>65.2</td>
</tr>
<tr>
<td>Shares of Value Traded (%)</td>
<td>60.1</td>
<td>61.5</td>
<td>59.3</td>
<td>51.7</td>
<td>68.6</td>
<td>65.6</td>
<td>57.8</td>
</tr>
<tr>
<td>P/T ratio</td>
<td>20.2</td>
<td>21.4</td>
<td>21.6</td>
<td>10.5</td>
<td>-106.2</td>
<td>-7.4</td>
<td>-5.4</td>
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<tr>
<td>P/BV ratio</td>
<td>2.4</td>
<td>2.7</td>
<td>2.7</td>
<td>1.4</td>
<td>1.5</td>
<td>3.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Dividend yield (%)</td>
<td>1.5</td>
<td>1.9</td>
<td>1.3</td>
<td>2.9</td>
<td>0.8</td>
<td>0.6</td>
<td>3.6</td>
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<tr>
<td>Price Index</td>
<td>95.7</td>
<td>105.92</td>
<td>124.1</td>
<td>32.1</td>
<td>22.7</td>
<td>45.2</td>
<td>18.4</td>
</tr>
<tr>
<td>Change in Index (%)</td>
<td>-20.6</td>
<td>9.9</td>
<td>18.9</td>
<td>-74.2</td>
<td>-29.3</td>
<td>99.1</td>
<td>-50.3</td>
</tr>
<tr>
<td>Total Return Index</td>
<td>101.6</td>
<td>113.8</td>
<td>136.4</td>
<td>35.8</td>
<td>25.6</td>
<td>51.2</td>
<td>21.6</td>
</tr>
<tr>
<td>Change in Index</td>
<td>-19.3</td>
<td>12.0</td>
<td>19.8</td>
<td>-73.7</td>
<td>-28.7</td>
<td>100</td>
<td>57.9</td>
</tr>
</tbody>
</table>

**Economic Data**

| Gross Domestic Product (US$)   | 176,892  | 202,132  | 227,370  | 215,747  | 94,156   | 142,511  | 152,200  |
| Change in consumer price index (%) | 8.50   | 9.40     | 8.09     | 6.70     | 57.60    | 20.50    | 22.00    |
| Exchange rate (end of period)  | 2,198.00 | 2,286.50 | 2,362.50 | 5,495.00 | 7,590.00 | 7,050.00 | 9,675.00 |
| Exchange rate (average of period) | 2,159.80 | 2,246.60 | 2,326.10 | 2,890.40 | 10,267.80 | 7,838.38 | 8,401.62 |
| Inflation rate (average of period in %) | 9.24 | 8.64     | 6.47     | 11.05    | 77.54    | 2.01     | 9.35     |

*Source: the Indonesian Capital Market Directory (various editions)*
Appendix 4:

Figure 24: Average Return on Sales by Ownership Type of All Firms

Figure 25: Average Total Sales of Private Domestic Firms
Appendix 4:

Figure 26: Average Total Assets of Private Domestic Firms

Figure 27: Average Return on Sales by Owner Involvement in Management Board
Appendix 4:

Figure 28: Average Return on Sales by the Degree of Owner Involvement in Supervisory Board Membership

Figure 29: Average Return on Sales by the Degree of Owner Involvement in Management Board Membership
 Appendix 4:

Figure 30: Average Return on Sales by Company Affiliation
Appendix 5:

Descriptive Statistics for Sub-sample Firms Before and After Crisis Period on Minimum and Maximum Value

<table>
<thead>
<tr>
<th></th>
<th>Before Crisis Period</th>
<th></th>
<th>After Crisis Period</th>
<th></th>
<th>Full Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Minimum</td>
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<tr>
<td><strong>A. Governance Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Shares by Public</td>
<td>2.75</td>
<td>93.42</td>
<td>1.76</td>
<td>85.88</td>
<td>1.76</td>
</tr>
<tr>
<td>Supervisory Board’s size ^</td>
<td>2</td>
<td>11</td>
<td>2</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Proportion of board seats held by related owners (%) ^</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Management Board Size ^</td>
<td>3</td>
<td>12</td>
<td>1</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Proportion of management seats held by related owners (%) ^</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td><strong>B. Firm Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets (1A Million IDR)</td>
<td>18,691</td>
<td>8,737.131</td>
<td>34,359</td>
<td>56,635.620</td>
<td>18,691</td>
</tr>
<tr>
<td>Total Sales (TS Million IDR)</td>
<td>13,428</td>
<td>6,558,296</td>
<td>601</td>
<td>14,964.674</td>
<td>601</td>
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<tr>
<td>Earning Per-share (EPS, IDR)</td>
<td>-739</td>
<td>2,566</td>
<td>-12,474</td>
<td>25,722</td>
<td>-12,474</td>
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<tr>
<td>Dividend Per-share (DPS, IDR)</td>
<td>0</td>
<td>1,830</td>
<td>0</td>
<td>3,550</td>
<td>0</td>
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<tr>
<td>Return on Assets (ROA, %)</td>
<td>-19.85</td>
<td>35.82</td>
<td>-261.81</td>
<td>116.08</td>
<td>-261.81</td>
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<tr>
<td>Earning Price Ratio (EPR, %)</td>
<td>-133.33</td>
<td>68.49</td>
<td>-10,000</td>
<td>4,098</td>
<td>-10,000</td>
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<td>Return on Sales (ROS, %)</td>
<td>-42</td>
<td>75</td>
<td>-1,151</td>
<td>68</td>
<td>-1,151</td>
</tr>
<tr>
<td>Net Profit Margin (NPM, %)</td>
<td>-57</td>
<td>61</td>
<td>-8,577</td>
<td>434</td>
<td>-8,577</td>
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<td>Debt to Equity Ratio (DER, %)</td>
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<td>1,695</td>
<td>-31,704</td>
<td>74,118</td>
<td>-31,704</td>
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<td>Leverage Ratio (LR, %)</td>
<td>-7</td>
<td>120</td>
<td>5</td>
<td>681</td>
<td>-7</td>
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</tbody>
</table>

**Notes:** Annual inflation rates are; 1994 (9.24%), 1995 (8.64%), 1996 (6.47%), 1997 (11.05%), 1998 (77.54%), 1999 (2.01%), 2000 (9.35%)

* Each period consist of 483 observations

** Full period consist of 1,127 observations (including 1997)

^ Excluding foreign- and government-owned firms
### Appendix 6

**Descriptive Statistics on Accounting Performance Based on Ownership Type (1994 – 2000)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Concentrated Ownership</th>
<th>Dominant &amp; Dispersed Ownership</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># obs.</td>
<td>Mean (%)</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>A. Return on Assets (ROA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>114</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1995</td>
<td>113</td>
<td>7</td>
<td>6</td>
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<tr>
<td>1996</td>
<td>117</td>
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<td>7</td>
</tr>
<tr>
<td>1997</td>
<td>118</td>
<td>-3</td>
<td>13</td>
</tr>
<tr>
<td>1998</td>
<td>113</td>
<td>-13</td>
<td>36</td>
</tr>
<tr>
<td>1999</td>
<td>107</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2000</td>
<td>106</td>
<td>-5</td>
<td>23</td>
</tr>
<tr>
<td>B. Return on Sales (ROS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>114</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>1995</td>
<td>113</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>1996</td>
<td>117</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>1997</td>
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<td>12</td>
<td>23</td>
</tr>
<tr>
<td>1999</td>
<td>107</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>2000</td>
<td>106</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

Return on Assets (ROA) is measured as net income divided by total book value of assets in percentage point.
Return on Sales (ROS) is measured as operating income divided by total sales or revenue in percentage point.
Appendix 7:
Frequency Distributions of Dichotomous Variables

<table>
<thead>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;No&quot; Count (%)</td>
<td>&quot;Yes&quot; Count (%)</td>
<td>&quot;No&quot; Count (%)</td>
</tr>
<tr>
<td>Majority Ownership</td>
<td>138 (28.57)</td>
<td>345 (71.43)</td>
<td>152 (31.47)</td>
</tr>
<tr>
<td>Private-Domestic Firms</td>
<td>45 (9.32)</td>
<td>438 (90.68)</td>
<td>66 (13.66)</td>
</tr>
<tr>
<td>Owner's involved in Supervisory Board*</td>
<td>32 (7.30)</td>
<td>406 (92.70)</td>
<td>55 (13.2)</td>
</tr>
<tr>
<td>Owner's involvement in Management Board*</td>
<td>98 (22.40)</td>
<td>340 (77.60)</td>
<td>105 (25.20)</td>
</tr>
<tr>
<td>Affiliated Companies*</td>
<td>69 (15.80)</td>
<td>369 (84.20)</td>
<td>65 (15.60)</td>
</tr>
<tr>
<td>Manufacturing Industry</td>
<td>144 (29.81)</td>
<td>339 (70.19)</td>
<td>146 (30.23)</td>
</tr>
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</table>

* Private Domestic Firms (excluded foreign- and government-owned companies).
Appendix 8:


<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
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<td>7</td>
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<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>42</td>
<td>3.73</td>
</tr>
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<td>2 Mining &amp; Construction</td>
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<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>26</td>
<td>2.31</td>
</tr>
<tr>
<td>3 Manufacturing</td>
<td>112</td>
<td>113</td>
<td>114</td>
<td>114</td>
<td>113</td>
<td>112</td>
<td>112</td>
<td>790</td>
<td>70.10</td>
</tr>
<tr>
<td>4 Transportation &amp; Communication</td>
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<td>6</td>
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<td>6</td>
<td>6</td>
<td>6</td>
<td>44</td>
<td>3.90</td>
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<tr>
<td>5 Other*</td>
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<td>32</td>
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<td>32</td>
<td>33</td>
<td>33</td>
<td>225</td>
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<td>161</td>
<td>161</td>
<td>1127</td>
<td>100</td>
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</table>

* Consist of: Wholesale and retail trade; Real Estate and Property; Hotel and travel services; Others
Appendix 9

Descriptive Statistics Based on Industry Classification and Ownership Category (1994 – 2000)

<table>
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<tr>
<th>No.</th>
<th>Industry Type</th>
<th>Dispersed</th>
<th>Dominant</th>
<th>Private Domestic</th>
<th>Government</th>
<th>Foreign</th>
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<tr>
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<td>Count</td>
<td>%</td>
<td>Count.</td>
<td>%</td>
<td>Count.</td>
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<td>10</td>
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<td>Manufacturing</td>
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<td></td>
<td>99</td>
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<tr>
<td>5</td>
<td>Other*</td>
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<td>109</td>
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</tbody>
</table>

Total

* Wholesale and retail trade; Real Estate and Property; Hotel and travel services & others.
Appendix 10:
Descriptive Statistics of Sub-sample Based on Ownership Type

<table>
<thead>
<tr>
<th></th>
<th>Number of Observation</th>
<th>Dispersed</th>
<th>Dominant</th>
<th>Majority Ownership</th>
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<td>Private-Domestic</td>
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<td></td>
<td></td>
<td>Foreign</td>
</tr>
<tr>
<td>Panel A</td>
<td>483</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1994-1996)</td>
<td></td>
<td>22</td>
<td>116</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.6%)</td>
<td>(24%)</td>
<td>(62.1%)</td>
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<td></td>
<td>152</td>
<td>152</td>
<td>331</td>
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</tr>
<tr>
<td></td>
<td>(31.3%)</td>
<td>(54.9%)</td>
<td>(68.5%)</td>
<td></td>
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<td>Panel B</td>
<td>483</td>
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<tr>
<td>(1998-2000)</td>
<td></td>
<td>(5.6%)</td>
<td>(25.9%)</td>
<td>(54.9%)</td>
</tr>
<tr>
<td></td>
<td>793</td>
<td>793</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(70.4%)</td>
<td>(10%)</td>
<td>(10%)</td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>1127</td>
<td>334</td>
<td>793</td>
<td></td>
</tr>
<tr>
<td>(1994-2000)*</td>
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<td>(29.6%)</td>
<td>(70.4%)</td>
<td></td>
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<td></td>
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<td>(4.9%)</td>
<td>667</td>
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<td></td>
<td>279</td>
<td>(24.8%)</td>
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<td>113</td>
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</tr>
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<td>(59.2%)</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>(1.1%)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(10%)</td>
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* Including 1997 observations
Appendix 11:

**Characteristics of Companies Newly Listed and Delisted in the JSX (1994-2000) excluded in the Analysis**

<table>
<thead>
<tr>
<th>Year</th>
<th><strong>Ownership Structure</strong></th>
<th><strong>Company Affiliation</strong></th>
<th><strong>Owner Involvement in Board Membership</strong></th>
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<tbody>
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<td>Dispersed</td>
<td>Dominant</td>
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<td>5</td>
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<td>19</td>
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<td>2</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>1998</td>
<td>2</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>1999</td>
<td>3</td>
<td>13</td>
<td>50</td>
</tr>
<tr>
<td>2000</td>
<td>4</td>
<td>13</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>75</td>
<td>272</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Dispersion</strong></th>
<th><strong>Affiliation</strong></th>
<th><strong>Involvement Settings</strong></th>
<th><strong>Supervisory Board</strong></th>
<th><strong>Management Board</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.34%</td>
<td>20.89%</td>
<td>75.77%</td>
<td>100%</td>
<td>71.59%</td>
</tr>
</tbody>
</table>

**Notes:**
- **Company Affiliation:** AF = Affiliated Firms, IF = Independent Firms
- **Owner Involvement in Board membership:** OI = Owner Involved, NOI = No Owner Involved
Appendix 12

Descriptive Statistics of Performance Measures and Continuous Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Statistic</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
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<tbody>
<tr>
<td><strong>All Firms (N = 1,127)</strong></td>
<td></td>
<td></td>
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<tr>
<td>ROA</td>
<td>-.76</td>
<td>20.56</td>
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<td>35.57</td>
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<td>46.89</td>
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<td>LAS</td>
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<td>-.50</td>
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<tr>
<td>SBP</td>
<td>.42</td>
<td>.28</td>
<td>.21</td>
<td>-.58</td>
</tr>
<tr>
<td>MBP</td>
<td>.29</td>
<td>.27</td>
<td>.75</td>
<td>-.16</td>
</tr>
<tr>
<td><strong>Before Crisis (N = 483)</strong></td>
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<td>ROA</td>
<td>6.02</td>
<td>5.84</td>
<td>.89</td>
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<td>ROS</td>
<td>17.35</td>
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<td>LAS</td>
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<td>-.63</td>
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<td>-.58</td>
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<td><strong>After Crisis (N = 483)</strong></td>
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<td>-.39</td>
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<tr>
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<td>.34</td>
<td>.27</td>
<td>.49</td>
<td>-.56</td>
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Notes:
ROA = Return on Assets (Net Income/Total Assets)
ROS = Return on Sales (Operating Income/Total Sales)
LAS = Size based on natural logarithm of total assets
SBP = The percentage of owner-related supervisory board to total number of supervisory board member
MBP = The percentage of owner-related management board to total number of management board member
Model 1:
Normal Plot of Standardized Residual
Dependent Variable: Return on Assets

Scatterplot
Dependent Variable: Return on Assets
Appendix 13

Model 2:
Normal Plot of Standardized Residual
Dependent Variable: Return on Sales

Scatterplot
Dependent Variable: Return on Sales