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OWNERSHIP & CONTROL**

**КОРПОРАТИВНАЯ
СОБСТВЕННОСТЬ И КОНТРОЛЬ**

Editorial Address:

Assistant Professor Alexander N. Kostyuk
Department of Management & Foreign Economic
Activity
Ukrainian Academy of Banking of National Bank of
Ukraine
Petropavlovskaya Str. 57
Sumy 40030
Ukraine

Tel: +0038-0542-288365

Fax: +0038-0542-611025

e-mail: alex_kostyuk@mail.ru

alex_kostyuk@virtusinterpress.org

www.virtusinterpress.org

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Адрес редакции:

Александр Николаевич Костюк
доцент кафедры управления и
внешнеэкономической деятельности
Украинская академия банковского дела
Национального банка Украины
ул. Петропавловская 57
г. Сумы
40030 Украина

Тел.: 0038-0542-288365

Факс: 0038-0542-611025

эл. почта: alex_kostyuk@mail.ru

alex_kostyuk@virtusinterpress.org

www.virtusinterpress.org

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Dear Readers!

The recent issue of the journal „Corporate Ownership and Control“ is devoted to some key topics. We constructed this issue of the journal around the fundamental analysis of corporate governance systems in Asia, Africa and Australia.

We introduced a new market to explore corporate governance - Africa. Corporate governance has received much attention especially among very large firms in developed markets. As proved by Anthony Kyereboah-Coleman, Charles K.D. Adjasi, and Joshua Abor developing countries are now increasingly embracing the concept of good corporate governance, knowing it leads to sustainable growth and Ghana is no exception.

So it is generally accepted that the concept “corporate governance” discussed by Anthony Kyereboah-Coleman, Nicholas Biekpe is gradually warming itself as a priority in the African continent.

The paper by Greg Tower and Dulacha G Barako provides an empirical analysis of banks performance in Kenya.

Besides that we tried to do our utmost to develop the academic investigations and concepts through publishing papers titled as “Ownership Structure and Operating Performance Changes surrounding Stock Option Adoptions: Evidence from Japan” by Konari Uchida and Mamoru Matsumoto, “Impact of Board Size and Board Diversity on Firm Value: Australian Evidence” by Hoa Nguyen, Robert Faff and “Board Composition, Audit Committee and Timeliness of Corporate Financial Reports in Malaysia” by Shamsul-Nahar Abdullah.

The paper by Ying-Fen Lin divides companies into non-family businesses and family businesses and investigates the influence of outside directors, outside blockholders, and excess compensation in CEOs termination process.

In turn Cláudio Antonio Pinheiro Machado Filho, Adalberto Fischmann, Luciana Rocha de Mendonça, Sandra Guerra open essentials of the mechanisms of governance in nonprofit organizations.

In another study Li-Anne Elizabeth Woo researches critically the law matters thesis, also critiques the law matters thesis from a perspective largely beyond the mainstream law journals and yields perspectives often overlooked in the law literature.

Tzong-Huei Lin describes the IPO underpricing and corporate governance in Taiwan. The results generally suggest that the corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market.

The study by Alma Whiteley attempts to investigate trust and the employee perspective. It is meant to introduce trust as related to organizational design and management within the broader domain of governance and report on case study research on trust carried out in a large Australian organization.

The next studies by Saw-Imm Song, Ruhani Ali, Subramaniam Pillay, and Douglas Nanka-Bruce described family ownership, premiums paid and performance (evidence from corporate take-overs in Malaysia) and corporate ownership and technical efficiency analysis in the Spanish real estate sector.

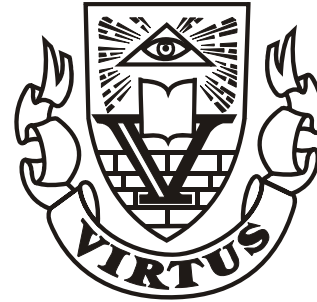
We hope that our practitioner’s corner with the paper „The premium paid for M&A: the Nasdaq case“ by Mpasinas Antonios will be read by you with interest.

We would like to remind that all our efforts are directed to develop corporate governance through intensive research and in this way your contribution is welcome by us!

CORPORATE OWNERSHIP & CONTROL

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board chairman and CEO significantly are associated with timelier reporting. The results also indicate that the 1997 financial crisis had adversely affected the timeliness of reporting. These findings imply that during difficult periods, companies tend to take a longer time to prepare their audited financial reports. Finally, the negative relation between firm's profitability and timeliness of reporting is supportive of information signaling theory.

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Anthony Kyereboah-Coleman, Nicholas Biekpe

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Anthony Kyereboah-Coleman, Charles K.D. Adjasi, Joshua Abor

Well governed firms have been noted to have higher firm performance. The main characteristic of corporate governance identified include board size, board composition, and whether the CEO is also the board chairman. This study examines the role corporate governance structures play in firm performance amongst listed firms on the Ghana Stock Exchange. Results reveal a likely optimal board size range where mean ROA levels associated with board size 8 to 11 are higher than overall mean ROA for the sample. Significantly, firm performance is found to be better in firms with the two-tier board structure. Results show further that having more outside board members is positively related to firm performance. It is clear that corporate governance structures influence firm performance in Ghana, indeed within the governance structures the two-tier board structure in Ghana is seen to be more effective in view of the higher firm level mean values obtained compared to the one-tier system.

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Dulacha G. Barako, Greg Tower

This paper provides an empirical analysis of banks performance in Kenya. The primary purpose of this study is to investigate the association between ownership structure characteristics and bank performance. Data utilised in the study is collected from the Financial Institutions Department of the Central Bank of Kenya, both on-site inspection reports and off-site surveillance records. Empirical results indicate that ownership structure of banks significantly influence their financial performance. In particular, board and government ownership are significantly and negatively associated with bank performance, whereas foreign ownership is strongly positively associated with bank performance, and institutional shareholders have no impact on the performance of financial institutions in Kenya. The results are consistent with prior research findings, and more importantly, presents statistical justification for pursuing further corporate governance reforms with respect to banks' ownership structure to enhance the financial stability of the sector.

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НАУЧНЫЕ ИССЛЕДОВАНИЯ
И КОНЦЕПЦИИ

SECTION 1
ACADEMIC
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& CONCEPTS



OWNERSHIP STRUCTURE AND OPERATING PERFORMANCE
CHANGES SURROUNDING STOCK OPTION ADOPTIONS: EVIDENCE
FROM JAPAN

Konari Uchida, Mamoru Matsumoto***

Abstract

Stock option adoptions by IPO firms account for about one-third of Japanese stock option adoptions during 1997-2000. Non-IPO firms that adopt stock options tend to decrease financial institutions' ownership levels less than the average whereas reduce other corporations' ownership levels more than the average. The result suggests firms that care more about shareholder wealth decrease cross-shareholdings as well as issue stock options. However, such firms need to keep shareholdings by financial institutions to prevent increases in agency costs of debt. Finally, we do not find a significant change in firms' operating performance surrounding stock option adoptions.

Keywords: stock option, ownership structure, operating performance, agency costs of debt, IPO

**Corresponding author: The University of Kitakyushu, Faculty of Economics and Business Administration, 4-2-1, Kitagata, Kokuraminami-ku, Kitakyushu 802-8577 Japan. Tel & Fax: +81-93-964-4085 E-mail: k_uchida@kitakyu-u.ac.jp*

*** Graduate School of Economics Kyushu University*

1. Introduction

Japanese corporate governance structures have been somewhat different from U.S. ones. Keiretsu affiliations and main banks have a major role in the Japanese corporate governance (Aoki et al., 1994; Prowse, 1992). Cross-shareholdings among listed firms have released managers from threats of hostile takeovers. Managerial compensations have given a weak incentive to maximize shareholder value to managers (Kaplan, 1994). As a result, the traditional governance structure has made managers care less about shareholder wealth.

However, the Japanese corporate governance shows a remarkable change in the late 1990s; Japanese companies adopt new governance devices

that give managers an incentive to maximize shareholder value. Since stock options are permitted in 1997, many companies have adopted options in the managerial compensation. Companies began to have outside directors to make the boards more effectively monitor managements. These changes imply that Japanese corporate governance began to care more about shareholder value.

Using Japanese data, we investigate firms' ownership structure and operating performance changes surrounding stock option adoptions. If a firm's corporate governance structure is optimally designed, adding a new governance device may deviate the firm's governance structure from the optimal one; thus, the firm must adjust existing governance instruments associated with a new

governance device adoption. We explore whether Japanese companies adjust their existing governance structures when adopting stock options.

There is another perspective that motivates us to analyze ownership structure changes when Japanese firms adopt stock options. Recent Japanese companies decrease cross-shareholdings that have made the managers care less about shareholder wealth; firms adopt stock options and abolish cross-shareholdings for a same reason. This fact gives rise to the prediction that firms that adopt stock options decrease cross-shareholdings more.

Finally, we investigate operating performance changes pre- and post-stock option adoptions to explore whether the Japanese corporate governance reform has a positive impact on firm performance. Kato et al. (2005) investigate firms' operating performance changes during three years surrounding stock option adoptions; they report stock option adoptions improve firm performance. Considering that managers may have an incentive to manipulate the firms' accounting performance upward when receiving stock options (Bartov and Mohanram, 2004), this paper extends the analytical period to seven years surrounding stock option adoptions,

Investigating changes in ownership structure and operating firm performance, we should take into account that firms tend to adopt stock options pre- or post-IPOs; IPO firms can take a significant portion of firms that adopt stock options. Previous studies detect that IPO firms tend to reduce leverage levels, change ownership structures, and experience poor long run operating performance as well as issue stock options (Hamao et al., 2000; Jain and Kini, 1994; Kutsuna et al., 2002; Mikkelsen et al., 1997; Roell, 1996). The IPO firms' characteristics may produce a spurious relation between stock option adoptions and changes in ownership structures and operating performance. Dividing firms that adopt stock options into IPO firms and non-IPO firms, we try to disentangle changes in corporate governance structures and firm performance induced by stock option adoptions from those associated with IPOs.

Our empirical results are summarized as follows. Stock option adoptions associated with IPOs account for about one-third of all stock option adoptions during 1997-2000. IPO firms that adopt stock options tend to decrease directors' ownership levels and leverage whereas increase financial institutions' ownership levels surrounding the first option grant years. However, these changes may not be induced directly by stock option adoptions; the results may reflect IPO firms tendencies to substantially change their leverage and ownership structures as well as issue stock options.

Non-IPO firms that adopt stock options tend to decrease financial institutions' ownership levels less than the average whereas reduce other corporations' ownership levels more than the average. Firms that care more about shareholder wealth decrease cross-

shareholdings as well as issue stock options. However, such firms need to keep shareholdings by financial institutions to prevent increases in agency costs of debt. These results suggest firms need to adjust existing governance instruments when adding a new governance device.

Finally, firms' operating performance does not significantly change surrounding stock option adoptions. Our data support neither the idea that incentive effects provided by stock options improve firm performance nor the hypothesis that managers time stock option grants so that unexpectedly good performance is announced immediately after the grants.

The reminder of this paper is organized as follows. Section 2 presents a brief sketch of the traditional corporate governance and characteristics of Japanese stock options. Section 3 explains hypotheses. Section 4 describes sample selection procedures and data. Section 5 presents empirical results. Finally, section 6 summarizes this study.

2. Japanese corporate governance and stock options

Keiretsu affiliations and main banks have played an important role in the traditional Japanese corporate governance (Aoki et al., 1994; Prowse, 1992). Kaplan and Minton (1994) and Kang and Shivdasani (1997) find that main banks dispatch personnel to a firm's board before it gets into financial crisis.¹ Another feature of the traditional governance is that firms have cared less about shareholder wealth. In the Japanese stock market, cross-shareholdings among listed companies have been developed; the cross-shareholdings weaken managers' incentive to maximize shareholder value by releasing them from treats of hostile takeovers.

Managerial compensation structures also have given managers a weaker incentive to increase shareholder wealth. In Japan, stock options have been banned for a long time. Kaplan (1994) argues that Japanese managers' cash compensations are more sensitive to negative earnings than it is in the U.S., even though it is linked to firm performance. Kaplan also finds that the level of managerial ownership is roughly one-half than that of U.S. top executives, and one-quarter if stock options are included.

However, the Japanese governance characteristics substantially changed during the 1990s. The serious reductions of share prices and Return on Equity (ROE) raised awareness that firms should adopt shareholder wealth-oriented corporate

¹ Some previous studies emphasize negative aspects of keiretsu and main bank-centered corporate governance. Weinstein and Yafeh (1998) argue that close bank ties increase availability of financing, but not profitability. Kang and Stultz (1997) report a strongly significant negative relation between the ratio of loans to total debt in 1989 and the firm's stock return from 1990 to 1993.

governance. This idea make Japanese firms abolish cross-shareholdings. According to NLI Research Institute, the percentage of cross-held shares in the Japanese all stocks decreased from 18.0% in 1990 to 7.4% in 2002. In accordance, the percentage of shares held by corporations in Tokyo Stock Exchange (TSE) decreases from 73.4% in 1990 to 60.5% in 2002.²

Japanese companies also introduce some new governance devices. Firms began to adopt outside directors in their boards. Stock options were permitted by the 1997 Commercial Code amendment; then many companies adopted options in managers' compensations. According to Daiwa Securities SMBC Co. Ltd., 1391 firms (approximately 38% all listed companies) adopted stock options as of March 2005.

To grant stock options, Japanese firms must gain approval at their shareholder meetings. Within one year from that approval, the firm can actually award options. Uchida (2005) reports that the most common exercise period is five years in his sample; no firm adopts stock options whose exercise period is over 10 years to satisfy a condition for the tax-qualified stock option. In most cases, the strike price is determined by multiplying the closing stock price at the end of the month before the grant month by 1.05.

3. Hypotheses

3.1. Stock option adoptions and existing governance devices

If a firm's corporate governance structure is optimally designed, adding a new governance device may divert the governance structure from an optimal one. This problem should be marked for the Japanese case in which many companies simultaneously adopt stock options after the Commercial Law amendment.

Stock options give managers a stronger incentive to maximize shareholder wealth. However, such an incentive may increase agency costs of debt; shareholders tend to undertake high-risk projects and forgo positive-NPV projects to transfer wealth from bondholders to shareholders (Jensen and Meckling, 1976; Myers, 1977). John and John (1993) show that optimal sensitivities of managerial compensation to performance measures decrease as firm's leverage increases. Previous studies indicate that leverage is negatively related to the likelihood that Japanese firms grant stock options (Kato et al., 2005; Uchida, 2006). DeFusco et al. (1990) find that shareholder wealth increases and bondholder wealth decreases at the announcement of stock option adoptions. Therefore, firms may need to adjust their governance

structures to reduce agency costs of debt in accordance with stock option adoptions; firms must reduce leverage when adopting stock options.

There is another perspective that derives the same hypothesis. Jensen (1986) stresses the disciplinary role of debt; debt prevents managers from undertaking negative-NPV projects by forcing managers to pay out cash flows. If incentive effects provided by stock options act as substitutes for the disciplinary role of debt, firms that adopt stock options can reduce leverage levels..

Hypothesis 1-A: Firms decrease their leverage levels surrounding stock option adoptions.

If shareholders also hold firms' debt, the shareholders-creditors conflict may become less severe; firms can reduce agency costs of debt by increasing financial institutions' ownership levels instead of reducing leverage. In Japan, main banks have played a role of reducing agency costs by holding both shares and debt of firms (Prowse, 1990; Fukuda and Hirota, 1996). This idea leads to another hypothesis.

Hypothesis 1-B: Firms increase financial institutions' ownership levels surrounding their option adoptions.

3.2. Cross-shareholdings reduction and stock option adoptions

Recent Japanese companies tend to decrease cross-shareholdings that weaken managers' incentive to maximize shareholders value. Many firms simultaneously adopt stock options to make managers care more about shareholder wealth; the abolition of cross-shareholdings and stock option adoptions are motivated by a same idea that firms should care more about shareholder wealth. This fact gives rise to the following hypothesis.

Hypothesis 2: Firms that adopt stock options decrease cross-shareholdings.

4. Sample Selection and Data

Our sample consists of firms listed on the TSE, first section. Using Nikkei NEEDS FinancialQuest Database, we collected firms that adopt stock option plans as of March 2000. We identified the year when these firms got the first approval to grant options from their annual reports. These procedures offer us 201 firms that adopt stock options during 1997 to 2000.

For the 201 firms, we obtained ownership structure and financial data from Nikkei NEEDS FinancialQuest. Table 1 presents descriptive statistics. Over half of our sample firms got first the approval to grant options in 2000 (Panel A). Electric appliance firms adopt stock options most frequently; it is followed by wholesale service and machinery. Panel B indicates that firms that went public after 1995 account for approximately one-third of our

² Financial institutions' ownership level decreases from 43% to 39.1% and other corporations' ownership level declines from 30.1% to 21.5% from 1990 to 2002.

sample firms. Likewise, about one-third of the firms adopt stock options within three years after or before IPOs (Panel C); stock option grants by IPO firms take a significant portion of Japanese stock option adoptions during 1997-2000. We should take this fact into account when analyzing changes in corporate governance structures and operating performance.

We use two leverage measures: (a) Leverage 1 = total liabilities / total assets ratio and (b) Leverage 2 = financial liabilities / (financial liabilities and book value of equity). For testing Hypothesis 2, we adopt financial institutions' ownership level and other corporations' ownership level as proxies for the degree of cross-shareholdings. We adopted three measures for firms' operating performance: (a) operating income-to-total assets ratio, (b) operating income-to-sales ratio, and (c) EBIT-to-total assets ratio.

We analyze corporate governance structure and operating performance changes during seven years surrounding the grant year (See Figure 1). In most cases, firms' fiscal year ends on March and shareholders meetings are held on June. If a firm got the first approval to grant stock options on June 2000, the firm can grant stock options from June 2000 to May 2001. In this case, we define the grant year as the fiscal year that ends on March 2001 (year 0); as shown in Figure 1, we investigate the firm's corporate governance structures and operating performance from the fiscal year that ends on March 1998 (year -3) to the year that ends on March 2004 (year +3).

5. Empirical Results

5.1. Changes in directors' ownership surrounding first stock option adoptions

First, we investigate changes in directors' ownership levels surrounding stock option adoptions. Panel A of Table 2 finds the average directors' ownership level decreases from 10.1% at year -3 to 6.4% at year 3 (median decreases from 1.9% to 1.3%). The average change from year -3 to year 1 is -3.4% (median is -0.1%) and significantly different from zero. This evidence is consistent with Kato et al. (2005) and Ofek and Yermack (1997); directors tend to sell their firms' shares surrounding stock option grants.

Considering that managers tend to sell a significant portion of their companies' shares when the firm goes public, the result may represent an IPO firm' tendency to substantially change ownership structures and issue stock options; it would be important to investigate changes in directors' ownership levels for IPO and non-IPO firms respectively to disentangle the direct effect of stock option adoptions on directors' ownership levels from

the spurious relation produced by IPO firms' characteristics.

We define IPO firms as companies that adopt stock options within three years after or before IPOs. There are 67 IPO firms in our sample; it accounts for one-third of the entire sample. Also, we define Non-IPO firms as companies that adopt stock options over 10 years after IPOs. This procedure offers us 113 Non-IPO firms.

Results are shown in Panels B and C of Table 2. From year -1 to year 3, IPO firms decrease directors' ownership levels by 8.8% on average (median change is 4.4%) whereas Non-IPO firms do so by 0.4% (median change is 0.01%). This evidence suggests the finding by Kato et al. (2005) and Ofek and Yermack (1997) might represent IPO firms' pattern; managers tend to sell a significant portion of their companies' shares and simultaneously issue stock options when the company goes public.

The result also suggests additional incentive effects provided by stock options may be stronger for non-IPO managers than for IPO managers; stock option adoptions may increase agency costs of debt more for non-IPO firms than for IPO firms.

5.2. Leverage changes surrounding first stock option adoptions

Hypothesis 1-A predicts firms' capital structure changes surrounding stock option adoptions. Table 3 summarizes firms' leverage changes from year -3 to year 3.

For the entire sample, the average Leverage 1 decreases from 52.1% at year -3 to 43.3% at year 3 (median decreases from 52.3% to 42.7%). The average change from year -1 to year 3 is -4.8% (median change is -3.2%); it is significantly different from zero. Likewise, Leverage 2 decreases by 6.0% on average from year -1 to year 3 (the median reduction is 3.1%). Panels B and C of Table 3 indicate that both IPO and Non-IPO firms tend to decrease their leverage levels.

It would be important to analyze industry adjusted leverage levels because the average Japanese company tends to decrease leverage during the late 1990s.

Table 4 reports changes in the industry adjusted leverage (subtract the industry median leverage from the raw variable).³ The average sample firm increases the industry adjusted Leverage 1 by 1.4% from year -1 to year 3 (median increase is 2.4%). Likewise, the adjusted Leverage 2 increases by 3.7% from year -1 to year 3; it is significantly different from zero.

³ The industry adjusted leverage is negative and significantly different from zero through the analytical period; it is consistent with the finding by Kato et al. (2005) and Uchida (2005) that leverage levels are negatively associated with the likelihood that firms adopt stock options.

The evidence suggests firms that adopt stock options decrease their leverage levels less than the average; it contradicts Hypothesis 1-A. This finding is more pronounced for Non-IPO firms (Panel C of Table 4). The average Non-IPO firms' Leverage 1 (industry adjusted) increases from -6.2% at year -3 to -1.1% at year 3. The average sample firm increases the adjusted Leverage 1 by 3.7% from year -1 to year 3 (median increase is 3.5%); it is statistically significant at the 1% level. Hypothesis 1-A is not supported for Non-IPO firms.

A possible interpretation of this finding would be that firms that adopt stock options tend to have more growth opportunities; thus, it is difficult for such firms to substantially decrease leverage levels. Many previous studies argue that market-to-book ratio is positively associated with the likelihood that firms adopt stock options (Baber et al., 1996; Gaver and Gaver, 1993; Kato et al., 2005; Mehran, 1995; Ryan and Wiggins, 2001; Smith and Watts, 1992). Thus, we predict firms that adopt stock options can not reduce leverage because they need to spend cash flows in business projects rather than in repaying their debt. For testing this prediction, we compute percentage changes in fixed assets from year -1 to year 3 and relate it to the leverage change. Specifically, we equally divide Non-IPO firms into two groups according to the change in leverage and compare fixed assets changes between the two groups. Industry adjusted variables are used both for the changes in leverage and fixed assets.

Results are summarized in Table 5. Panel A reports Non-IPO firms that increase Leverage 1 more than the median increase fixed assets by 10.6% on average whereas Non-IPO firms that increase Leverage 1 less than the median decrease fixed assets by 1.5%; the difference in the fixed assets change is statistically significant at the 5% level. Panel B shows a similar result though the statistical significance levels are marginal.

Panel C reports correlation coefficients between the changes in leverage and fixed assets; the correlations are positive and statistically significant. This evidence suggests non-IPO firms that adopt stock options tend less to decrease leverage because they have more growth opportunities; thus, Hypothesis 1-A is not supported. Non-IPO firms need to adjust other governance instruments to prevent increases in agency costs of debt when adopting stock options.

On marked contrast, Panel B shows the average IPO firm decreases the industry adjusted Leverage 1 from -7.0% at year -3 to -17.9% at year 3 (median decreases from -5.6% to -19.1%). The average Leverage 1 reduction from year -1 to year 3 is -2.9%; it is significantly different from zero (median change is -1.8%).

The result may be produced by an IPO firms' tendency to substantially decrease leverage as well

as issue stock options (Roell, 1996); it may not induced directly by stock option adoptions.

5.3. Changes in financial institutions' and other corporations' ownership

5.3.1. Financial institutions' ownership levels

Non-IPO firms tend less to decrease directors' ownership levels and leverage when adopting stock options. Thus, Non-IPO firms need to increase shareholdings by financial institutions to prevent increases in agency costs of debt (Hypothesis 1-B). Table 6 describes percentage changes in financial institutions' and other corporations' ownership levels (raw variables). Panel A (results for the entire sample) indicates the sample firms seems not to substantially change raw financial institutions' ownership levels; the average change from year -1 to year 3 is 0.8% (median is 0.4% increase).

Panels B and C of Table 6 reports ownership structure changes for IPO firms and Non-IPO firms, respectively. The average IPO firm significantly increases the financial institutions' ownership level. It may reflect the Japanese IPO firms' pattern; firms tend to increase banks' ownership levels following IPOs (Hamao et al., 2000; Kutsuna et al., 2002). On the other hand, the average Non-IPO firm significantly decreases raw financial institutions' ownership levels. Considering that the average Japanese firm decreases the financial institutions' and other corporations' ownership level during the late 1990s, it would be necessary to analyze whether sample firms increase (decrease) the ownership levels than the TSE average. We make variables above the TSE mean (subtract the TSE mean from the raw ownership variable) and trace the adjusted variables' change (Table 7).

Panel A of Table 7 shows the average financial institutions' ownership level increases from -9.1% (median is -8.1%) at year -3 to -2.3% (median is -2.8%).⁴ The average change from year -1 to year 3 is positive (5.6%) and significantly different from zero at the 1% level; it is consistent with Hypothesis 1-B.

The result might be earned by a Japanese IPO firms' tendency to substantially increase banks' ownership levels after IPOs (Hamao et al., 2000; Kutsuna et al., 2002). For disentangling ownership structure changes induced by stock option adoptions from those associated with IPOs, we conduct a same test for IPO and Non-IPO firms, respectively (Panels B and C of Table 7). Both IPO and Non-IPO firms significantly increase financial institutions' ownership levels (above the TSE mean). The Non-

⁴ Financial institutions' ownership level at year -1 is -7.8% on average (median is -7.4%); it is significantly different from zero. This figure suggests that firms with lower financial institutions' ownership level tend to adopt stock options; it is consistent with Kato et al. (2005).

IPO's firms' finding supports Hypothesis 1-B though the IPO firms' result may be produced by the Japanese IPO firms' tendency. Non-IPO firms need to decrease shareholdings by financial institutions less than the average to prevent increases in agency costs of debt.

5.3.2. Other corporations' ownership levels

Hypothesis 2 predicts firms that care more about shareholder wealth may decrease cross shareholdings as well as adopt stock options. Panel A of Table 6 reports the sample firms substantially decrease shareholdings by other corporations (raw variable); the other corporations' ownership level decreases from 25.2% at year -3 to 20.7% at year 3. The change from year -1 to year 3 is -2.8% (median is -3.0%). Panels B and C of Table 6 find both IPO and Non-IPO firms significantly decrease other corporations' ownership levels (raw variable) surrounding stock option adoptions. The result keeps unchanged when using the variable above the TSE mean (Panel A of Table 7). Considering that Non-IPO firms may be encumbered by cross-shareholdings, the Non-IPO firms' result is consistent with Hypothesis 2; firms that care more about shareholder wealth tend to decrease cross-shareholdings more than the average as well as adopt stock options. We conduct a same test for keiretsu firms to check the robustness of this interpretation. Other corporations' ownership levels of keiretsu firms may represent the degree of cross-shareholdings more accurately; the variable of Non-IPO firms sometimes includes corporate block shareholders. Each sample firm's keiretsu affiliation is obtained from *Keiretsu no Kenkyu*. We define keiretsu firms as companies that belong to a six major keiretsu group (Mitsui, Mitsubishi, Sumitomo, Fuyo, Sanwa, and Dai-ichi Kangyo) in the *Keiretsu no Kenkyu*. Results for keiretsu firms are shown in Table 8. Panels A and B of Table 8 show keiretsu firms significantly decrease other corporations' ownership levels. Keiretsu firms that adopt stock options decrease cross-shareholdings with other corporations more than the average; the evidence is consistent with Hypothesis 2.

Table 8 also finds keiretsu firms significantly increase the adjusted financial institutions' ownership levels whereas decrease the raw variable. Keiretsu firms decrease shareholdings by financial institutions less than the average; it is consistent with Hypothesis 1-B. Overall, non-IPO firms or keiretsu firms that care more about shareholder wealth tend to decrease cross-shareholdings with other corporations more than the average as well as adopt stock options. However, such firms decrease shareholdings by financial institutions less than the average to prevent increases in agency costs of debt. These firms seem

to adjust ownership structures along with adopting stock options.

5.4. Stock option adoptions and operating performance

Finally, we analyze operating performance changes surrounding stock option adoptions. We report only industry adjusted performance measures (subtract the industry median from the raw performance variable). Results for the entire sample are described in Panel A of Table 9. The average firm achieves almost same operating income-to-total assets ratio at years -3 and 3. The average change from year -1 to year 3 is -0.3% (median change is -0.1%); it is not statistically significant. The other performance measures do not show a significant increase surrounding the grant years. The results might be caused by IPO firms' characteristics; Previous studies report that firms experience poor long-run performance following IPOs (Jain and Kini, 1994; Kutsuna et al., 2002; Mikkelsen et al., 1997). Disentangling the effect of stock option adoptions on firm performance from the impact of IPO firms, we conduct a same test for IPO and Non-IPO firms, respectively (Panels B and C of Table 9). Panels B and C show no significant change in the three performance measures both for IPO and Non-IPO firms. Our data do not find a positive effect of stock option adoptions on firms' operating performance. Table 9 also shows no substantial change in operating performance from year -1 to year 1; it is inconsistent with Kato et al. (2005).⁵ Our data do not support the idea that managers time stock option grants so that unexpectedly good performance is announced immediately after the option grants.

6.1. Concluding Remarks

The Japanese corporate governance shows a remarkable change in the late 1990s; Japanese companies adopt stock options in their managerial compensations and decrease cross-shareholdings. These changes mean that Japanese corporate governance began to care more about shareholder wealth. Using Japanese data, we investigate changes in firms' leverage, ownership structures, and operating performance surrounding stock option adoptions. Our empirical results are summarized as follows. Stock option adoptions associated with IPOs account for about one-third of all stock option adoptions during 1997-2000. IPO firms that adopt stock options tend to decrease directors' ownership levels and leverage whereas increase financial institutions' ownership levels surrounding the first option grant year. These changes may not be induced

⁵ It can be attributed to the difference in the sample coverage. Kato et al. collect stock option adoptions during 1997 to 2001. Also, Kato et al. adopt additional stock option adoptions by a same company whereas we focus on firms' first stock option adoptions.

directly by stock option adoptions; the results reflect IPO firms tendencies to substantially change their leverage and ownership structures as well as issue stock options. Non-IPO firms that adopt stock options tend to decrease financial institutions' ownership levels less than the average whereas reduce other corporations' ownership levels more than the average. Firms that care more about shareholder wealth tend to decrease cross-shareholdings as well as issue stock options. However, such firms need to keep shareholdings by financial institutions to prevent increases in agency costs of debt. These results suggest that firms need to adjust existing governance instruments when adding a new governance device.

Finally, firms' operating performance shows no significant change surrounding stock option adoptions. Our data support neither the idea that incentive effects provided by stock options improve firm performance nor the hypothesis that managers time stock option grants so that unexpectedly good performance is announced immediately after the grants.

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Appendices

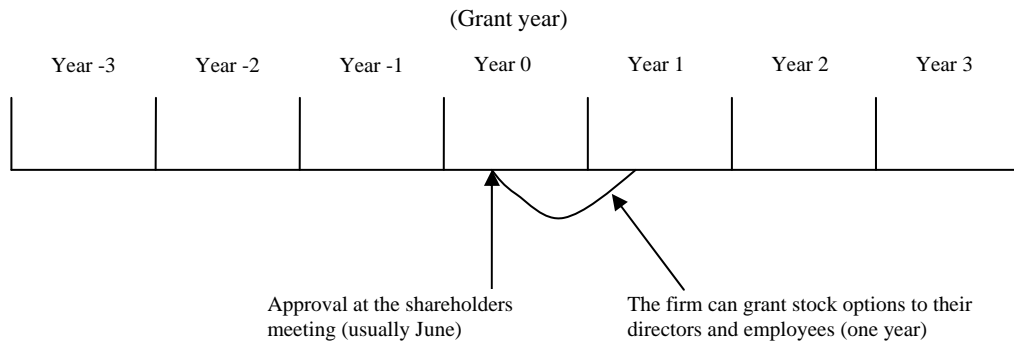


Fig. 1 Events and analytical period

Table 1			
Sample distributions			
Panel A: First approval year			
Approval year	Number of observations		
	1997	14	6.97%
	1998	36	17.91%
	1999	33	16.42%
	2000	118	58.71%
Total		201	
Panel B: Firms' IPO year			
IPO year	Number of observations		
Prior to 1990	116	57.71%	
1990- 1995	17	8.46%	
1996- 2000	34	16.92%	
After 2000	34	16.92%	
Total	201		
Panel C: First option approval year relative to IPO year			
First approval year	Number of observations		
Before IPO year	28	13.93%	
Same year with IPO	16	7.96%	
0 years - 3 years after IPO	23	11.44%	
4 years - 5 years after IPO	5	2.49%	
6 years - 10 years after IPO	16	7.96%	
Over ten years after IPO	113	56.22%	
Total	201		

Table 2

Percentage change in directors' ownership

Panel A: Entire sample

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Directors' ownership level								
Mean	10.10%	8.92%	9.51%	8.12%	7.54%	6.77%	6.35%	-3.44%
Median	1.92%	1.97%	1.66%	1.32%	1.41%	1.34%	1.30%	-0.08%
Number of observations	191	195	198	200	201	200	201	198
t-statistics								-5.05 ***
Wcoxon Test								-6.76 ***

Panel B: IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Directors' ownership level								
Mean	26.18%	21.78%	23.18%	19.33%	17.87%	15.93%	14.87%	-8.78%
Median	21.52%	18.04%	16.39%	16.03%	12.28%	11.53%	10.80%	-4.44%
Number of observations	57	61	64	66	67	67	67	64
t-statistics								-4.79 ***
Wcoxon Test								-5.85 ***

Panel C: Non-IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Directors' ownership level								
Mean	1.86%	1.67%	1.56%	1.39%	1.29%	1.21%	1.13%	-0.43%

Table 2 (Continued)

Median	0.46%	0.43%	0.45%	0.39%	0.39%	0.40%	0.41%	-0.01%
Number of observations	113	113	113	113	113	112	113	113
t-statistics								-2.79 ***
Wcoxon Test								-2.14 **

This table shows sample firms' percentage changes in directors' ownership levels surrounding the first stock option grant year. IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non-IPO firms are companies that adopt stock options over 10 years after IPOs. T-statistics test the null hypothesis that the variable's average change from year -1 to year 3 is zero. Wilcoxon test is for the null hypothesis that the variable's median change from year -1 to year 3 is zero.

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 3

Leverage changes surrounding first stock option adoptions

Panel A: Entire sample

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Leverage 1 = total liabilities / total assets								
Mean	52.10%	50.48%	48.11%	46.95%	46.01%	45.29%	43.30%	-4.81%
Median	52.26%	51.19%	49.01%	47.99%	45.79%	44.50%	42.72%	-3.18%
Number of observations	201	201	201	201	201	201	201	201
t-statistics								-6.72 ***
Wcoxon Test								-6.23 ***
Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	33.98%	32.99%	30.23%	28.19%	27.61%	26.69%	24.19%	-6.04%
Median	30.86%	31.25%	30.73%	27.18%	23.77%	24.21%	19.78%	-3.12%
Number of observations	201	201	201	201	201	201	201	201
t-statistics								-7.68 ***
Wcoxon Test								-7.33 ***

Panel B: IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Leverage 1 = total liabilities / total assets								
Mean	56.70%	52.36%	46.07%	42.58%	40.97%	39.61%	36.97%	-9.10%
Median	59.47%	52.75%	48.49%	43.14%	40.32%	38.54%	35.32%	-7.90%
Number of observations	67	67	67	67	67	67	67	67
t-statistics								-6.11 ***
Wcoxon Test								-5.38 ***

Table 3 (Continued)

Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	38.88%	34.27%	28.20%	23.79%	22.67%	20.72%	17.64%	-10.57%
Median	36.53%	30.40%	27.38%	19.41%	17.97%	12.97%	8.52%	-8.13%
Number of observations	67	67	67	67	67	67	67	67
t-statistics								-6.22 ***
Wilcoxon Test								-5.38

Panel C: Non-IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Change from year -1 to year 3
Leverage 1 = total liabilities / total assets								
Mean	52.63%	52.15%	51.44%	51.47%	51.02%	50.62%	48.99%	-2.45%
Median	52.26%	52.04%	51.01%	50.84%	49.39%	48.58%	46.73%	-1.13%
Number of observations	113	113	113	113	113	113	113	113
t-statistics								-3.13 ***
Wilcoxon Test								-2.60
Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	34.17%	34.92%	33.49%	32.53%	32.32%	32.20%	29.91%	-3.58%
Median	30.95%	32.61%	32.53%	30.37%	30.48%	30.89%	28.38%	-2.29%
Number of observations	113	113	113	113	113	113	113	113
t-statistics								-4.27 ***
Wilcoxon Test								-4.05

This table shows sample firms' leverage changes surrounding the first stock option grant year. IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non-IPO firms are companies that adopt stock options over 10 years after IPOs. T-statistics test the null hypothesis that the variable's average change from year -1 to year 3 is zero. Wilcoxon test is for the null hypothesis that the variable's median change from year -1 to year 3 is zero.

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 4

Industry adjusted leverage changes surrounding first stock option adoptions

Panel A: Entire sample

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Leverage 1 = total liabilities / total assets								
Mean	-8.70%	-9.91%	-10.06%	-9.20%	-8.10%	-7.90%	-8.71%	1.35%
Median	-6.02%	-8.66%	-10.96%	-8.89%	-8.47%	-7.75%	-9.76%	2.40%
Number of observations	201	201	201	201	201	201	201	201
t-statistics								1.75 *
Wilcoxon Test								-2.92 ***
Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	-6.47%	-6.97%	-6.05%	-4.79%	-2.72%	-1.56%	-2.36%	3.69%
Median	-6.26%	-6.25%	-5.81%	-5.91%	-4.48%	-3.22%	-5.16%	4.35%
Number of observations	201	201	201	201	201	201	201	201
t-statistics								4.12 ***
Wilcoxon Test								-4.90 ***

Panel B: IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Leverage 1 = total liabilities / total assets								
Mean	-6.96%	-11.09%	-14.95%	-16.06%	-15.52%	-16.09%	-17.85%	-2.90%
Median	-5.58%	-11.91%	-16.23%	-17.17%	-14.97%	-16.20%	-19.06%	-1.95%
Number of observations	67	67	67	67	67	67	67	67
t-statistics								-2.02 **
Wilcoxon Test								-1.80 *

Table 4 (Continued)

Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	-5.09%	-9.02%	-11.24%	-12.18%	-10.46%	-10.26%	-11.95%	-0.71%
Median	-9.17%	-11.53%	-10.14%	-13.21%	-11.01%	-9.46%	-11.32%	1.25%
Number of observations	67	67	67	67	67	67	67	67
t- statistics								-0.42
Wilcoxon Test								-0.19
Panel C: Non- IPO firms								
Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Leverage 1 = total liabilities / total assets								
Mean	-6.20%	-6.16%	-4.79%	-2.97%	-1.40%	-0.88%	-1.11%	3.67%
Median	-3.42%	-4.05%	-3.06%	-1.74%	-2.23%	-0.53%	0.34%	3.54%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								3.89 ***
Wilcoxon Test								-4.99 ***
Leverage 2 = financial liabilities / (equity + financial liabilities)								
Mean	-3.92%	-2.79%	-0.63%	1.64%	3.88%	5.82%	5.47%	6.11%
Median	-4.58%	-2.44%	-0.92%	0.00%	0.09%	3.21%	5.30%	5.74%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								5.46 ***
Wilcoxon Test								-5.53 ***

This table shows sample firms' leverage changes surrounding the stock option grant year. All variables are adjusted by the industry median (subtract the industry median from the raw variable). IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non- IPO firms are companies that adopt stock options over 10 years after IPOs. T- statistics test the null hypothesis that the variable's average change from year -1 to year 3 is zero. Wilcoxon test is for the null hypothesis that the variable's median change from year -1 to year 3 is zero.

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 5
Leverage changes and fixed assets changes for Non- IPO firms

Panel A: Leverage 1 changes and fixed assets changes

	Fixed assets increase from year -1 to year 3 (industry adjusted)
Non- IPO firms that increase leverage more than the median	
Mean	-1.48%
Median	-1.51%
Number of observations	56
Non- IPO firms that increase leverage less than the median	
Mean	10.62%
Median	5.77%
Number of observations	57
Mean difference	12.10%
t- statistics	2.05 **
Median difference	7.28%
Wilcoxon test	-1.63

Panel B: Leverage 2 changes and fixed assets changes

	Fixed assets increase from year -1 to year 3 (industry adjusted)
Non- IPO firms that increase leverage more than the median	
Mean	-0.24%
Median	-1.51%
Number of observations	56
Non- IPO firms that increase leverage less than the median	
Mean	9.41%
Median	5.77%
Number of observations	57
Mean difference	9.66%
t- statistics	1.61
Median difference	7.28%
Wilcoxon test	-1.49

Panel C: Correlation between leverage changes and fixed assets changes

Leverage 1 change - fixed assets change	0.23 **
Leverage 2 change - fixed assets change	0.16 *

This table shows the relationship between changes in leverage and fixed assets. Non- IPO firms are equally divided into two groups according to the leverage change. The changes in fixed assets are compared between the two groups (Panels A and B). Panel C reports correlation coefficients between the changes in leverage and fixed assets. All variables are industry adjusted ones (subtract the industry median from the raw variable). T- statistics test the null hypothesis that the average fixed assets changes are not different between the two groups. Wilcoxon test is for the null hypothesis that the median fixed assets changes are not different between the two groups.

Table 5 (Continued)

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 6
Percentage changes in financial institutions' ownership and other corporations' ownership
Panel A: Entire sample

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Financial institutions' ownership level								
Mean	31.71%	31.51%	29.95%	30.75%	31.39%	31.86%	30.65%	0.81%
Median	32.93%	32.16%	30.46%	30.42%	31.00%	32.37%	29.81%	0.44%
Number of observations	188	192	198	200	201	201	201	198
t- statistics								1.36
Wcoxon Test								- 0.95
Other corporations' ownership level								
Mean	25.20%	24.73%	23.55%	22.64%	21.92%	21.10%	20.69%	- 2.82%
Median	19.86%	20.37%	20.13%	19.32%	18.40%	17.30%	15.77%	- 1.61%
Number of observations	191	195	198	200	201	201	201	198
t- statistics								- 5.41 ***
Wcoxon Test								- 6.77 ***
Panel B: IPO firms								
Financial institutions' ownership level								
Mean	14.57%	14.74%	15.36%	17.46%	19.26%	20.91%	20.36%	4.85%
Median	12.75%	13.40%	13.89%	16.77%	16.92%	18.43%	18.53%	4.57%
Number of observations	54	58	64	66	67	67	67	64
t- statistics								4.75 ***
Wcoxon Test								- 4.15 ***

Table 6 (Continued)

Other corporations' ownership level								
Mean	29.72%	29.59%	26.50%	25.61%	24.22%	22.76%	22.83%	- 3.44%
Median	24.53%	24.50%	23.09%	22.63%	20.94%	19.43%	19.57%	- 1.97%
Number of observations	57	61	64	66	67	67	67	64
t- statistics								- 3.01 ***
Wcoxon Test								- 3.06 ***

Panel C: Non- IPO firms

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Financial institutions' ownership level								
Mean	41.19%	41.28%	39.21%	39.31%	39.37%	39.09%	37.19%	- 2.02%
Median	42.09%	41.34%	40.35%	39.62%	40.84%	39.98%	38.29%	- 1.83%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								- 2.94 ***
Wcoxon Test								- 3.18 ***
Other corporations' ownership level								
Mean	23.04%	22.27%	21.97%	20.95%	20.56%	20.00%	19.41%	- 2.56%
Median	18.72%	18.02%	17.70%	16.28%	15.84%	14.48%	14.41%	- 1.79%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								- 4.29 ***
Wcoxon Test								- 5.86 ***

This table shows sample firms' changes in financial institutions' ownership and other corporations' ownership levels surrounding the first stock option grant year. IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non- IPO firms are companies that adopt stock options over 10 years after IPOs. T- statistics test the null hypothesis that the variable's average change from year - 1 to year 3 is zero. Wlcoxon test is for the null hypothesis that the variable's median change from year - 1 to year 3 is zero.

*: Significant at the 10%level.

**: Significant at the 5%level.

***: Significant at the 1%level.

Table 7

Percentage changes in financial institutions' ownership and other corporations' ownership: Variables above the TSE mean

Panel A: Entire sample

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Financial institutions' ownership level								
Mean	- 9.06%	- 8.39%	- 7.75%	- 6.70%	- 5.10%	- 3.26%	- 2.26%	5.61%
Median	- 8.11%	- 7.42%	- 7.37%	- 7.26%	- 5.46%	- 4.15%	- 2.79%	4.97%
Number of observations	188	192	198	200	201	201	201	198
t- statistics								9.42 ***
Wcoxon Test								- 8.37 ***
Other corporations' ownership level								
Mean	1.27%	0.70%	- 0.33%	- 0.35%	- 1.28%	- 2.89%	- 3.82%	- 3.45%
Median	- 3.92%	- 3.77%	- 3.74%	- 3.68%	- 4.82%	- 6.82%	- 7.66%	- 2.60%
Number of observations	191	195	198	200	201	201	201	198
t- statistics								- 6.55 ***
Wcoxon Test								- 7.67 ***

Panel B: IPO firms

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Financial institutions' ownership level								
Mean	- 26.28%	- 25.19%	- 22.64%	- 19.85%	- 17.34%	- 14.39%	- 12.82%	9.67%
Median	- 27.77%	- 26.28%	- 23.84%	- 20.20%	- 19.20%	- 15.87%	- 13.05%	9.13%
Number of observations	54	58	64	66	67	67	67	64
t- statistics								9.56 ***
Wcoxon Test								- 6.39 ***
Other corporations' ownership level								
Mean	5.80%	5.56%	2.59%	2.50%	1.12%	- 1.09%	- 1.66%	- 4.02%

Panel C: Non-IPO firms

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Financial institutions' ownership level								
Mean	0.48%	1.44%	1.75%	1.83%	2.95%	4.12%	4.52%	2.77%
Median	0.87%	1.27%	2.15%	2.64%	4.54%	5.37%	6.48%	2.93%
Number of observations	113	113	113	113	113	113	113	113
t-statistics								4.02 ***
Wcoxon Test								-4.30 ***
Other corporations' ownership level								
Mean	-0.91%	-1.77%	-1.88%	-1.93%	-2.68%	-4.10%	-5.14%	-3.26%
Median	-5.37%	-6.12%	-6.05%	-7.01%	-7.91%	-8.32%	-10.21%	-2.60%
Number of observations	113	113	113	113	113	113	113	113
t-statistics								-5.36 ***
Wcoxon Test								-6.61 ***

This table shows sample firms' changes in financial institutions' ownership and other corporations' ownership levels surrounding the first stock option grant year. All variables are adjusted by the TSE mean (subtract the TSE mean from the raw variable). IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non-IPO firms are companies that adopt stock options over 10 years after IPOs. T-statistics test the null hypothesis that the variable's average change from year -1 to year 3 is zero. Wcoxon test is for the null hypothesis that the variable's median change from year -1 to year 3 is zero.

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 8

Percentage changes in financial institutions' ownership and other corporations' ownership for keiretsu firms

Panel A: Raw variables

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Financial institutions' ownership level								
Mean	42.28%	42.26%	40.14%	40.20%	40.43%	40.15%	38.59%	-1.55%
Median	43.75%	42.60%	40.59%	41.59%	42.29%	43.11%	39.66%	-1.49%
Number of observations	66	66	66	66	66	66	66	66
t-statistics								-1.68 *
Wcoxon Test								-2.12 **
Other corporations' ownership level								
Mean	22.85%	22.20%	21.55%	20.42%	20.08%	19.16%	18.31%	-3.24%
Median	19.34%	18.02%	17.33%	15.30%	14.72%	12.91%	11.88%	-2.72%
Number of observations	66	66	66	66	66	66	66	66
t-statistics								-3.48 ***
Wcoxon Test								-5.19 ***

Panel B: Variables above the TSE mean

Year relative to the first option grant year	-3	-2	-1	0	1	2	3	Year 3 - Year -1
Financial institutions' ownership level								
Mean	1.62%	2.50%	2.81%	2.87%	3.98%	5.27%	6.11%	3.30%
Median	2.65%	3.26%	3.80%	4.61%	6.13%	8.97%	7.40%	2.97%
Number of observations	66	66	66	66	66	66	66	66
t-statistics								3.55 ***
Wcoxon Test								-3.64 ***

Table 8 (Continued)

Other corporations' ownership level								
Mean	-1.11%	-1.86%	-2.29%	-2.41%	-3.10%	-5.03%	-6.34%	-4.04%
Median	-4.75%	-6.12%	-6.42%	-7.00%	-8.45%	-11.87%	-13.22%	-3.28%
Number of observations	66	66	66	66	66	66	66	66
t-statistics								-4.24 ***
Wcoxon Test								-5.52 ***

This table shows keiretsu firms' changes in financial institutions' ownership and other corporations' ownership levels surrounding the first stock option grant year. Panel A reports raw variables whereas Panel B describes variables above TSE mean (subtract the TSE mean from the raw variable). T-statistics test the null hypothesis that the variable's average change from year -1 to year 3 is zero. Wcoxon test is for the null hypothesis that the variable's median change from year -1 to year 3 is zero.

*: Significant at the 10% level.

**: Significant at the 5% level.

***: Significant at the 1% level.

Table 9
Industry adjusted operating performance changes surrounding first stock option adoptions

Panel A: Entire sample

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Operating income- to- total assets ratio								
Mean	1.64%	1.80%	1.93%	1.62%	1.63%	1.99%	1.63%	- 0.30%
Median	0.78%	0.91%	0.73%	0.65%	0.97%	1.19%	0.13%	- 0.13%
Number of observations	201	201	201	201	201	201	201	201
t- statistics								- 0.80
Wcoxon Test								- 0.80
Operating income- to- sales ratio								
Mean	2.53%	2.91%	3.13%	3.10%	3.02%	3.28%	3.39%	0.26%
Median	0.71%	1.43%	2.02%	1.49%	1.57%	1.63%	1.26%	0.03%
Number of observations	201	201	201	201	201	201	201	201
t- statistics								0.35
Wcoxon Test								- 0.37
EBIT- to- total assets ratio								
Mean	1.83%	1.94%	2.03%	1.82%	1.79%	2.12%	1.84%	- 0.19%
Median	0.85%	0.69%	0.74%	0.92%	1.08%	1.21%	0.45%	- 0.02%
Number of observations	201	201	201	201	201	201	201	201
t- statistics								- 0.50
Wcoxon Test								- 0.19

Panel B: IPO firms

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Year 3 - Year - 1
Operating income- to- total assets ratio								
Mean	4.77%	5.27%	5.08%	4.32%	4.38%	5.26%	5.00%	- 0.08%
Median	3.13%	3.68%	3.80%	3.82%	2.96%	3.89%	3.63%	- 0.41%
Number of observations	67	67	67	67	67	67	67	67
t- statistics								- 0.10
Wcoxon Test								- 0.46
Operating income- to- sales ratio								
Mean	4.52%	5.67%	5.83%	5.71%	5.90%	6.44%	6.29%	0.45%
Median	2.79%	4.02%	4.17%	3.90%	4.69%	4.34%	3.26%	0.31%
Number of observations	67	67	67	67	67	67	67	67
t- statistics								0.61
Wcoxon Test								- 0.69
EBIT- to- total assets ratio								
Mean	4.74%	5.23%	4.96%	4.46%	4.58%	5.41%	5.08%	0.13%
Median	2.91%	3.56%	3.91%	3.61%	3.43%	3.66%	3.74%	- 0.19%
Number of observations	67	67	67	67	67	67	67	67
t- statistics								0.15
Wcoxon Test								- 0.22

Panel C: Non- IPO firms

Year relative to the first option grant year	- 3	- 2	- 1	0	1	2	3	Change from year - 1 to year 3
Operating income- to- total assets ratio								
Mean	- 0.05%	- 0.23%	- 0.01%	- 0.07%	- 0.13%	- 0.13%	- 0.54%	- 0.53%
Median	- 0.69%	- 1.17%	- 0.66%	- 0.29%	- 0.55%	- 0.70%	- 0.84%	- 0.09%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								- 1.28
Wcoxon Test								- 0.77
Operating income- to- sales ratio								
Mean	1.10%	0.77%	1.01%	1.09%	0.86%	0.92%	1.33%	0.33%
Median	- 0.11%	- 0.26%	- 0.27%	0.10%	- 0.20%	0.06%	- 0.17%	- 0.15%
Number of observations	113	113	113	113	113	113	113	113

Table 9 (Continued)

t- statistics								0.27
Wcoxon Test								- 0.88
EBIT- to- total assets ratio								
Mean	0.24%	0.01%	0.23%	0.21%	0.03%	0.00%	- 0.24%	- 0.47%
Median	- 0.59%	- 1.03%	- 0.46%	- 0.31%	- 0.52%	- 0.49%	- 0.77%	0.00%
Number of observations	113	113	113	113	113	113	113	113
t- statistics								- 1.11
Wcoxon Test								- 0.23

This table shows operating performance changes surrounding the first stock option grant year. All variables are industry adjusted ones (subtract the industry median from the raw variable). IPO firms are companies that adopt stock options within three years after IPOs or before IPOs. Non- IPO firms are companies that adopt stock options over 10 years after IPOs. T- statistics test the null hypothesis the average variable change from year - 1 to year 3 is zero. Wilcoxon test is for the null hypothesis that the median variable change from year - 1 to year 3 is zero.

*: Significant at the 10%level.

**: Significant at the 5%level.

***: Significant at the 1%level.

IMPACT OF BOARD SIZE AND BOARD DIVERSITY ON FIRM VALUE: AUSTRALIAN EVIDENCE

Hoa Nguyen*, Robert Faff**

Abstract

The aim of this paper is to provide a preliminary analysis of the relationship between firm market value and the size and gender diversity of a board of directors for a sample of publicly listed Australian firms. Our results show that smaller boards appear to be more effective in representing the shareholders as smaller boards are associated with higher firm value. As board size increases firm value declines, however at a decreasing rate suggesting that the relationship between board size and firm value is not strictly linear. Our findings further indicate that gender diversity promotes shareholders' value as the presence of women directors is associated with higher firm value.

Keywords: corporate governance, board of directors, shareholders, Australia

* School of Accounting, Economics and Finance, Faculty of Business and Law, Deakin University, 221 Burwood Highway, Burwood, Victoria 3125, Australia, hoa.nguyen@deakin.edu.au

** Department of Accounting and Finance, Faculty of Business and Economics, PO Box 11E, Monash University, Victoria 3800, Australia, robert.faff@buseco.monash.edu.au

1. Introduction

Corporate governance structure and the role of board of directors have recently re-emerged as a topical research topic following the collapse of US giants Enron and WorldCom. The main thrust of research in this area is to identify the optimal board composition and to investigate the effectiveness of corporate governance structure in controlling agency behaviors of executive officers and promoting firm value. Existing empirical evidence from various US studies, while mixed, suggests that board characteristics indeed have an impact on firm performance. Baysinger and Butler (1985), for example, show that the number of outside directors impacts positively on firm performance. Additionally, investors view the appointment of a new outsider on the board of director is good news (Rosenstein and Wyatt 1990). The compensation literature, on the other hand, postulates that firm performance is a function of how directors and executive officers are being compensated. Ownership compensation is expected to align directors and managers' interest to that of shareholders, hence reduces agency costs. Empirical evidence on the effectiveness of corporate governance structure in Australia is however rather limited. In one of the rare studies that look at the role

of board composition of Australian publicly listed companies Lawrence and Stapledon (1999) have no success in documenting a significant relationship between the number of independent directors and firm value. The potential impact of board size and board diversity on firm value, on the other hand, has not been investigated in Australia.

In this paper we focus on the relationship between board size and firm value using data from the Australian corporate sector. We also address the question of whether board gender diversity, as presented by the number of woman directors, adds value as claimed by many commentators. Yermack (1996) shows that larger board in general destroys value, mostly due to the costs involved in coordinating the decision making process of a large number of people. Carter, Simkins and Simpson (2003), on the other hand, suggest that a more diverse board is associated with value increment. We aim to test the generalizability of these results using a sample of Australian companies. The choice of the Australian sample is justified on two grounds. First, Australian board of directors appear to be structurally different from US boards. Australian companies tend to have smaller boards which are mostly attributable to the smaller market capitalization of Australian firms. It is therefore unclear if larger boards are associated with a reduction in firm market value as a critical mass in

the number of directors needs to be achieved for a diverse range of skills and expertise. Second, Australia has less developed financial markets and a less active market for corporate control. These institutional differences are expected to have implications for the relationship between board characteristics and firm value.

Using a sample of 832 observations over the 2-year period from 2000 to 2001 we find that larger boards are in general associated with lower firm value. Our results also suggest that the relationship between board size and firm value is non-linear in nature. More specifically, firm value is V-shaped as board size increases. Nevertheless, the cut-off point appears to be sufficiently large that all of our sample firms belong to the left hand side of the V and thus do not benefit from an increase in board size. In general, our results support the empirical evidence documented by Yermack (1996) that larger boards hurt firm value and firms should consider a simple strategy to enhance value by reducing the number of directors. The underlying argument for a smaller board is when board size increases the marginal benefits from a wide range of expertise and skills do not seem to outweigh the marginal costs arising from conflicts of opinions in the decision making process. Furthermore, we show that an increase in board size of Australian firms is associated with a reduction in firm market value at a *decreasing rate*. This means that a super-sized board can potentially add value. Nevertheless, according to our rough estimation, a board needs to be comprised of at least 26 members for this value addition to take place as an additional director is appointed. Given that the maximum number of directors for our sample firm is 17, it is unrealistic to expect that a larger board is associated with enhanced shareholders' value.

We also find that a board of director comprising of female members is more effective in promoting firm value. Employing both a dummy variable and a continuous variable to measure the presence of women directors on the board, we find encouraging results that woman director variables are both significantly and economically related to a higher firm market value. Our findings are supportive of the view that board diversity should be promoted as a common corporate governance practice. The US National Association of Corporate Directors Blue Ribbon Commission, for example, recommended that gender, racial, age, and nationality diversity should be considered in the selection of directors.¹ In an empirical study, Carter et al (2003) also document significant relationships between the proportion of women (and racial minorities) on the board and firm value.

The paper proceeds as follows. Section 2 describes the data and methodology. Empirical

results are presented in Section 3 and Section 4 concludes.

2. Data and Methodology

The role of the board of directors in monitoring agency behaviors of executive officers is most critical in publicly traded firms. As a result, we choose to focus on the 500 largest listed companies in the Australian Stock Exchange that have their financial reports registered with the Connect4 database. We study the financial reports of these firms individually for financial years 2000 and 2001 to obtain data on the board of directors. Specifically, we hand collect the data regarding the number of directors, the composition of the board in terms of gender balance and insider/outsider director make-up. We also determine the average age of the directors where possible and whether the Chairman of the board is also an executive officer. Balance sheet and profit and loss statement data are also obtained from Connect4. In addition, we examine the Directors' reports and the Notes to the financial statement to gather data on directors' option and equity ownership. The number of industry segment is also obtained from Connect 4 while market value of equity and capital expenditure data is downloaded from Datastream. Following this data collection procedure, we end up with a sample of 832 firm-year observations, of which data on woman directors are available for 793 observations.

First, to determine the potential relationship between firm value and board size we run the following regression:²

$$TobinQ = \alpha_0 + \alpha_1 BoardSize_i + \sum_{i=1}^n \alpha_i X_i + \varepsilon \quad [1]$$

where *TobinQ* is measured as the sum of market value of equity and book value of total liabilities divided by the book value of total assets. *BOARDSIZE* is the natural log of the number of directors at the reporting date. *X* is a vector of control variables. The control variables are: *WOMANDUM* (a dummy variable equaling to unity if a company has a woman director), *OUTDIRPER* (percentage of outside directors on the board), *DUALITY* (a dummy variable equaling to unity if the Chairman of the board also holds an executive position with the firm), *CAPEX* (the expenditure spent on fixed assets in a particular financial year scaled by total assets), *INDSEG* (the number of industry segments that the firm operates in), *ROA* (the return on assets calculated as profit after interest and tax divided by total assets), *LNTA* (the natural log of total assets), *EXEOP* (the number of options held by directors scaled by the total number of shares outstanding) and *EXESH* (the number of company

¹ See Carter, Simkins and Simpson (2003)

² Equation [1] is estimated using OLS. Yermack (1996), however, argues that fixed effects estimators are more appropriate as unobservable firm characteristics are likely to affect firm market value. Our results using fixed effects estimators are forthcoming.

shares held by directors scaled by the total number of shares outstanding). ϵ is the error term.

We choose to use Tobin's Q ratio as a measure of firm market value. In the spirit of Lemmon and Lins (2003) we calculate Tobin's Q ratio as the ratio of total liabilities plus the market value of equity divided by the book value of total assets. A simple Tobin's Q is used in our paper as opposed to a more complex Tobin's Q (for example, as measured in a fashion described by Lewellen and Badrinath, 1997, and/or Perfect and Wiles, 1994) because simple Tobin's Q has been shown to be highly correlated with more complex Tobin's Q proxies, the measurement of which requires an estimation of the replacement costs of assets. Allayannis and Weston (2001), for example, report that the correlation coefficient between simple Tobin's Q and complex Tobin's Q is 0.93, while Daines (2001) suggests that similar results are obtained using a simple Tobin's Q and one constructed using the Perfect and Wiles (1994) approach. A simple Tobin's Q also does not require a lot of data input and has been used widely in both Australia and elsewhere as a popular proxy for firm value (Farrer and Ramsey 1998, Daines 2001).

The control variables are employed to account for variations in firm market value which are not explained by our two main explanatory variables – board size and gender diversity. Firm value has been shown to be positively related to the percentage of insiders on the board (Baysinger and Butler 1985, Prevost, Rao and Hossain 2002), future growth opportunities as measured by capital expenditure (Yermack 1996, Smith and Watts 1992), profitability as measured by the return on asset ratio (Yermack 1996, Carter et al 2003) and executive option and share ownership (Morck, Shleifer and Vishny 1988). Joint chairmanship and executive role and industrial diversification, on the other hand, are expected to have a negative impact on firm market value.³ Existing findings on the relationship between firm size and market value however is mixed and thus is a question of 'empirical evidence'. These predicted theoretical relationships are depicted in Column 2 of Table 4.

Theoretically, the impact of board size on firm value appears to be determined by two interacting factors: the marginal benefits of a director's expertise, skills, experience and fresh perspectives and the marginal costs of the potential conflict of ideas and a slower decision making process when an additional director is appointed. For a particular period, if marginal benefits outweigh marginal costs, a positive relationship between board size and firm value will prevail. On the contrary, a negative relationship results when marginal costs outweigh

marginal benefits. Therefore it is reasonable to expect that the relationship between board size and firm value is non-monotonic. We test for the possibility of a non-linear relationship by employing a quadratic term. Specifically, we run the following regression:

$$TobinQ = \beta_1 + \beta_2 BoardSize_i + \beta_3 BoardSize_i^2 + \sum_{j=1}^n \beta_j X_j + \delta \quad [2]$$

Second, the relationship between firm value and board gender diversity is tested by running the following equations:

$$TobinQ = \lambda_0 + \lambda_1 WOMDIR_i + \sum_{i=1}^n \lambda_i Y_i + \theta \quad [3]$$

$$WOMDIR = \gamma_0 + \gamma_1 TobinQ_i + \sum_{j=1}^n \gamma_j Z_j + \sigma \quad [4]$$

WOMDIR is measured as a dummy variable equaling to unity if a company has a woman director and a continuous variable indicating the percentage of woman directors on the board. *Y* is a vector of explanatory variables which include *BOARDSIZE*, *OUTDIRPER*, *DUALITY*, *CAPEX*, *INDSEG*, *ROA*, *LNTA*, *EXEOP* and *EXESH*. *Z* is also a vector of explanatory variables which include *BOARDSIZE*, *OUTDIRPER*, *DUALITY*, *ROA* and *LNTA*. The definitions of these variables are the same as above.

Carter et al (2003) and Prevost, et al (2002) argue that corporate governance research that attempt to establish a relationship between firm value and board composition may suffer from endogeneity problem where one or more variables on the right hand side are correlated with the disturbance term. This situation may arise if there are endogenously determined variables on the right hand side of the equation. To correct for this biasness and inconsistency of the OLS estimators, two-stage least squared (2SLS) can be used. Our OLS estimators, however, do not appear to be affected by endogeneity as our OLS results are highly similar to 2SLS results although the coefficients of the *WOMDIR* variables are more economically significant in 2SLS results. We therefore choose to report OLS results.

3. Empirical Findings

a. Descriptive Statistics

In Table 1, we report the descriptive statistics of the board of directors for our sample firm. On average, an Australian listed corporation has a board of director that comprises of 6.3 directors, of which 0.31 (4.52%) is woman and 1.71 (28.34%) are directors who concurrently hold a full time executive position with the company. The median value of board size (median = 6) suggests that the distribution of the number of directors is fairly normal. The largest board has 17 members while the smallest one has a mere 3 directors. The highest number of women directors on the board is 3 while a majority of firms have a board of directors that are made up of entirely males. The mean value of the

³ See Yermack (1996) for a discussion of the chairman and CEO duality and Lang and Stuz (1994) for empirical evidence on industrial diversification

chairman/executive duality variable is 0.1617 which means that 16.17% of the firms have a non-independent chairman. Directors are approximately 55 years old and on average they hold 2.33% of options and 18.22% of shares relative to the total number of shares outstanding. Our descriptive statistics highlight the institutional difference between US and Australian corporation. Yermack (1996) reports that the mean board size of his *Forbes* magazine sample is 12.25 while *Fortune* 1000 firms have a mean board size of 10.98 (Carter *et al* 2003). Our statistics are however similar to that obtained from New Zealand. According to Prevost *et al* (2002), the mean number of directors for a sample of firms listed on the New Zealand Stock Exchange is 6.6 with a min of 2 and a max of 14. While differing in size, board composition of US and Australian firms appear to be fairly similar: 36% of inside directors reported by Yermack (1996) and 26.2% by Carter *et al* (2003).

A comparison of board characteristics and firm characteristics of boards with no women directors and boards with women directors is presented in Table 2. Boards with women directors, in general, are larger which makes intuitive sense as a larger board is more likely to have a woman director on it. Boards without women directors, however, are characterized by a higher incidence of chairman and executive duality, a higher percentage of directors' option and equity ownership and a larger proportion of inside directors compared to boards with female directors. The existing literature suggests that boards of directors where the chairman is also the CEO and the number of inside directors is significant tend to be less effective in controlling agency behaviors of executive officers. Boards with and without woman directors, however, are not distinguishable from each other with respect to the average age of directors.

In terms of financial characteristics, firms with women directors have a statistically higher ROA ratio suggesting that profitable firms are more likely to appoint a female director. Female directors are also more likely to be appointed in larger firms that are more industrially diversified (operate in more industry segments). Nevertheless, these univariate analyses do not reveal any differences between boards with and without woman directors with respect to firm value as measured by the Tobin's Q ratio and future growth opportunities as proxied by capital expenditure.

In Table 3, we report the board size and gender diversity statistics according to industry sector as classified by the Australian Stock Exchange (ASX). We observe that on average utilities firms have largest boards (mean = 7.75) while firms in the Information Technology industry sector have smallest boards (mean = 5.67). In terms of gender balance, the Health Care industry sector has the highest number of women directors (mean = 0.52). In relative terms, the Health Care industry also has the

highest score for women directors with approximately 8% of the board being female members. On the other hand, women are least likely to be appointed as directors in the Materials industry (mean percentage = 2.96%).

b. Board size and firm market value

Regression results of Equation [1] are presented in Column (1) of Table 4. According to the results, there is no significant relationship between firm market value and board size. We argue above that the residual relationship between firm value and board size depends on the interactive strength of two opposing factors: the marginal benefits of an extra director's skills, experience and expertise and the marginal cost arising from potential conflicts and slower decision making. The strengths of these two forces may vary as the number of directors changes. Therefore, the initial insignificant relationship between board size and firm value does not necessarily mean that board size has no impact on firm value. The lack of a significant relationship is more likely to be attributable to non-linearity. Consistent with our expectation, the results of Equation [2], which are presented in Column (2) of Table 4, indicate that the relationship between firm value and the number of directors on the board is non linear. As the coefficient of the main variable *BOARDSIZE* is negative and the coefficient on the quadratic term is positive, it appears that firm value takes on a V shape as board size increases. While both the linear and quadric coefficients are statistically significant at the 1% level, economically, the coefficient on the linear term far overpowers the coefficient on the quadric term. As a result, the cutoff number of directors (the benchmark number of directors above which an increase in board size will result in an increase in firm value) appears to be so large that it is unrealistic in practice to pursue a value enhancing strategy by increasing board size. For instance, other things being equal, our estimation shows that the board needs to comprise of at least 26 members for any subsequent member appointment to add value. Given the largest board in our sample only consists of 17 directors, we conclude that for our sample firms an increase in board size hurts firm value. The marginal cost of adding one extra director appears to be greatest when board size increase from 4 to 5, after that the decline in firm value takes place at a decreasing rate as board size increases. Our findings indicate that despite differences in board size between the US and Australia, in both countries larger boards are associated with a lower firm value. Contrary to the common belief that an additional director appointment to a small board will add value, our results show that in all instances the cost of communication and coordinating the decision making process of a large number of directors outweigh the benefit that additional directors bring.

Our regression results also show that the presence of woman directors is associated with higher firm value. We will endeavor to examine this relationship in more detail in the next section. Consistent with Lawrence and Stapledon (1999) we fail to find a significant correlation between the percentage of outside directors and firm value. Australian firms are neither valued more highly when they have more outside directors on the board nor when the chairman of the board is separate from a full time executive officer. Contrary to our prediction that growth opportunities are related to higher firm value, we find no such significant relationship. Industrial diversification, on the other hand, hurts firm value as theorized by Lang and Stulz (1994). In particular, as a company operates in one more industry segment, Tobin's Q declines by 0.0936 which is equivalent to a 4.93% reduction in firm value based on the mean Tobin's Q of 1.8999. The results also support the notion that more profitable firms have higher market value while, other things being equal, the market values smaller firms more highly than larger firms. Despite the belief that option and stock compensation should align directors' interest with that of shareholders and result in a higher firm value, we find no evidence that directors' option and equity holdings have a positive impact on firm value.

c. Board gender diversity and firm value

The case for a positive relationship between board diversity and firm value has recently emerged and thus the body of empirical knowledge in this field is relatively limited. Board diversity, however, is believed to benefit corporations for the following reasons.⁴ First, diversity allows a better understanding of the marketplace; the more diverse the market place, the more diversity is expected to add value in a corporate context. Second, diversity is associated with creativity and innovation. Third, diversity produces more effective problem-solving. Fourth, diversity enhances the effectiveness of corporate leadership and finally diversity promotes more effective global relationships. In this paper, we only examine the value enhancing property of one diversity aspect – gender diversity. In particular, we test the hypothesis that firms with women directors on the board (dummy variable) and firms with more women directors on the board (continuous variable) are associated with higher firm value. The results of our regression on the inter-relationship between firm value and gender diversity are reported in Table 5. First, it is observed that firms with women directors are associated with higher market value. The coefficient is both statistically and economically

significant. On average, if two firms are similar in every aspect, the firm with woman directors has a Tobin's Q which is 0.7149 higher than that of a firm with all male directors. Hence, it appears that a market value premium exists for the appointment of female directors. Using a continuous variable to proxy for the presence of women on board of directors, we also find that not only the incidence of woman directors is associated with higher market value but the proportion of women directors relative to men directors also adds value. In particular, as the number of women directors increases by 1, Tobin's Q increases by 0.0360, an increase of 1.89% in firm value. Our findings suggest that women play an essential role in maintaining the effectiveness of a board of directors.

In the 2nd and 4th columns of Table 5 we report the results of regressions where the dependent variable are a dummy variable and the percentage of women directors on the board respectively. We find that Tobin's Q is positively related to both the incidence of woman director appointment and the proportion of them on the board. This result further supports the view that board gender diversity and firm value are positively related to each other. We are also able to draw conclusions about the factors that determine the appointment of women directors and the number of them on the board. It appears that a firm is more likely to have a female director if it is larger and has a bigger board. The findings are consistent with our expectation that larger firms are more likely to have larger boards and hence more likely to have a woman director. Not only are firm size and board size important in determining the appointment of women directors, they also play a crucial role in determining the number of women directors on the board. Generally, a firm is more likely to have a larger percentage of woman director representation if it is larger and has a bigger board of directors. Our overall results suggest that board diversity leads to an increase in firm value and the appointment of female directors is a practice that should be encouraged in the corporate world.

4. Conclusion

In this paper we address the issue of whether characteristics of a board of directors are instrumental in promoting shareholders' wealth in a sample of Australian publicly listed companies. Specifically, we examine the impact of board size and board gender diversity on firm value. Using a simple Tobin's Q as a measure of firm market value, we find that larger boards are generally value destructive as the costs of resolving conflicts and coordinating communication flows and decision making significantly outweigh the benefit of having an additional director. Gender balance in the board of directors, on the other hand, is associated with higher market value. Firms with woman directors are

⁴ These propositions are provided by Cox and Blake (1991) and Robinson and Dechant (1997) and recited by Carter, Simkins and Simpson (2003). The propositions provided by Cox and Blake (1991) and Robinson and Dechant (1997) are in the context of corporate diversity but they have implications for board diversity.

rewarded with a value premium and the higher the proportion of women directors, the higher the firm value. The implication of our findings is shareholders' value is best preserved when board size are small and partly represented by female directors.

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Appendices

Table 1. Descriptive Statistics of Board of Directors

This table details the statistics of the boards of director for our sample firm. The number of directors and number of woman directors are gathered from the individual firms' financial reports as of reporting date. Chairman and executive duality is a dummy variable equaling unity if the chairman holds an executive position in the firm. Executive options (shares) are measured as the numbers of options (shares) held by directors scaled by the total number of shares outstanding. An insider director is defined as a director who holds a full time executive position with the firm. The remaining directors are classified as outside directors. Average age is the mean age of all directors.						
	Mean	Median	Maximum	Minimum	SD	Observations
Number of directors	6.2993	6.0000	17.0000	3.0000	2.1380	832
Number of woman directors	0.3153	0.0000	3.0000	0.0000	0.5518	793
% of woman directors	4.5234	0.0000	50.000	0.0000	8.5109	793
Chairman and executive duality	0.1617	0.0000	1.0000	0.0000	0.3684	810
Executive options	2.2329	0.3719	66.5369	0.0000	8.6876	830
Executive shares	18.1191	7.0039	94.7946	0.0000	22.9613	830
Number of insider directors	1.7086	1.0000	7.0000	0.0000	1.1443	810
% of insider directors	28.3382	25.0000	100.0000	0.0000	18.4182	810
Number of outsider directors	4.6086	4.0000	14.0000	0.0000	2.0779	810
% of outsider directors	71.6619	75.0000	100.0000	0.0000	18.4182	810
Average age	55.0831	56.0000	82.0000	39.0000	4.8578	373

Table 2. Comparison of boards with no woman directors and board with woman directors

This table details the statistics of the boards of director with woman directors and boards with no woman directors. The number of directors and number of woman directors are gathered from the individual firms' financial reports as of reporting date. Chairman and executive duality is a dummy variable equaling unity if the chairman holds an executive position in the firm. Executive options (shares) are measured as the numbers of options (shares) held by directors scaled by the total number of shares outstanding. An insider director is defined as a director who holds a full time executive position with the firm. The remaining directors are classified as outside directors. Average age is the mean age of all directors. Tobin Q is measured as the sum of market value of equity and book value of total liabilities divided by book value of total assets. ROA is the return on assets calculated as profit after interest and tax divided by total assets. Ln(Total Assets) is the natural log of total assets. Capital expenditure is the expenditure spent on fixed assets in a particular financial year. Number of industry segment indicates the number of industry segments that the firm operates in

	Board with woman directors N=256		Board with no woman directors N=575		p-value
	Mean	SD	Mean	SD	
Board characteristics					
Number of directors	7.2891	1.9610	5.8594	2.0665	0.0000
Chairman and executive duality	0.1205	0.3262	0.1800	0.3846	0.0337
Executive options	1.4205	5.6587	2.7400	9.7083	0.0430
Executive shares	14.5018	21.7380	19.8701	23.3124	0.0018
Number of insider directors	1.7390	1.1289	1.6952	1.1518	0.6157
% of insider directors	24.3663	15.0807	30.1010	19.4736	0.0000
Number of outsider directors	5.5542	1.9505	4.1889	1.9946	0.0000
% of outsider directors	75.6337	15.0807	69.8990	19.4736	0.0000
Average age	55.6639	4.3382	54.8008	5.0754	0.1075
Firm characteristics					
Tobin Q	1.9929	2.1294	1.8587	2.3395	0.4330
ROA	0.0276	2.0027	-0.7117	4.7292	0.0163
Ln(Total Assets)	19.9873	1.9187	18.7349	1.6473	0.0000
CapEx/Total Revenue	0.4109	4.0840	1.1570	7.5320	0.1462
Number of industry segment	1.9063	1.2676	1.5625	0.9831	0.0000

Table 3. Board Size and Woman Directors by Industry Classification

This table reports the board size and woman directors of firms according to industry classification. The industry sectors are classified according to the Global Industry Classification Standard (GICS) adopted by the Australian Stock Exchange (ASX) from March 31, 2002

Industry sector	Observation	Board size	Observation	Average number of woman director	Average percentage of woman directors
Energy	35	6.1429	33	0.2424	3.9960
Materials	158	5.8797	152	0.1974	2.9613
Industrials	121	6.5372	117	0.2735	4.0612
Consumer Discretionary	141	6.9220	132	0.4091	5.4567
Consumer Staples	55	6.7091	54	0.3704	5.5511
Health care	83	6.2048	82	0.5244	8.0213
Financials	151	6.0795	137	0.2774	3.5732
Information Technology	58	5.6724	56	0.2500	4.1490
Telecommunication Services	18	5.8889	18	0.3333	3.7037
Utilities	12	7.7500	12	0.4167	5.2976
Total	832	6.2993	793	0.3153	4.5234

Table 4. Board Size and Firm Value

This table presents the results of the following regressions

$$TobinQ = \alpha_0 + \alpha_1 BoardSize_i + \sum_{i=1}^n \alpha_i X + \varepsilon \quad [1]$$

$$TobinQ = \beta_1 + \beta_2 BoardSize_i + \beta_3 BoardSize_i^2 + \sum_{j=1}^n \beta_j X + \delta \quad [2]$$

where TobinQ is measured as the sum of market value of equity and book value of total liabilities divided by book value of total assets. Board Size is the natural log of the number of directors at the reporting date.. X is a vector of control variables. The control variables are: WOMANDUM (a dummy variable equalling to unity if a company has a woman director), OUTDIRPER (percentage of outside directors on the board), DUALITY (a dummy variable equaling to unity if the Chairman of the board also holds an executive position with the firm), CAPEX (the expenditure spent on fixed assets in a particular financial year scaled by total assets), INDSEG (the number of industry segments that the firm operates in), ROA (the return on assets calculated as profit after interest and tax divided by total assets), LNTA (the natural log of total assets), EXEOP (number of options held by directors scaled by the total number of shares outstanding) and EXESH (number of company shares held by directors scaled by the total number of shares outstanding). ε and δ are error terms.

	Predicted Sign	(1)	(2)
Constant		10.9594 ^a	16.0484 ^a
		(8.8579)	(6.9582)
Ln(BoardSize)	?	0.3827	-4.8775 ^a
		(1.5794)	(-2.6081)
Ln(BoardSize) Squared	?		1.4833 ^a
			(2.9645)
Woman Director Dummy	+	0.7149 ^a	0.7410 ^a
		(4.1125)	(4.2668)
Percentage of Outside Directors	+	0.0003	0.0007
		(0.0571)	(0.1403)
Duality	-	0.3825	0.2927
		(1.0826)	(0.8061)
Capital Expenditure	+	0.0133	0.0121
		(1.0713)	(1.0194)
Industry Segment	-	-0.0824 ^c	-0.0936 ^c
		(-1.6805)	(-1.8919)
ROA	+	0.0441 ^b	0.0499 ^b
		(2.2567)	(2.4980)
Ln(Total Assets)	?	-0.5122 ^a	-0.5431 ^a
		(-7.0478)	(-7.3954)
Executive Options	+	0.0071	0.0074
		(1.4126)	(1.5380)
Executive Shares	+	-0.0060	-0.0056
		(-1.5880)	(-1.4794)
R-squared		0.1341	0.1415

^a Significant at 1%

^b Significant at 5%

^c Significant at 10%

Table 5. Woman Directors and Firm Value

This table presents the results of the following regressions

$$TobinQ_i = \lambda_0 + \lambda_1 WOMDIR_i + \sum_{i=1}^n \lambda_i Y_i + \theta \quad [3]$$

$$WOMDIR_i = \gamma_0 + \gamma_1 TobinQ_i + \sum_{j=1}^n \gamma_j Z_j + \omega \quad [4]$$

where TobinQ is measured as the sum of market value of equity and book value of total liabilities divided by book value of total assets. WOMDIR is measured as a dummy variable equaling to unity if a company has a woman director and a continuous variable indicating the percentage of woman directors on the board. Y is a vector of explanatory variables which include BOARDSIZE (natural log of the number of directors), OUTDIRPER (percentage of outside directors on the board), DUALITY (a dummy variable equaling to unity if the Chairman of the board also holds an executive position with the firm), CAPEX (the expenditure spent on fixed assets in a particular financial year scaled by total assets), INDSEG (the number of industry segments that the firm operates in), ROA (the return on assets calculated as profit after interest and tax divided by total assets), LNTA (the natural log of total assets), EXEOP (number of options held by directors scaled by the total number of shares outstanding) and EXESH (number of company shares held by directors scaled by the total number of shares outstanding). Z is also a vector of explanatory variables which include BOARDSIZE, OUTDIRPER, DUALITY, ROA and LNTA. θ and ω are error terms.

	Predicted Sign	DepVar = TobinQ	DepVar = WomanDum	DepVar = TobinQ	DepVar = % Woman Director
Constant		10.9594 ^a (8.8579)	-1.4649 ^a (-7.6631)	10.8811 ^a (8.8222)	-17.6778 ^a (-4.9352)
Woman Director Dummy	+	0.7149 ^a (4.1125)			
% of Woman Directors	+			0.0360 ^a (3.4123)	
TobinQ	+		0.0262 ^a (3.1071)		0.4335 ^a (2.7821)
Board Size	?	0.3827 (1.5794)	0.2763 ^a (4.9111)	0.5098 ^b (2.0662)	2.1874 ^b (2.2009)
% of Outside Directors	+	0.0003 (0.0571)	0.0014 (1.5666)	0.0007 (0.1277)	0.0248 (1.5309)
Duality	-	0.3825 (1.0826)	-0.0100 (-0.2216)	0.4154 (1.1427)	-0.3235 (-0.3554)
Capital Expenditure	+	0.0133 (1.0713)		0.0122 (0.9786)	
Industry Segment	-	-0.0824 ^c (-1.6805)		-0.0625 (-1.2155)	
ROA	+	0.0441 ^b (2.2567)	-0.0006 (-0.2579)	0.0461 ^b (2.3389)	-0.0049 (-0.1206)
Ln(Total Assets)	?	-0.5122 ^a (-7.0478)	0.0592 ^a (5.3525)	-0.5196 ^a (-7.0744)	0.8256 ^a (3.8977)
Executive Options	+	0.0071 (1.4126)		0.0066 (1.2821)	
Executive Shares	+	-0.0060 (-1.5880)		-0.0067 ^c (-1.7413)	
R-squared		0.1341	0.1500	0.1357	0.0718

^a Significant at 1%

^b Significant at 5%

^c Significant at 10%

BOARD COMPOSITION, AUDIT COMMITTEE AND TIMELINESS OF CORPORATE FINANCIAL REPORTS IN MALAYSIA

Shamsul-Nahar Abdullah*

Abstract

This study attempts to investigate the roles of the composition of board of directors, audit committee and the separation of the roles of the board chairman and the chief executive officer on the timeliness of reporting. The issue of reporting timeliness is important in corporate governance because it is associated with corporate transparency. It is also an important indicator of the value of the information in the financial reports. Given the fact that the board is the highest internal corporate governance system, it is predicted that the characteristics of the board and its sub-committee, namely the audit committee, are associated with the timeliness of reporting. Using Bursa Malaysia (formerly known as the Kuala Lumpur Stock Exchange) Main Board companies data in respect of the financial years 1998 and 2000, the findings show that board independence and the separation of the roles of board chairman and CEO significantly are associated with timelier reporting. The results also indicate that the 1997 financial crisis had adversely affected the timeliness of reporting. These findings imply that during difficult periods, companies tend to take a longer time to prepare their audited financial reports. The positive association between timeliness of reporting and leverage found in this study suggests that the agency costs of debts could play an important role in explaining the timeliness of corporate financial reports. Finally, the negative relation between firm's profitability and timeliness of reporting is supportive of information signaling theory.

Keywords: board of directors, audit committee, CEO duality, reporting timeliness, Malaysia

**Faculty of Accountancy, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, MALAYSIA, Phone: + 6 04 9285266, Fax: + 6 04 9285762, Email: snahar@uum.edu.my*

1. Introduction

The issue of reporting timeliness is important as it relates to corporate transparency. In East Asia, including Malaysia, corporate transparency has become a very significant issue following the 1997 financial crisis. Recognizing the importance of reporting timeliness, the Malaysian Accounting Standards Board (hereafter referred as MASB), in its MASB1 (1999), states that the usefulness of financial statements would be impaired if they are not made available to the public within a reasonable period of time from the close of a company's financial year. The Standard stipulates that the audited annual accounts need to be submitted to the Bursa Malaysia within six months of the balance sheet date. The Bursa Malaysia in its Listing Requirements also demands all listed companies submit the annual audited accounts together with the auditor's and directors' reports within four months from the close of their financial years for public release. Commenting on the importance of the timeliness of reporting, the former chairman of the (Malaysian) Securities Commission states that providing "... high quality and timely disclosure of financial and other material information to the board, to the public markets and to the shareholders" is among the key aspects of the board oversight functions (Kadir, 2000: 20). A number of empirical

studies that attempt to explain the timeliness of corporate reporting have been carried out, but they are mainly done using data from developed countries (e.g. Courtis, 1976; Whittred, 1980; Ashton, Gaul and Newton, 1989; Carslaw and Kaplan, 1991; Bamber, Bamber and Schoderboek, 1993; Knechel and Payne, 2001). Recent changes in corporate governance, specifically on the issue of board composition, have also motivated research that attempts to test the link between accounting quality and board composition. For instance, Beekes, Pope and Young (2004) report that the proportion of outside directors on the board in UK is associated with more timely recognition of bad news in earnings. In an earlier paper, Beasley (1996) finds that the incidence of financial fraud in the US is inversely associated with the extent of outside directors on the boards. Studies by Dechow, Sloan and Sweeney (1996) in US and Peasnell, Pope and Young. (2000) also support the contention that outside dominated boards are associated with higher accounting quality. The Australian Stock Exchange's (ASX) Corporate Governance Council (2003) states that better-governed firms are "more transparent" and make "more timely" disclosures that are "better balanced" in terms of the release of good and bad news. Compared to the developed markets, awareness of corporate governance in Malaysia was

also felt in the 1990's and it only became stronger following the 1997 financial crisis. The significant impacts of the crisis to the nation have led the Malaysian government to introduce a number of institutional changes aiming at strengthening corporate governance and thus the timely disclosure of information among Malaysian companies, notably the establishment of the high-level finance committee in 1998. This committee subsequently published the Report on Corporate Governance in 1999 (High Level Finance Committee, 1999). This report was adopted in 2000 and has been referred as the Malaysian Code on Corporate Governance. Subsequently, the Bursa Malaysia incorporated the Malaysian Code in 2001 in its Revamped Listing Requirements and has required listed companies to state in the annual reports the extent of compliance (or non-compliance) with the Malaysian Code. In addition, the (Malaysian) Financial Reporting Act was gazetted in March 1997 empowering the government to establish the Financial Reporting Foundation and the MASB. Beginning from 1999, the Bursa Malaysia has started to require listed companies to issue quarterly reports not later than two months after the end of each quarter. All these changes seem to enhance the level of corporate transparency, which includes timeliness of corporate reporting. It is therefore the objective of this study to investigate reporting timeliness in an environment that is different from that in developed countries in terms of institutional requirements. Specifically, this study attempts to investigate the extent to which the board of directors, the audit committee and the separation of the roles of the board chairman and the CEO influence a firm's reporting timeliness. The motivation to investigate the roles of the board comes from the contention by Jensen (1993) who argues that board composition and board leadership are associated with the board monitoring incentives. Thus, examining board independence and the leadership structure on the timeliness of reporting will reveal the extent to which the board involves in overseeing the financial reporting processes. The fact that the board, being at apex of the internal corporate governance system, as argued by Jensen (1993), suggests the board is important in determining the timeliness of reporting. Thus, findings of this study would provide evidence as to the roles of these corporate governance variables in promoting corporate transparency. The remainder of the paper is organized as follows. First, hypotheses development relating to the board and audit committee composition as well as the separation of the roles of the board chairman and the CEO on reporting timeliness is presented. Second, a section discussing the research methodology will follow. Findings are presented in the third section. In the fourth and final section, the summary and conclusions will be provided.

2. Hypotheses Development

2.1. Board Composition

Annual reports are found to be a primary source of information to users, especially the shareholders (see for example Mautz, 1968; Anderson and Epstein, 1995; Abu-Nassar and Rutherford, 1996). Similar pattern is also found in developing countries where annual reports are viewed as the main source of corporate information (Abu Baker and Naser, 2000). Due to the important role that annual reports play, it is therefore argued that providing the annual reports in a timely manner is not only a matter of satisfying the legal requirements, it is a matter of responsibility. According to Cadbury (1997: 15), "information is the lifeblood of markets" and "openness by companies is the basis of public confidence in the corporate system". He stresses the need to provide relevant information, which is very crucial for efficient markets, without which market manipulation may result. Rezaee (2003: 26) also contends that "... for capital markets to function efficiently and effectively, participants (including investors and creditors) must have confidence in the financial reporting process". Information that reaches users early is predicted to contain a higher value than information that reaches users much later. Timeliness of reporting has also been argued to not only increase the value of the information but also help minimize the level of insider trading, information leakage and rumors in the markets (Owusu-Ansah, 2000). Empirical evidence shows that timeliness of reporting affects the pricing of a firm's securities (Chambers and Penman, 1984; Kross and Schroeder, 1984). Audit lag has been used as an indicator of timelines of reporting because a company cannot publish its accounts in the annual reports without an audit report (Johnson, 1998). One of the earliest empirical studies on reporting timeliness was conducted by Dyer and McHugh (1975) who find that firm's size and the fiscal year-end significantly influence reporting timeliness. Several studies have then followed (e.g. Courtis, 1976; Whittred, 1980; Carslaw and Kaplan, 1991; Bamber and Schoderboek, 1993; Knechel and Payne, 2001). It has also been concluded that audit lag determines the financial reporting timeliness (Givoly and Palmon, 1982). The board of directors is important in corporate governance and in financial reporting processes because it links the shareholders and managers. In fact, Fama and Jensen (1983) argue that the board plays an important governance role in large corporations and the role of the board of directors has been the focus in corporate governance guidelines. Jensen (1993: 862) further reiterates on the significant role of the board of directors when he claims that "The board, at the apex of the internal control system, has the final responsibility for the functioning of the firm". In Malaysia, the Malaysian

Companies Act 1965, which among others, states that both the directors and the managers are required to keep proper records to ensure the true and fair view of the profit and loss accounts and the balance sheet (Section 167). Thus, the importance of directors' roles in ensuring managers to keep the firm's proper accounts is already well recognized in law. Should the directors discharge these duties effectively, the firm should not take long to issue the audited financial statements as all the records are kept in good order. In a similar vein, the Cadbury Report (1992) asserts that the board has a duty "... to present a balanced and understandable assessment of the company's position" (p. 7). The importance of the role of the board in promoting transparency is also recognized in Australia when the Australian Stock Exchange's (ASX) Corporate Governance Council (2003) states that better-governed firms are "more transparent" and make "more timely" disclosures that are "better balanced" in terms of the release of good and bad news. The Malaysian Code further identifies duties of the board of directors that include, among others, ensuring the firm has adequate and sufficient internal control systems and management information systems, ascertaining compliance systems with the applicable laws, regulations and rules. Having proper and adequate internal systems would enable firms to prepare the financial reports in a more timely fashion as compared with companies that do not have such proper and adequate internal systems.

Timeliness of corporate reporting is reflective of accounting quality. Timelier reporting is associated with higher accounting quality as users are able to use the information for such purpose as valuation and evaluation. Several studies have examined the link between board independence and accounting quality. Beasley (1996) for instance, shows that the proportion of outside directors is lower among firms that were found to have frauds in the financial statements than firms that did not. Dechow, Sloan and Sweeney (1996) document a link between violations in accounting that were subjected to SEC accounting enforcement actions and board structure. Peasnell, Pope and Young (2001) and Klein (2002) reconfirm the link between board independence and accounting quality by focusing on accrual management permitted within GAAP. More recently, Beekes, Pope and Young (2004) find that the proportion of outside directors on the board is associated with the likelihood of timelier recognition of bad news. Thus, their evidence supports the contention that board independence is associated with accounting quality. The link is predicted to exist between the board of directors and timeliness of reporting due to the fact that it is the board of directors that authorizes the firm's annual report for public release. Thus, the board has the discretion either to speed up or delay the issuance of the annual report depending, among

others, on the incentives that they have. The effectiveness of the board in carrying out its monitoring roles, such as on accounting quality, it is argued and found, depends largely on it being independent of management (Beasley, 1996; Dechow, Sloan and Sweeney, 1996; Peasnell, Pope and Young, 2000; Klein, 2002; Beekes, Pope and Young, 2004). This evidence supports Fama and Jensen (1983) who argue that outside directors are experts in decision controls. It is further argued that good corporate governance is said to exist when the independence of the board of directors is maintained (Abdullah, 2002b).

Similarly, Rezaee (2003: 28) claims, "aligning the interests of managers and shareholders requires vigilant, independent, effective boards". Empirical evidence generally shows that board effectiveness is related to its independence (see for example Weisbach, 1988; Byrd and Hickman, 1992; Brickley, Coles and Terry, 1994; Kini, Kracaw and Mian, 1995; Beasley, 1996). Outside-dominated board's greater incentives to monitor management are attributed to the fact that outsiders of these boards do not want to associate themselves with troubled companies, which could impair their reputation (Weisbach, 1988). Daynton (1984: 35) argues that "... the board must be independent of management" to enable it to carry out its oversight duties more effectively. Kini, Kracaw and Mian (1995) further demonstrate that the extent of outside directors' dominating the board substitutes for market-based corporate controls. Brown and Caylor (2004) find that board independence is associated with higher operating performance measures, namely ROE, net profit margin, dividend yield and share repurchases. However, their evidence shows a negative and significant association between board independence and firm's Tobin's Q and sales growth. Thus, these findings suggest that the link between board independence and firm performance is not conclusive as has been documented in earlier studies (see for example, Fosberg, 1989; Rosenstein and Wyatt, 1990; Hermalin and Weisbach, 1991; Bhagat and Black, 2002; Anderson, Mansi and Reeb, 2004). When compared with other corporate governance variable, Brown and Caylor (2004) find that the link between board independence and firm performance is inferior to the link between nominating committee independence and firm performance, as indicated by the correlation coefficients. Therefore, from this study, it seems that the independence of the nominating committee is more important than board independence. This evidence might mean that the extent to which the nominating committee is independence of management is associated more strongly with timeliness of reporting than board independence is. However, in Malaysia, maintaining a nomination committee prior to the adoption of the Malaysian Code on Corporate Governance was rare. The issue of a nominating committee is only

addressed in the Malaysian Code's best practices composed solely of non-executive directors. Following the adoption of the Malaysian Code by the Bursa Malaysia, disclosure on the compliance (or non-compliance) with the Code's best practices is mandatory.

The importance of the board having an optimal mix of outside directors and executive directors lies on the belief that this structure would contribute different skills, knowledge and expertise, which are vital for an effective board (Baysinger and Butler, 1985). The incentives for outside-dominated boards to report the firm's performance more quickly than inside-dominated boards lie primarily on the fact that outside directors are regarded as decision experts who derive their value by discharging their duties effectively. These outside directors are well respected in their fields. Providing annual reports to the firm's shareholders in a more quickly manner should be seen as discharging their duties to the shareholders more effectively because the annual reports are one of the primary sources of information for shareholders. By doing so, they should be able to enhance their reputation as being experts in decision control (Fama and Jensen, 1983). Empirical evidence by Beekes, Pope and Young (2004) supports this contention who find that board independence is associated with the timeliness of bad news recognition in earnings. The Bursa Malaysia Listing Requirements state that the board of a listed company should be composed of at least two independent directors or one-third of the board size whichever is higher. Kini, Kracaw and Mian (1995) also define outside directors as those who are not full-time employees of the firm. Thus, the maintained hypothesis is as follows:

H₁: The extent of outside directors on the board leads to reporting timeliness.

2.2. Audit Committee Composition

Audit committee acts as a means of communication between external and internal auditors (Vinten and Lee, 1993) and it could enhance the reliability of a firm's financial reporting process (Treadway Committee, 1987). These benefits are derived because it helps to reinforce the independence of the company's external auditor (High Level Finance Committee, 1999). The fact that management prepares the firm's financial statements, which in turn are audited by external auditors, could lead to differences of opinion between management and external auditors on how to best apply GAAP (Magee and Tseng, 1990; Antle and Nalebuff, 1991; Dye, 1991). Empirical evidence also reveals that many reported earning figures are negotiated (Nelson, Elliott and Tarpley, 2000). Klein (2002), based upon prior research on audit committees, argues "... the audit committee's role as arbiter between the two parties is to weigh and broker

divergent views of both parties to produce ultimately a balanced, more accurate report" (p. 378).

To ensure the audit committee is effective, the Cadbury Report (1992) recommends that an audit committee be comprised at least three outside directors with written terms of references (Section 4.3). The Malaysian Code states that an "... audit committee serves to implement and support the oversight function of the board..." (p. 46). It further stresses that its independence "... reinforces the independence of the company's external auditor..." (p. 46). In terms of composition, the Malaysian Code adopted the requirement set out in the Bursa Malaysia Listing Requirements of having at least three members, the majority of whom should be independent directors. Jemison and Oakley (1983) also argue that an effective audit committee requires its composition to be solely independent directors.

The independence of the audit committee is important because it ensures its objectivity (Kolins, Cangemi and Tomasko, 1991). Studies have also found greater outside directors' proportion on a board leads to audit committee formation (Pincus, Rusbarsky and Wong, 1989; Collier, 1993a). Menon and Williams (1994) further show that the proportion of outside directors on a board is associated positively with the frequency of audit committee meetings, indicating that the intensity of the audit committee to oversee the financial reporting process is influenced by the proportion of outside directors on the committee. Thus, an audit committee that is composed solely of outside directors should increase its incentive to oversee the financial reporting process and this is reflected by the new requirement by the NYSE and NASDAQ, which was introduced in December 1999. The new requirement mandates all listed companies to maintain audit committees consisting of at least three directors, all of whom have no relationship to the company that could impair the exercise of their independence from management and the company.

Audit committee independence is predicted to be associated with the timeliness of reporting because of the extent of outside directors making up the audit committee and the experiences they bring to the firm. The firm could exploit these outside directors' experiences to improve its financial reporting processes. Further, these outside directors could help strengthen the firm's internal control systems as one of the audit committee's roles is to discuss the effectiveness of the firm's internal controls with internal auditors (Collier, 1993b). Improving the firm's financial reporting processes and strengthening the internal control systems should help shorten the time taken to issue the audited financial statements. In planning the audit, the auditor will need to assess the firm's internal control systems as the outcome of the internal control assessment determines the extent of audit investigation. If the internal control systems are

strong, fewer tests of details will be performed. Thus, this should lead to timelier reporting. In fact, Kadir (2000: 20) asserts that the primary roles of an audit committee being "... the first among equals, oversees the work of the other actors in setting up internal controls and financial reporting process." He also contends that the audit committee and the board of directors are among the key participants in the areas of financial and risk management, internal controls and financial reporting.

Criticisms have, nonetheless, been leveled against the audit committee because it is established for window-dressing purposes (Menon and Williams, 1994). The evidence in Malaysia by Abdullah (2002a) shows that audit committee formation is primarily to satisfy the Bursa Malaysia Listing Requirements, which supports criticism of the window-dressing purposes argued by Menon and Williams (1994). However, the study was carried out on listed companies at an initial stage when the Bursa Malaysia had just introduced the requirement to form audit committees. Given time, the role of the audit committee might have improved in due course as the members gained sufficient experience. Abdolmohammadi and Levy (1992) argue that audit committee members need 3-5 years to obtain the needed skills and experience. It is therefore predicted that the extent of directors who are not full time employees of the firm leads to timelier reporting. The hypothesis is therefore as follows:

H₂: The extent of outside directors on the audit committee is associated positively with reporting timeliness.

2.3. CEO Duality

Daynton (1984) argues that having a board chairman who is also the firm's CEO impairs the board independence. In fact, Rechner (1989) suggests that the ideal corporate governance structure is one in which the board is composed of a majority of outside directors and a chairman who is an outside director and argues that the weakest corporate governance is one where the board is dominated by insider directors and the CEO holds the chairmanship of the board. In an empirical study, Collier (1993a) argues that the formation of an audit committee is negatively associated with the presence of a dominant personality in the board of the firm. The importance of maintaining non-executive board chairman is reflected in the Cadbury Report (1992), which recommends the separation of these two top posts, which has been advocated by the Hampel Report (1998). The Malaysian Code also proposes a similar board structure. The reason for the need for a separation is that when the monitoring roles (i.e. the board chairman) and implementation roles (the CEO) are vested in a single person; the monitoring roles of the board will be severely impaired. Thus, a conflict of interest is predicted to arise. However, separating

these top roles is not without problems as the independent chairman monitors the performance of the CEO while the performance of the board chairman is left unmonitored (Brickley, Coles and Terry, 1994). The performance of the board chairman and the board as a whole nonetheless, is evaluated by the shareholders as well as other externally originated corporate controls.

Separating the top two roles is, nevertheless, not without costs and the substantial costs of the separation could come from "... the incomplete transfer of company information, and confusion over who is in charge of running the company" (Goodwin and Seow, 2000: 43) which is not found in a unitary system. These costs could perhaps explain the fact that empirical evidence of CEO duality is not conclusive. For instance, findings by Berg and Smith (1978) indicate that there is no significant difference in various financial indicators between firms that experienced CEO duality, and firms that did not. Chaganti, Mahajan and Sharma (1985) document evidence that shows firms that experienced bankruptcy (failure) and survival are not significantly different in the leadership structure. Rechner and Dalton (1991) also report that firms with CEO duality consistently outperform firms with CEO non-duality structure, which contradicts their expectations. Baliga, Moyer and Rao (1996) further show that the market was indifferent to firms' announcements on changes in the leadership structure. The insignificant influence of CEO duality on firm's performance was later reconfirmed among Malaysian companies in a study by Abdullah (2004a). However, Brown and Caylor (2004) provide evidence that shows that the separation of chairman and CEO is associated with a higher firm value, as measured by Tobin's Q. Thus, their evidence signals that the market recognizes the importance of separating these two roles and firms that separate these roles receive a higher valuation.

The link between the separation of the CEO and board chairman roles and timeliness of reporting is expected to exist because having a non-executive chairman could lead the board to promoting a higher level of corporate openness, as argued by Miller (1997). This should therefore lead to timely reporting. The higher market valuation for firms that separate these roles, as found by Brown and Caylor (2004), means that the market is in favor of the separation. The separation should provide greater incentives to the non-executive chairman to act in the interest of the shareholders rather than to protect the interest of the CEO. Annual reports are the primary source of information for the shareholders. Thus, if the non-executive chairman acts in the best interest of the shareholders, he or she would strive to provide the annual reports in a timely manner to shareholders. This is because the shareholders need the annual reports to enable them to make informed investment-related decisions. Thus it is predicted the

separation is associated with reporting timeliness. Thus, the following is tested, which is as follows:

H₃: Separating the CEO and board chairman's roles is associated positively with reporting timeliness.

3. Methodology

Non-financial companies listed in the Main Board of the Bursa Malaysia were included in this study involving financial years 1998 and 2000. The financial year 1998 was chosen for two reasons. First, during the year, the Malaysian economy was still experiencing the 1997 crisis. Findings for this financial year relating to reporting timeliness could be different from non-crisis periods (in the case of the present study, financial year 2000). Second, in 1998, the issue of corporate governance and transparency drew a lot of public interest and during this time, guidelines specifically for Malaysian companies on the structure of the board of directors were absent. Therefore, the absence provides a basis for an investigation of the roles of the board of directors on reporting timeliness.

The Report on Corporate Governance was published in February 1999, followed by publication of the Malaysian Code in 2001. In the same year of the publication of the Malaysian Code, the Bursa Malaysia, among others, had adopted the Code's recommendations relating to the operations and composition of the board of directors in its Bursa Malaysia Listing Requirements. The Bursa Malaysia has required mandatory disclosure relating to the application of the principles and the extent of compliance with the best practices. Therefore, the financial year 2000 was considered as the period immediately prior to the Revamped Bursa Malaysia Listing Requirements. Furthermore, in 2000, the Malaysian economy saw a recovery from the crisis (Abdullah, 2004b). Thus, these financial years (1998 and 2000) provided an opportunity to study the roles of the board of directors both during the crisis and in the post-crisis period. This study investigates the roles of board independence, CEO duality and audit committee independence on reporting timeliness using regression analyses for panel data (combining both 1998 and 2000 years), sub-periods and changes

in all variables. The following regression model is as follows:

$$RT_{i,t} = \alpha + \beta_1.BDIND_{i,t} + \beta_2.ACIND_{i,t} + \beta_3.DUAL_{i,t} + \beta_4.SIZE_{i,t} + \beta_5.GRG_{i,t} + \beta_6.ROA_{i,t} + \beta_7.AUDTR_{i,t} + \beta_8.BUSY_{i,t} + \beta_9.OPINION_{i,t} + \epsilon.$$

Where:

RT: days lapsed from close of the preceding year-end until audit report date,

BDIND: proportion of non-executive directors on the board,

ACIND: Audit committee independence, "1" if all audit committee members are non-executive, or "0" otherwise,

DUAL: "1" combined roles of CEO and board chairman, "0" otherwise,

SIZE: log natural of firm's total assets,

GRG: ratio of total debts to total assets,

ROA: ratio of operating profit plus interest expense to total assets,

AUDTR: "1" if big-5 audit firm, or "0" otherwise,

BUSY: "1" if financial year-end dates between 31 December to 31 March, or "0" otherwise,

OPINION: "1" if qualified opinion issued, or "0" otherwise, i : firm 1 to j , and t : 1998 and 2000.

The hypotheses were tested using a pooled cross-sectional regression analysis. The coefficients that are of interest from the above model are β_1 and β_2 , which are predicted to be negative and significant. The other coefficient of interest is β_3 , which is predicted to be positive and significant.

4. Findings and Discussion

A total of 355 and 371 complete annual reports of non-financial companies were available for the financial years 1998 and 2000 respectively, representing seventy-eight and seventy-five percent of all the Main Board listed companies for financial year 1998 and financial year 2000 respectively. After deletion of outliers for gearing ratio and ROA variables, a total of 731 firms are available for analyses. Results for the descriptive statistics are shown in Table 1.

Table 1. Descriptive Statistics of the Variables (n= 731)

Variables	Mean	Median	Std. Deviation	Skewness
RT (days)	105.4	110	34.9	1.19
BDIND	0.67	0.71	0.16	-0.55
ACIND	0.23	0	0.42	1.27
DUAL	0.22	0	0.22	1.32
SIZE	13.27	13.24	1.33	0.10
GRG	0.27	0.23	0.25	1.59
ROA	0.04	0.04	0.14	0.43
AUDTR	0.79	1	0.41	-1.45
BUSY	0.67	1	0.47	-0.75
OPINION	0.05	0	0.21	4.21

Table 2. Compliance with the Bursa Malaysia Listing Requirements

<i>Year</i>	<i>Compliance</i>	<i>Percentage</i>	<i>Mean (In days)</i>	<i>Std. Dev. (In days)</i>
1998	Within 121 days	58%	87.4	20.15
	More than 121 days	42%	145.8	23.27
2000	Within 121 days	92%	93.7	24.85
	More than 121 days	8%	151.0	54.67
Overall	Within 121 days	75%	91.5	23.34
	More than 121 days	25%	146.8	30.91

The average number of days taken to issue the audited financial statements is about three and half months and the majority of firms issued the audited financial statements within the range of seventy days and 140 days. This evidence is consistent with Che-Ahmad and Abidin (2001) who document that the average days taken to issue the audited reports is 113. Their study examines the pattern of reporting among Malaysian listed companies for the 1995 financial year. Though the financial crisis had shortened the time taken, which is supportive of greater transparency, the improvement was not seen as very significant. Within a close examination into the pattern of reporting timeliness, three sub-groups are discernable, namely early reporting compliers, reporting compliers and non-compliers. The early reporting compliers peak at seventy days. The second sub-group, which issued the audited financial statements just to comply with Bursa Malaysia listing requirements, peaked at 120 days. The third sub-group issued the audited financial statements after 121 days. To understand further the roles of board independence, CEO duality and audit committee independence, three separate regression analyses were carried out for each sub-group.

As for the composition of the board of directors, the percentage of non-executive directors on the board is sixty-seven percent. Thus, in terms of composition, it is evident that the Malaysian boards are independent of management. Further, the majority of the firms separate the roles of the CEO and board chairman. Therefore, these two pieces of evidence indicate that, with regard to composition, Malaysian boards are independent of management. However, only about a quarter of Malaysian audit committees are composed of wholly non-executive directors. The evidence also revealed that at least one executive director (either the managing director or finance director) sits on the audit committees. This could limit the effectiveness of the audit committees.

Analysis of the pattern of the reporting timeliness for 1998 and 2000 was subsequently carried out by classifying companies into complying or non-complying with the four months' requirements (Bursa Malaysia Listing Requirements, Section 9.24(b)). The four months requirement is converted into 121 days (i.e. $365 \text{ days} / 3 = 121 \text{ days}$). Results are shown in Table 2.

Results in Table 2 indicate that forty-two percent of the companies failed to issue their audited annual accounts within four months from the date of the financial year-end 1998. The non-complying companies for financial year 1998 took an average of 4.8 months to issue their audited accounts, which is about one month longer than that allowed by the Bursa Malaysia. On the other hand, companies that complete their annual audited accounts within four months took on the average about three months, which is one month earlier than that stipulated in the Bursa Malaysia Listing Requirements. The high incidence rate of companies that fail to issue their annual audited accounts within four months in year 1998 is attributed to the financial crisis. The incident of non-compliance is significantly reduced in 2000 where only eight percent of the Main Board listed companies fail to prepare their annual audited accounts within four months from the close of the financial year. Comparison between the two sub-periods suggests that the average period taken in 2000 is longer than it is in 1998 for companies that complete their annual audited accounts within four months (eighty-seven days in 1998 against ninety-four days in 2000). The t-test was carried out to determine whether the financial crisis has caused significant delays in the timeliness of reporting. The results (not presented here) revealed that reporting timeliness is better in 2000 than in 1998 and the difference is statistically significant (at five percent level). Thus, the economic crisis in 1997 must have contributed to the longer period that has been taken

to issue the audited accounts for 1998. One explanation is that the crisis may have resulted in auditors taking a longer time to issue the audited accounts especially because of the uncertainty. The uncertainty has resulted in greater audit risk, which has led to an increased audit program.

Regression analyses were performed to test the hypotheses. Since the analysis involved panel data, the ordinary least squares method was not appropriate. Thus, regression analyses with random or fixed effects were used. Four analyses were performed. First, analysis for the full data was performed. Second, analyses for sub-sample data, determined on the basis of compliance with reporting timeliness, were also carried out. Results are shown in Table 3.

For full sample analysis, two hypotheses were supported, namely board independence and CEO duality. Thus, the evidence indicates that board independence and the separation of the CEO and board chairman roles are associated with timelier reporting. The hypothesis on audit committee independence, on the other hand, was not supported. Analyses of board independence for sub-samples, nonetheless, reveal conflicting results. For early reporter and late reporter sub-samples, board independence is found to be not associated with reporting timeliness. In fact, the results show that, for the early reporter sub-sample, only auditor's opinion is associated with timelier reporting. Corporate governance and performance variables are

not associated with reporting timeliness. For the late reporter sub-sample, the level of gearing, ROA, the types of auditor and the auditor's opinion were associated with reporting timeliness. Nevertheless, for this sub-sample, the effects of board independence, CEO duality and audit are not significant. The complier sub-sample explains the highest variation in reporting timeliness of all the models in Table 3. However, only the hypothesis that predicts the association between CEO duality and reporting timeliness is supported. The other two hypotheses that predict the association between board and audit committee independence are not supported. In fact, the association between board independence and reporting timeliness is positive. Thus, for this sub-sample, the more independent the board is, the more likely it is that the firm would issue the audited financial statements towards the deadline specified by the Bursa Malaysia listing requirements.

Analyses for sub-periods (i.e. 1998 and 2000) were also carried out to determine if the financial crisis (i.e. the 1998 financial year) had any impact on the results of the regression models. In addition, a separate regression was also performed to take into account changes in the variables for each firm by comparing the value of each variable for the 1998, 2000 financial years. This analysis controls for cross-sectional differences that have not been measured in this study. Results are provided in Table 4.

Table 3. Regression Analysis Results⁺

Variables	All (Random effects) (n= 731)	Early Reporter Sub-Sample (< 70 days) (Random effects) (n= 115)	Complier Sub-Sample (71-120 days) (Fixed effects) (n= 435)	Late Reporter Sub-Sample (> 121 days) (Random effects) (n= 181)
Intercept	121.82*	56.55*	14.59	146.62*
BDIND	-22.18*	-2.91	29.10 [#]	-19.92
ACIND	-3.20	-1.08	0.22	-2.05
DUAL	5.49*	0.73	14.5 [#]	2.93
SIZE	0.15	0.127	-8.46 [#]	1.79
GRG	15.45*	-1.44	6.17	-22.38*
ROA	-47.95*	-0.22	14.59	-18.07 [#]
AUDTR	-8.59*	-	-23.77*	-8.91*
BUSY	-0.33	-	-	-
OPINION	15.21*	-11.31 [#]	-2.33	39.94*
Adjusted R ²	0.15	0.04	0.27	0.16

⁺Decision either to use fixed effect or random effect models is based on the Hausman test. In sub-sample analyses, either BUSY or AUDTR (or both) was dropped because they were automatically removed in the regression analyses.

[#]5 and 10 percent significant levels respectively

Table 4. Regression Results for Sub-periods and Change in Variables
(Results corrected for heteroskedasticity)

Variables	1998 (Asian crisis)	2000 (Non-crisis)	Change in Variables
Intercept	116.07*	132.33*	-15.18*
BDIND	-25.05*	-20.33*	-48.07*
ACIND	-7.43 [#]	-0.11	3.06
DUAL	-11.83*	-3.85	-3.11
SIZE	1.76	-0.91	2.48
GRG	20.05*	15.02*	4.28 [#]
ROA	-40.52*	-39.75*	0.20*
AUDTR	-5.45	-11.65*	-14.84
BUSY	0.17	0.89	8.13
OPINION	11.99	19.66	13.18
Adjusted R ²	0.15	0.12	0.02

*[#] At 5 and 10 percent significant levels respectively

Results in Table 4, for all models, support the contention of the influence of extent of outside directors on the board on reporting timeliness. The influence of CEO duality and audit committee independence, though in the predicted direction, is not consistently significant in all the models. However, for the 1998 financial year, CEO duality and audit committee independence are significant. Thus, during the crisis, the evidence seems to suggest that corporate governance variables, namely board independence, CEO duality and audit committee independence are associated with reporting timeliness, as hypothesized. However, after the crisis (i.e. the 2000 financial year), only board independence remains to be significant. The other two variables (i.e. CEO duality and audit committee independence) are not significant.

Overall, the findings provide some support of the importance of board independence and the separation of the firm's top two posts to improve reporting timeliness among Malaysian listed firms. Thus, having independent boards and separating the CEO and board chairman are beneficial, as argued by, for instance, the Cadbury Report, the Hampel Report and more recently the Malaysian Code. The evidence is also supportive of the ASX's contention of better-governed firms being "more transparent" and "more timely" with respect to disclosures. In sub-sample analyses, it was found that both board independence and separation of the top two roles are significant in influencing the timeliness of reporting, in the hypothesized directions, only for the 1998 financial year. This, thus, lends support to the contention that boards are predicted to be effective during crisis periods, as argued by Kosnik (1987, 1990). In other sub-sample analyses, the influence of board independence and CEO duality is not significant. In fact, for reporting compliance sub-sample analyses, the association between these variables and reporting timeliness is not consistent. Board independence and CEO duality are not important for early complier and laggard sub-samples. These two variables are only significant for

the complier sub-sample. Thus, the evidence, taken together, suggests that non-executive directors' incentive to produce audited reports early is not motivated by their monitoring intensity, as argued by agency theory. Rather, these outside directors are found to discharge their monitoring roles in the event of crisis, e.g. during financial crisis. To project their reputation as good monitors of management, non-executive directors have added incentives to issue the audited financial statements more timely to shareholders. This is thus, seen by the shareholders that these non-executive directors have acted in the shareholders' best interest. Further, providing more timely information to users during the crisis is very important so that the shareholders are kept informed of the firm's performance. This evidence is also supportive of the evidence offered by Beekes, Pope and Young (2004) who show that firms with a higher proportion of outside directors are more likely to recognize bad news in earnings more timely compared to firms with a lower proportion of outside directors on the boards.

Another hypothesized variable, namely audit committee independence, was found to be not significant in all the analyses. This finding thus rejects the contention that audit committee independence is important in explaining the timeliness of reporting. Though the evidence is not consistent with Klein's (2002) evidence, the insignificant association between audit committee independence and reporting timeliness is not unexpected given the history of the audit committees in Malaysia. Audit committees only emerged in Malaysia in the mid-1980's following the collapse of a merchant bank in Malaysia. In 1994, the Bursa Malaysia mandated all listed companies to maintain audit committees composed in majority of non-executive directors. Further, it has been documented that Malaysian listed companies form audit committees to satisfy the Bursa Malaysia listing requirements (Abdullah, 2004a). Due to this, the effectiveness of the audit committees is still questionable (Abdullah, 2002a). In addition, the fact

that it is a common practice among Malaysian companies having either the firm's managing director or financial director on the audit committee might have hindered its independence, which is important for its effectiveness.

As for the control variables, ROA and gearing are found to be consistently significant in influencing reporting timeliness. This evidence supports the contention that leverage (indicating a firm's financial risk level) is associated negatively with timeliness of reporting. This evidence is consistent with the argument by Carslaw and Kaplan (1991) who predict that companies with a high debts to assets ratio would take longer to be audited than companies with a low debts to assets ratio. A high debt to assets ratio is also associated with financial distress (Abdullah, forthcoming). The higher the leverage level, the longer it takes to issue an audit report to ensure the auditor has taken all the necessary steps to protect themselves from shareholders' litigation. Debts also signal the presence of agency cost of debts (Jensen and Meckling, 1976). Debt covenants usually rely on the accounting data and evidence has shown that there is a link between accounting-based debt covenants and the extent of a firm's leverage (Press and Weintrop, 1990). Smith and Warner (1979) argue that renegotiating the debt covenants is very costly. Evidence has shown that the level of gearing is associated with the accounting policy choices that are income increasing (Watts and Zimmerman, 1986). This fact should lead to the auditor taking extra time to ensure that the accounting policies adopted by companies with high leverage do not distort the "true" financial condition of the companies. The association between ROA and reporting timeliness is consistent with signaling theory, which predicts that better performing firms provide more information than less performing firms (Ross, 1979). By providing more information, managers of better performing firms are able to distinguish their firms from poorly performing firms. Empirical evidence consistent with this contention is offered in the voluntary disclosure studies (e.g. Hossain, Tan and Adams, 1994; Haniffa and Cooke, 2002; Mohd-Nasir and Abdullah, 2004).

5. Summary and Conclusions

This study attempts to investigate the extent to which corporate governance, namely the composition of the board of directors and audit committee and CEO duality play an important role in promoting corporate transparency, defined as the number of days taken to issue their audit reports. The shorter the number of days taken, it is argued, the greater the level of transparency. Transparency is not merely about providing information but it is all about providing relevant information in a timelier manner. The findings show that the 1997 financial crisis was found to have significant impact on the timeliness of

financial reports where more companies during the crisis failed to issue their annual audited accounts within four months compared to the period after the crisis. This evidence leads to the conclusion that the 1997 crisis had adversely affected timeliness of reporting among Malaysian listed companies.

The results, with respect to the composition of the board of directors are generally consistent with the arguments that properly constituted boards and audit committees lead to effective governance (Weisbach, 1988; Cadbury, 1992; Beasley, 1996; Malaysian Code, 2001; Bursa Malaysia Listing Requirements, 2001). The evidence should support the contention that corporate governance is associated with corporate transparency. Having more outside directors on boards should bring independent views to the company. This should result in the company maintaining proper internal control systems, which will enable the board to manage the risk. Having a sound check and balance mechanism should support the outside directors' reputation as decision experts, as argued by Fama and Jensen (1983). However, the findings seem to suggest that non-executive directors' effectiveness in issuing annual financial statements is found to be more pronounced during the financial crisis period. Thus, during crisis, there is a strong incentive for non-executive directors to act more closely in the interest of shareholders, supporting Kosnik's contention (1987 and 1990).

Results from the regression analyses also indicate that the separation of the board chairman and the CEO leads to financial reports being issued much earlier than those firms whose boards are dominated by a single person. The evidence could be interpreted as the separation of these roles reduces the likelihood of the board being dominated by one person. Thus, this should enable the board to effectively monitor the performance of the management (i.e. the CEO). Accounting information is commonly used to measure the performance of the management. Hence, the separation of the roles leads the board to require more timely information to monitor the management as the board chairman relies on the financial reports when assessing the management performance due to his or her not having personal access to the firm's accounting information system compared to when the board chairman is also the CEO. Effective monitoring requires timely information that, among others, involves assessing management performance based on un-audited monthly financial statements. Producing un-audited monthly financial statements requires proper accounting and internal control systems to be in place. If the firm maintains proper accounting and internal control systems, the annual audit process is expected to be short. Thus, this shortens the time taken to issue audited annual financial statements. The evidence should support the concerns raised in the Cadbury Report, the

Hampel Report and the Malaysian Code, which recommend the separation of the two roles. As in the case of board independence, the role of CEO duality is more pronounced during financial crisis. Thus, as it seems, corporate governance plays important roles during financial crises.

Another variable of interest, namely audit committee independence, is not important in explaining the pattern of reporting timeliness. Two reasons could explain the insignificant influence. First, audit committees in Malaysia have not reached maturity, as they were only required to be formed by the Bursa Malaysia in 1994. Thus, they are still developing. Second, the fact that audit committee formation is mandatory might have also contributed to the ineffectiveness. This is because it is a matter of satisfying the listing requirements rather than maintaining the audit committees to improve the firm's financial reporting processes.

This study documents that only two control variables, namely the level of gearing and ROA, to have a consistent and significant influence on the reporting timeliness. The direction of the influence indicates the higher the gearing levels, the longer the days lapsed to issue the annual audited accounts. This finding is consistent with the findings in the previous studies (e.g. Carslaw and Kaplan, 1991). High gearing requires more careful audit investigation, as it could be associated with high financial risks. The significant influence of ROA on

the timeliness of reporting supports information signaling theory, as the more profitable the firm is, the quicker the time is to issue the audited annual accounts.

Finally, there are several limitations that should be noted in this study. First, this study has been carried out in a setting that is quite different from that in developed countries, such as U.K. or U.S. Furthermore, compared to these developed countries, the public awareness of corporate governance in Malaysia has only been seen to improve significantly following the 1997 crisis. Thus, this might have confounded the findings. Second, this study focuses only on three aspects of corporate governance: board independence, CEO duality, and audit committee independence. Other equally important corporate governance variables, such as ownership pattern, could be investigated as well. For instance, a study examining the role of foreign shareholders or large shareholders might be examined because these shareholders could apply pressure to firms to issue audited financial statements more timely. Finally, it will be fruitful to examine other less investigated corporate governance issues, such as the independence of the nominating committee. The independence of the nominating committee has been found to have significant bearing on firm's performance as documented by Brown and Caylor (2004).

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CORPORATE GOVERNANCE, EXCESS COMPENSATION, AND CEO TURNOVER IN FAMILY AND NON-FAMILY BUSINESSES

Ying-Fen Lin*

Abstract

The replacement of a CEO is one of the control mechanisms that companies employ to reduce the agency problems. This paper divides companies into non-family businesses and family businesses and investigates the influence of outside directors, outside blockholders, and excess compensation in CEOs termination process. The samples used in the paper come from manufacturing companies in Taiwan listed between 1996-1997; the analytical method is logistic regression model. The conclusion is as follows: 1. the characteristics of family businesses, corporate governance, and excess compensation have no correlation on CEO turnover. 2. External board members play an important role in CEO termination in non-family businesses.

Keywords: Agency theory, CEO turnover, corporate governance, excess compensation

**Address for correspondence: National Dong Hwa University, Hualien, Taiwan R.O.C. Tel: 886-3-8633074; Fax: 886-3-8633070; E-mail: yflin@mail.ndhu.edu.tw*

Introduction

The work character of a CEO is essentially different from that of other management levels, prompting the rare occurrence of CEO turnover to be main issue for scholastic research. Among scholars, agency theory holders regard discharging or changing managing the management level as an internal control mechanism that reduces the problems of agency (Dewing, 1953). They believe a company should change its CEO when company does not work effectively. Therefore, many scholars research the effect of CEO turnover on a company, in order to prove whether the internal control mechanism is efficient. However, does a decision-maker act naturally as is mentioned in agency theory? If not, dose the mechanism work at making sure the agent's move corresponds to the owner's favor as agency theory proposes? This question is indeed worth discussing.

In Taiwan there were not many examples of changing a CEO in stock market-listed companies before 1995, but more than a hundred happened in 1996 and 1997. The problem of CEO turnover has become very clear. However, there are only a few related research studies and overseas research towards this issue still remain on the relations between company performance and CEO turnover

(Benston, 1985, Coughlan, & Schmidt, 1985, Jauch, Martin & Osborn, 1980, James & Soref, 1981, Morck, Schleifer, & Vichny, 1988, Osborn, Jauch, Martin, & Blueck, 1981, Warner, Watts, & Wruck, 1988). Not until recently has there been research about board control and CEO turnover Boeker & Goodstein, 1993, Denis & Sharin, 1997, Fisel & Louie, 1990, Kang & Shivdasani, 1995, Kesner & Dalton, 1994, and Weisbach 1988 , but they do not come to the same conclusion. To offer employees an inducement with their payment policy in order to lower the turnover rate is very important in human resources management. The efficient wage model says that the most direct way to keep employees is to offer them a higher residual value than your competitors (Katz, 1986), but this affect falls short of empirical research (Harrison, Torres & Kukalis, 1988).

This paper divides companies into family enterprises and non-family enterprises. It investigates the inference of corporate governance and excess compensation on the effectiveness of CEO turnover. This paper reviews literature pertaining to the above issues and develops six hypotheses. The samples used in the paper for CEO turnover research come from listed manufacturing companies in Taiwan

between 1996-1997 and the analytical method is the logistic regression model.

The remainder of this paper is organized into four sections. Section 2 is a review of the relevant literature and hypotheses development. Section 3 presents the method and variable explanation. Section 4 includes the empirical results and Section 5 offers the conclusions of this study.

Literature Review and Hypotheses Development

A. The Characteristics of Family Businesses

Handler (1989) points out that scholars approach the definition of family businesses from different angles, including:

Ownership and management;

The level of interdependence among the family and the family's level of involvement in the business;

The transfer of power between generations within a family.

Various factors

Yen (1994) lists the dual-system and bipolar co-existence phenomena characteristics of family businesses. Family businesses are not composed largely of family members, only the higher-leveled ones are. Family members are defined basically by blood or marriage (the characteristics of dual-system, as in Yen (1994), and promotion among CEOs in family businesses maintains a stagnant equilibrium simply due to family protection (the characteristics of bipolar co-existence phenomena, as in Yen, 1994). This fact declaims that the promotion of CEOs in family businesses is quite different from that in ordinary businesses.

B. CEO Turnover in Non-family Businesses

1. Corporate Governance and CEO Turnover

a. Board of Directors

Directors' responsibilities are defined as three broad roles which are labeled control, service, and resource dependence (Johnson, Daily & Ellstrand 1996). The control role entails directors monitoring managers as fiduciaries of stockholders. In this role the directors' responsibilities include hiring and firing the CEO and other top managers, determining executive pay, and otherwise monitoring managers to ensure that they do not expropriate stockholder interests (Monks & Minow, 1995). Corporate law also gives the board of directors the power to appoint and dismiss a CEO.

A number of studies suggest that the degree of alignment between boards and shareholders incentives varies with the composition of the board. Fama and Jensen (1983) argue that outside directors, who tend to be major decision-makers at other organizations, have incentives to signal to the labor market that they are experts in decision control by acting in shareholder interests. As Weisbach (1988) notes, inside directors are less likely than outside directors to challenge the CEO to whom their careers are tied. Hypothesis 1 states that:

Hypothesis 1: When the ratio of outside directors is high, CEO turnover will be high in non-family businesses.

b. Outside Blockholders

Berle and Means (1932) original managerial theory of corporate control maintains that the ownership of large corporations is dispersed, and therefore the influence of owners on the actions of managers is limited. The monitoring of the actions of top managers by numerous dispersed owners thus becomes a free-rider problem: no individual owner is willing to invest in the costs of monitoring necessary to keep management acting in the owner's interests. The concentration of ownership therefore becomes an important determinant of the extent to which free-rider problems are likely to occur (Davis, 1991). If ownership is concentrated in the hands of a few individuals, who can better monitor the actions of management, then the free-rider problem is reduced (Demsetz & Lehn, 1985). Conversely, if ownership is dispersed among several stockholders, none of whom have a significantly large ownership share, then managers may retain uncontested control over the organization (Davis, 1991).

Active investors are individuals or institutions that simultaneously hold large equity positions in a company and actively participate in its strategic direction. Active investors are important to a well-functioning governance system, because they have the financial interest and independence to view firm management and policies in an unbiased way (Jensen, 1993). This leads to the paper's second hypothesis:

Hypothesis 2: CEO turnover is high when there are outside blockholders in non-family businesses.

2. Excess compensation and CEO turnover

The costs from executive turnover results in costs specific to the firm that is losing that employee, such as the company's loss of value from previous investments in recruiting and training that individual. Although the employee's firm-specific human capital is not valuable outside the firm or to its competitors, the firm loses rents and quasi-rents with the departure of said employee (Milgrom & Roberts,

1992). High turnover may also affect the morale and productivity of workers who remain with the company or provide a negative signal about the firm and its prospects. Further disruption to the organization could occur, because talented managers have ongoing incentives to shop for outside offers or engage in disingenuous bargaining in order to extract greater wages from their current employers (Milgrom & Roberts, 1992).

Firms can reduce costly managerial turnover through a better design of compensation contracts. A straightforward method for firms to retain their managers would be to offer premium or "excess" pay with a higher value than the contract offered by any competitor (Katz, 1986). In theory, firms should be willing to match any offer received by an executive up to the point where the compensation cost just equals the executive's marginal product, a process that should lead to a value-maximizing solution in the economy (Milgrom & Roberts, 1992). Therefore, we expect that the higher the premium or excess pay is, the less likely CEOs are to leave their jobs. Hypothesis 3 examines this correlation:

Hypothesis 3: CEO turnover will be low when there is excess compensation of CEO in non-family businesses.

C. CEO Turnover in Family Businesses

1. Corporate Governance and CEO Turnover

Board of Directors

The main duties of the board are to approve the CEO's policy and to supervise his/her effectiveness, and the board is legally empowered to employ and discharge a CEO (Fama & Jensen, 1983).

An outside director holding an independent position is able to work effectively (Fama, 1980), and as a result, the composition of the board, especially its ratio of outside directors, shows great influence on CEO turnover (Fredrickson, Hambrick & Baumrin, 1988; Finkel & Louie, 1990). Nevertheless, outside directors may still remain ineffective in family businesses for the following reasons:

I. The internal control mechanism of the company stands out even more in its importance when there is a conflict of profit caused by agency problems. However, when a family is not confronting conflict of profit and serious agency problem, then this mechanism will not work actively in terms of any serious loss of expenses (Davis, Schoorman & Donaldson, 1997).

II. A family business reveals the characteristics of family relations as a major path of promotion (Dommelle, 1964) and a stagnant equilibrium of upper level management (Yen, 1994).

The reasons above explain why the ratio of outside directors has no influence on CEO turnover in a family business. Hypothesis 1a therefore states:

Hypothesis 1a: In family businesses there is no correlation between CEO turnover and the ratio of outside directors.

b. Outside Blockholders

Because power held by a few members makes it much easier to supervise a CEO, the free-rider problem is reduced (Demsetz & Lehn, 1985). If aggressive shareholders own a huge amount of stock in a company, then from an indifferent position they are able to supervise management and the CEO, and also act importantly in the internal control mechanism (Jensen, 1993). In family businesses, outside blockholders have no effect on CEO turnover by similar reasons mentioned in the earlier paragraph. The hypothesis accordingly is made as the following:

Hypothesis 2a: In family businesses there is no correlation between CEO turnover and outside blockholders.

2. Excess Compensation and CEO Turnover

Offering higher salaries than competitors in the same industry, the effective model of compensation, is the most effective and direct way for owners to keep their employees (Katz, 1986). Surprisingly, the effective model of compensation does not impact CEO turnover in family businesses, simply because core members of the higher-leveled management are usually family members. They are well protected by blood, and thus turnover of family members seldom happens. Even if it occurs occasionally, they are always transferred here and there at the same level. Under this circumstance, the higher-level management remains at a stagnant equilibrium. Therefore, offering excess compensation to keep employees does not influence CEO turnover in family businesses. On the other hand, in family businesses, the CEO as a family member will not leave company, because of a low salary. This paper thus develops the following hypothesis:

Hypothesis 3a: In family businesses there is no correlation between CEO turnover and the excess compensation of CEO.

Sample Selection and Explanation of Variables

The definition of a family business in this paper is: a firm in which over half of the seats on the board of directors are held by the family, and the CEO is also a family member. The definition of a non-family business is: a firm in which less than half of the seats on the board of directors are held by the family.

The following is an explanation of the sampling methods, variable indicators, and analytical method in this paper.

Sample Selection

Samples are selected for this paper based on the following principles and standards:

There are records of compensation for a CEO who has held his/her position for a full year.

There is public access to the financial statements, structure of the board of directors, and stock holdings of the CEO and large shareholders of the company in question.

Samples are rejected if the age of the outgoing CEO is over 65, as this is viewed as retirement age.

In order to avoid any deviation in the study's conclusion due to changes in the power structure of companies, this research does not include companies that merged, declared bankruptcy, or reorganized. In order to avoid too large a discrepancy among industries, the financial, department store, construction, and shipping industries are not included.

Based on the criteria above, 184 companies represent non-family businesses, while 106 companies are family businesses.

Explanation of Variables

Ratio of Outside Directors: The definition of outside directors in this paper refers to all members of the board of directors who are not employees, as well as their relatives once removed. The number of outside directors is then divided by the number of total directors.

Outside Blockholders: The definition of outside blockholders refers to all members of the board of directors who own at least 5% of the total shares of stock, are not employees, as well as their relatives are once removed. This paper uses a dummy variable to express whether large external shareholders exist in the company or not: "1" represents that there are, and "0" represents that there are none.

Excess Compensation

CEO compensation is the sum of all forms of remuneration in the previous year (cash compensation, dividends, and performance bonuses). This paper uses the calculation method put forth in Coughlan & Schmidt (1985), although recent research into CEO compensation shows that other than company performance and company size, there are other factors that influence CEO compensation. As a result, the model employed in this paper also includes other factors: control by the board of directors, the influence of large shareholders, the

ratio of stock held by CEOs, and the company's investment opportunities.

These elements are factored in to calculate an anticipated market compensation level. Excess compensation thus refers to the value of the residual in the regression model shown below and represents the difference between the anticipated market compensation and the actual compensation of CEOs.

$$\text{Log (Cash Compensation)}_{it} = b_1 \text{Log(Sales)}_{it} + b_2 (\text{ROA})_{it} + b_3 (\text{Log}(1 + \text{Stock Return}))_{it} + b_4 (\text{Rinpt})_{it} + b_5 (\text{CEO Duality})_{it} + b_6 (\text{CEO Holdings})_{it} + b_7 (\text{Board Holdings})_{it} + b_8 (\text{Outside blockholders})_{it} + b_9 (\text{MKTBEQ})_{it} + e_{it}$$

Control Variables

This research includes a series of control variables based on previous research. These are firm performance (The two variables used to calculate company performance are: industry ROA and industry stock return rate), board shareholdings minus CEO's holdings, CEO's holdings, investment opportunity = (Outstanding share * Price) / Total common equity, total assets, and the debt ratio.

Data regarding CEOs, board of directors, and the rate of return on stock are taken from the Fiscal Databanks of the Taiwan Economic Press.

Data on CEO compensation, total assets, the rate of return on assets, and the rate of return on equity are found in the annual reports made by the companies, while data for the age of CEOs are drawn from the "List of Managers in Taiwan."

Analytical Methodology

The research herein uses logistic regression analysis to test the relationship among outside directors, outside blockholders, excess compensation, and CEO turnover.

The Empirical Results

1. Descriptive Statistics

Table 1 shows the minimum value, maximum value, mean, and standard deviation for the non-family businesses. The table shows that the average ratio of outside directors is 0.63. In addition, when the ratio of outside directors' reaches zero, it means all the board members are composed of either employees or relatives, while when it reaches one, it conveys that all the board members are neither employees nor family members. In the samples, there are 86 companies, 47% of all samples that have blockholders owning over 5% of all stock in a company, the numbers of companies with CEO compensation higher than the average is about 80.

For family businesses, Table 2 provides the minimum value, the maximum value, the mean, and

the standard deviation. The table shows that the average ratio of outside directors is 0.21. In the samples, the number of blockholders owning over 5% of stock is 21, 19.8% of all samples; the number of companies with a CEO compensation higher than the average is 50.47% of all samples.

The correlation among variables (Table 3 and Table 4) reveals that the problem of variable collineality is not great. The coefficient of all variables is less than 0.51.

2. Empirical Results of CEO Turnover in Non-family Businesses

The CEO turnover rate for non-family businesses and the results of the logistic regression analysis of the variables are listed in Table 5.

The first column of the table is the industry ROA, while the second column is the industry stock return and P values are in parentheses.

This table shows that no matter what indicator firm performance is, the higher the ratio is of outside directors, the higher the ratio of CEO turnover accordingly is.

This result supports Hypothesis 1: When the ratio of outside directors is high, CEO turnover will be high in non-family businesses.

From Table 5 one sees that outside blockholders of shares do not significantly influence CEO turnover. By means of a residual from the regression model or comparing with companies in the industry, the excess compensation of a CEO has no deep relationship with CEO turnover. These results do not support Hypothesis 2 & Hypothesis 3.

3. Empirical Results of CEO Turnover in Family Businesses

The CEO turnover rate for family businesses and the results of the logistic regression analysis of the variables are listed in Table 6. The first column of the table is industry ROA, the second column is industry stock return and P values are in parentheses. From this table, there is no variable that affects CEO turnover. This result supports Hypothesis 1a: In family businesses there is no correlation between CEO turnover and the ratio of outside directors, Hypothesis 2a: In family businesses there is no correlation between CEO turnover and outside blockholders, and Hypothesis 3a: In family businesses there is no correlation between CEO turnover and the excess compensation of CEO.

Conclusions

The major conclusions of this paper are:

The characteristics of family businesses, corporate governance such as the ratio of outside directors and outside blockholders, and excess compensation have no correlation on CEO turnover.

Outside directors are a crucial factor in the decision-making of CEO turnover in non-family businesses. Even though business law legally empowers the board to hire and fire CEOs, the empirical result of this research supports that outside directors show a better effectiveness on supervising CEOs than the board. In this research, the higher the number of outside directors there is, being neither employees nor relatives, the higher the ratio is of CEO turnover.

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Appendices

Table1. Descriptive Statistics (non-family businesses samples = 184)

	Minimum	Maximum	Mean	Std. Deviation
Outsiders	0	1	0.63	0.25
Blockholder (Dummy)	0	1	0.47	0.50
Excess compensation (log)	-0.73	0.70	2.0E-15	0.19
Industry ROA	-0.30	0.25	-0.02	0.06
Industry stock return	-0.47	2.73	-0.02	0.33
CEO holdings	0	0.35	0.03	0.06
CEO tenure	1	47	22.58	12.70
Debt ratio	0.06	0.70	0.38	0.14
Assets (log)	640,193,000	76,000,000,000	10,000,000,000	13,000,000,000
Investment opportunity	0.68	3.99	1.79	0.64

Table 2. Descriptive Statistics (family businesses samples = 106)

	Minimum	Maximum	Mean	Std. Deviation
Outsiders	0	1	0.21	0.22
Blockholder (Dummy)	0	1	0.20	0.40
Excess compensation (log)	-0.50	0.44	2.3E-16	0.18
Industry ROA	-0.35	0.15	-0.01	0.06
Industry stock return	-0.60	1.04	-0.08	0.26
CEO holdings	0	0.18	0.05	0.04
CEO tenure	2	47	25.93	11.13
Debt ratio	0.09	0.88	0.38	0.14
Assets (log)	1,311,545,000	83,000,000,000	8,765,078,000	13,000,000,000
Investment opportunity	0.55	4.37	1.76	0.64

Table 3. Correlation Matrix for variables (Non-family businesses, n=184)¹

	1	2	3	4	5	6	7	8	9	10
1	1									
2	.10	1								
3	-.01	.04	1							
4	.06	-.06	.13	1						
5	.04	-.06	.14	.51	1					
6	-.08	-.04	-.05	.04	.005	1				
7	.06	-.02	-.21	.01	.015	-.06	1			
8	-.04	.35	-.02	-.05	.017	-.25	.25	1		
9	-.21	-.01	-.01	-.10	-.04	-.17	.09	.03	1	
10	.18	-.12	.013	.50	.30	.09	.01	-.23	-.04	1

Table 4. Correlation Matrix for variables (Family businesses, n=106)²

	1	2	3	4	5	6	7	8	9	10
1	1									
2	.27	1								
3	-.06	-.18	1							
4	.17	.008	.25	1						
5	-.02	-.01	.00	.00	1					
6	-.15	.13	-.15	-.20	.00	1				
7	-.09	.07	.12	.13	-.15	-.02	1			
8	.09	.20	-.13	-.13	.04	-.23	.41	1		
9	.08	.23	.12	.22	.00	-.01	.13	-.15	1	
10	-.06	.09	-.12	-.15	-.04	-.01	-.07	.25	-.05	1

Table 5. Logit Regression Estimates of the Probability of CEO Turnover (non-family businesses samples = 184)

Estimated model: Probability (Turnover) = f (Outsiders, Blockholder Excess compensation, and control variables)				
	Industry ROA		Industry Stock Return	
Intercept	-9.5439	(0.1369)	-9.4707	(0.1352)
Outsiders	3.1615*	(0.0128)	2.9113*	(0.0182)
Blockholder (Dummy)	0.0974	(0.8543)	0.2075	(0.6933)
Excess compensation (log)	-0.3092	(0.8066)	0.4832	(0.7057)
Performance	-7.7942*	(0.0495)	-0.6400	(0.5309)
CEO holdings	6.8312	(0.0665)	7.1485	(0.0524)
CEO tenure	0.0215	(0.2809)	0.0204	(0.3000)
Debt ratio	-4.7161*	(0.0240)	-3.5154	(0.0746)
Assets (log)	0.5621	(0.3761)	0.5352	(0.3878)
Investment opportunity	0.3754	(0.3505)	0.3889	(0.3936)
Chi-Square	15.893	(0.0692)	12.376	(0.1929)

a. P values are in parentheses.

b. * p<0.05.

Table 6. Logit Regression Estimates of the Probability of CEO Turnover (family businesses samples = 106)

Estimated model: Probability (Turnover) = f (Outsiders, Blockholder Excess compensation, and control variables)				
	Industry ROA		Industry Stock Return	
Intercept	1.3378	(0.8915)	6.1895	(0.5443)
Outsiders	1.0471	(0.3936)	1.3533	(0.2931)
Blockholder (Dummy)	0.7149	(0.3170)	0.4799	(0.4954)
Excess compensation (log)	-1.6487	(0.3033)	-1.4059	(0.3752)
Performance	-6.7013	(0.1358)	1.1495	(0.3465)
CEO holdings	-4.1916	(0.5871)	-4.0591	(0.5813)
CEO tenure	-0.0090	(0.7503)	-0.0093	(0.7375)
Debt ratio	-0.9521	(0.6939)	-0.2902	(0.9040)
Assets (log)	-0.3488	(0.7370)	-0.8100	(0.4474)
Investment opportunity	0.2293	(0.6051)	-0.0087	(0.9854)
Chi-Square	6.851	(0.6527)	5.537	(0.7852)

a. P values are in parentheses.

¹ Definitions of the variables: 1. Industry ROA ; 2. Industry stock return rate ; 3. Ratio of outside directors ; 4. Outside blockholders (dummy) 5. Excess compensation ; 6. CEO holdings ; 7. Debt ratio ; 8. Total Assets ; 9. Investment opportunity =(Outstanding share * Price)/ Total common equity 10. CEO tenure.

² Definitions of the variables are as same as Table 3.

RECIPIENTS OF GOVERNANCE: TRUST AND THE EMPLOYEE PERSPECTIVE

*Alma Whiteley**

Abstract

Purpose - To introduce trust as related to organizational design and management within the broader domain of governance and report on case study research on trust carried out in a large Australian organization. **Design/methodology/approach** - This paper is in three parts. The first part reviews a selection of ideas and recent writers on trust; the second part describes the methodology of the case study research which focused on relationship management where trust emerged as an important element of relationships. This is followed by examples from the findings. The third part addresses insights and future research. **Originality/Value** - The study of trust has become an important topic for management and corporate governance during recent years. After discussing scholarly interpretations of trust, empirical research findings are used to provide insight into how employees actually understand and interpret trust.

Keywords: trust, relationship management, organizational governance

** Graduate School of Business, Curtin University, Perth, Australia*

Introduction

Corporate governance is concerned with ensuring that managers run firms honestly and effectively so as to provide a fair and acceptable return to those who invest resources in them. This definition is compatible with both shareholder and stakeholder orientations...Trust refers to a person's belief that others make sincere efforts to uphold commitments and do not take advantage of that person given the opportunity...If employees, suppliers customers or others having contractual relations with a firm believe that its managers intend to let them down or will do so because of incompetence, they have no grounds for trusting those managers (Child & Rodrigues, 2004, p143).

The overall focus of this paper is trust as related to organizational design and management within the broader domain of governance. The paper has three aims: the first aim is to present a selection of ideas and writers on trust; the second is to present findings on the Dalrymple Bay Coal Terminal (DBCT) case study research which focused on relationship management where trust emerged as an important element of relationships. The third aim is to discuss and draw insights from the research.

Our interest in trust came serendipitously. In the course of collecting workshop data on core values for managing change (Whiteley, 1995), we asked employee groups over a broad range of industries and business types what they valued most from their managers. One finding repeated itself with almost 100% consistency. Trust was the most valued quality in employee/management relationship. Confusingly

though, almost every time trust was identified, honesty and integrity were also identified. There seemed to be a connection between these concepts such that they 'went together' in the minds of our respondents. We have since come to recognize that these two qualities represent the 'worthiness' that is a qualifying condition of endowing trust. As Handy (1993, p193) explained "Organizations who expect their people to trust them must first demonstrate trustworthiness...Individuals will not be trusted fully until they prove that they can deliver". Governance and trust are connected in several ways and in this paper, trust as it relates to the reputation of those in a governing position plays a central role.

In addition to the study of relationship management at DBCT reported in this paper, we have an ongoing research which involves the use of the core values method (Whiteley 1995) to achieve cultural change in a international service organization operating throughout Australia. One of the hallmarks of scholarly writing is a definition of the subject matter, taking into account the various ideas and theories of those considered to be expert in the field. When writing about trust, a problem immediately presents itself. This is the problem of 'knowledgeability' (Giddens, 1984, p3). "It is the specifically reflexive form of the knowledgeability of human agents that is most deeply involved in the recursive ordering of social practices". Another way to say this is that human beings 'just know' about certain elements of social life. We think that trust comes into this category. As such, one single definition of the concept of trust immediately runs into difficulties as trust is simultaneously a) socially

located, b) contextually situated and c) a part of the discursive flow of everyday life.

In light of the diversity of interpretations of trust we will present different views organized around definitional statements. We will pay particular attention to trust as a feature of governance and organizational design.

Definitional Statements

Traditionally, governance has been associated with organizational images of stability, however tenuous, regulation and reductionism. An alternative set of images comes from the management literature which addresses the metaphors of chaos and complexity theory. Youngblood (1997) talks about a new order which is essentially a rejection of what he and others call the machine view of the world (Stacey, 1995, 1998, 2005; Wheatley, 1992; Zohar & Marshall, 1994, 2004). Several themes emerge in his work such as: the world as a living web of relationships; the space at the edge of chaos which is where creativity can flourish; the replacement of an 'either/or' scheme of organization with a 'both/and' notion that embraces paradox and dissent. His thesis is that life and organizational life is a holistic system, capable of self-organization. Enabling the system are concepts such as Prigogine's (1996, p53) dissipative structures (which depicts loss of energy in closed systems until at last they reach equilibrium at which point "it is a static state, where there is no change, just stillness. Equilibrium, in fact, can be equated with death". He, like Zohar & Marshall (1994) talks about quantum organization. He talks about openness and open systems where the intention to act in the best and highest interest of those affected by one's actions, thus becomes trustworthy.

Some writers employ causal or other logic to various aspects of the trust construct. For example, Coleman (1990), Putnam (1993) and others express trust as social capital. By this they mean the predisposition for people to produce socially efficient outcomes, based on positive assumptions that allow economy in judgements and decision making; and in reverse, avoid inefficiencies due to non-cooperation. Implicit in such writings are expectations of fair or cooperative behavior from others, thus lowering transactional costs. McEvily, Perrone, & Zaheer (2003) draw attention to the fact that although trust has received much attention in the literature, a set of generalizable propositions has not been produced. An example of a generalizable proposition is trust as an organizing principle. They identify other organizing principles of authority, price and norms. They disperse several descriptions of trust throughout their article.

...trust has been conceptualized as an expectation which is perceptual or attitudinal, as a willingness to be vulnerable, which reflects volition or intentionality and has a risk-taking act which is a

behavioural manifestation (McEvily et al., 2003, p93).

McEvily et al (2003) go on to make some powerful statements about trust and its impact on organizational efficiency. Challenging the economic viewpoint (Williamson, 1985) that rational economic actors should not rely on trust when managing interdependencies and facing problems in resource allocation, McEvily et al. (2003, p99) assert that "trust in fact is a basic necessity for virtually all forms of exchange". They suggest that it is possible that in pursuing a rational economic model of organization, the import of social relations is not too well understood. Some of the early literature from an economics perspective would certainly support this. From McEvily's expression of trust as something that can be causally examined, we go on to Fineman (2003) who places trust firmly in the emotional domain.

Fineman (2003) presents a comprehensive definition of trust. His interest is in trust as an emotional element to organizational learning. He contends that organizational learning has failed to engage with emotion in organizations. He sees emotion at the core of learning and he sees trust as an indicator of the way one fits into the political and moral order. He says that what is trustworthy is essentially emotional. Fineman (2003) points to the many descriptions of trust based on power, structural relations, arguments of rhetoric and manipulation but he adds "Yet it appears, for whatever reason, some feelings of, or about, trust, however transient, are important if knowledge is to be exchanged for mutual benefit"

Trust, we can conclude is not something that is simply present or absent from a social relationship, but it is negotiative and contextually/structurally specific. Its texture is essentially emotional, involving feelings of, for example, ease, suspicion, fear, confidence, comfort or anxiety.

In such terms, trust both frames and flavours what knowledge means to different people. It shapes the worth or value of new (or old) knowledge and learning. This is sharply evident in organizational settings where trust is strained and injustice strongly felt...Instructions, rumours or organizational changes are likely to be received cautiously, defensively or cynically when authority figures work by creating fear, anxiety or hopelessness.. (Fineman, 2003, p565).

Monge and Contractor (2001) relate to trust in their work on the emergence of communication networks. They refer to the patterns of contact between communication partners that are created every time a message is transmitted from one to the other. Their approach is theoretical and includes the need for network analysis which they describe as the application of a set of relations to an identified set of entities. "Relations possess a number of important properties including the number of entities involved,

strength, symmetry, transitivity, reciprocity and multiplexity” (Monge & Contractor, 2001, p 441). As one might imagine, the backbone theories connected to communication networks are self-interest; mutual self interest and collective action; exchange and dependency theories; contagion theories; cognitive theories; homophily theories (social comparison and identity theories); theories of proximity; uncertainty reduction and contingency theories and theories of network evolution, which includes structuration theory. Importantly, as part of this theorizing, trust and ethical behavior are addressed. This brings us to Monge and Contractor’s definition which in turn quotes Burt and Knez (1996, p69).

Trust is committing to an exchange before you know how the other person will reciprocate...In a study of managers in a large high-technology firm they found that the communication networks in which two individuals were embedded, predicted the probability of a trust relationship between them. In particular, the trust between two individuals in close contact was high if other members in the organization indirectly connected the two members to one another.

One writer in particular has shed much light on the construct of trust and distrust in organizations. Kramer (1999) has suggested four important categories of trust:

- images of trust in organizational theory (trust as a psychological trait, trust as choice behavior, unresolved questions and enduring tensions);
- bases of mistrust (dispositional trust, history-based trust, third parties as conduits of trust, role-based trust, rule-based trust;
- benefits of trust (trust and transactional costs, trust and spontaneous sociability, trust and voluntary deference) and
- barriers to trust (dynamics of trust and suspicion, technologies that undermine trust, breach of the psychological contract fragility of trust judgments). In this section we talk about the first two categories of trust.

Kramer says “Despite divergence in such particulars [as definitions of trust] most trust theorists agree that, whatever else its essential features, trust is fundamentally a psychological state” (Kramer, 1999, p571).

Like McEvily et al. (2003) and Youngblood (1997), Kramer characterizes trust in terms of “...a state of vulnerability or risk that is derived from individuals’ uncertainty regarding the motives, intentions and prospective actions of others on whom they depend” (Kramer, 1999, p571).

Kramer adds to this, following Lewis & Weigart’s (1985) addition of expectations, that all persons in an interaction will act in a competent and dutiful manner.

Put a little more strongly, Robinson (1996) talks about these expectations as a psychological contract where people will have “expectations, assumptions, or beliefs about the likelihood that another’s future actions will be beneficial favourable or at least not detrimental to one’s interests” (Robinson, 1996, p576).

Governance is, we believe strongly connected to psychological issues and in particular the invisible but powerful psychological contract. Kramer resonates with this as he talks about the need to conceptualize trust as a “more complex, multidimensional psychological state that includes affective and cognitive components” citing several writers on trust including Bromiley & Cummings (1996) who write on transaction costs and Tyler & Degoe (1996) who address motive attributions when accepting (or otherwise) decisions. The notion of feeling as well as thinking is recognized here also.

We briefly turn to Kramer’s bases for trust in organizations.

He suggests first that everyone is *disposed differently*, influenced by their early experiences with others. Consequences for this include the problem of making general assumptions for groups of people. This is especially the case when individuals have experienced different interactional histories. In our research we have found that individuals with strong and recent histories translate their experiences into what is almost a priori knowledge when entering new contexts. However, we have also found that in organizations that promulgate high-trust cultures, existing knowledge and dispositions are revised sometimes radically. Kramer talks about third parties as conduits of trust and we have found that people do take short cuts of listening to others. However, like Burt and Knez (1996) we found that first people communicate from their own trust disposition and secondly, they communicate what they think the other party wants to hear. We found also that third party communication is often a holding mechanism until individuals can make their own judgments.

In describing the qualities of trust contributed from the literature, three types of trust were delineated. These were competence trust, intentional trust and behavioural trust. Competence trust concerns a person’s ability to perform to expectations. Intentional trust, the perception that the person intends to be trustworthy and not to defect from expectations. Behavioral trust is the willingness to increase one’s vulnerability to another when the other’s behavior is beyond one’s control. We propose that these types are melded together quite fluidly and form part of a complex understanding of trust where someone’s ability, perceived intention and actions are weighted as part of the social relationship.

Qualities of Trust

Based on contemporary scholarly literature and our own research we propose that trust has the following facets:

Trust is a psychological state involving perceived risk, vulnerability and positive expectations;
Trust is emotional and perceptual in nature;
Trust is context specific;
Trust is linked in some way to fairness and justice;
Trust is associated with worthiness, qualities of which need to be ascertained;
Trust activities include awarding trust, managing risk, transforming trust and withdrawing trust;
Trust is a dialogue between motives, intentions and the actions of others;
Trust involves a cyclical process of perceived motives, anticipated outcomes, evaluation of actual outcomes and resulting need for either remedial action or a revision of the partner's trustworthiness status.

As suggested by the many references to expectations of integrity, trustworthiness and positive assumptions about motives, trust is linked to principles that are not only moral in nature but also linked strongly to a sense of personhood. Also, it seems that trust is a 'human given' in the sense of relating conduct to deep philosophical issues about personhood and social and moral reasoning. Reasoning, we propose, is at the heart of our mental activities. Our making sense of the actions and apparent motives and intentions of others will be heavily influenced by the reasoning processes that have developed over time. An acknowledged expert (although not without criticism) on developmental psychology is Lawrence Kohlberg. He developed a theory of the development of moral reasoning. As individuals develop, and we are especially interested in ages 10 – 20 and over 20, they internalize their own personal moral codes. These are shaped by society's principles and social rules but with recognition that these are relative to a personal code of values.

In Figure 1, we produce an extract from Youngblood's (1997, p.121) depiction of Kohlberg's moral reasoning stages. [See appendices, Figure 1] .

A point that is well made by Baumard (1999, p204) who writes on tacit knowledge is that attempts made to take concepts such as trust and try to explain them rationally and definitionally are tantamount to "...an explicit engineering of the foundations of meaning in organizations". Moral reasoning and the perceptions people make about the motives, intentions and integrity of others must, we think, remain at least to some extent, part of the tacit domain.

In the descriptions of principles of trust that follow, we propose that some of these principles are not provable or even necessarily observable. We begin with Handy (1997, p187) who presents what

he calls six cardinal principles of trust. These are: *Trust is not blind; Trust requires constant learning; Trust is tough, Trust needs bonding; Trust needs touch; Trust has to be earned.* To illustrate Handy's approach to trust we give three examples.

Trust not being blind - "It is unwise to trust people whom you do not know well, whom you have not observed in action over time and who are not committed to the same goals. One outcome of this is that organizations need to be designed in groupings small enough for people to get to know each other well enough to develop trust. Talking about his own experience he says "My title in one large organization was MKR/32. In this capacity I wrote memos to FIN/41 or PRO/23. I often knew no names and met no people behind those titles. I had no reason to trust them and frankly no desire to"(Handy, 1997, p188).

Trust needs boundaries - "Unlimited trust is, in practice, unrealistic. We trust friends in some areas of our lives but not all" (Handy, 1997, p188). In the organizational sense a boundary can be a goal "By trust organizations really mean confidence, a confidence in someone's competence and in their commitment to a goal. Define that goal and the trusted individual or team can be left to get on with it. Control is then exercised after the event, by assessing results, rather than before the event, by granting permission" (Handy, 1997, p189). Handy advocates organizational designs where, within a holistic design, units can, within their boundaries, be trusted to "find our own means to some agreed results [then] we have the room to explore, to put our own signature on the work.

Trust requires constant learning - Handy reminds of the importance of personal moral reasoning when he says "Every individual has to be capable of self-renewal. The ability to search for oneself and to regard learning as a continuing part of life, which was the justification for trusting someone in the first place becomes one of the keys to its success ...Learning, however, like trust can be squashed by fear" (Handy, 1997, p190). He also goes on to remind us that trust requires unconditional support and in one of the examples from the coal terminal study which we bring you later, we can see that effort is put in even to support breaches of trust.

Trust has to be earned - This is one of those statements made by employees and managers whenever trust is mentioned. As Handy says "This principle is the most obvious and yet the most neglected. Organizations who expect their people to trust them, must first demonstrate that they are trustworthy" (Handy, 1997 p192).

Knowledge Management and Organizational Learning as Governance Issues

If employees have limited trust in their companies, the ability of corporate managers to have their intentions executed will be impaired. There is considerable evidence that such trust is today at a

low ebb... [An] underlying theme is that greater attention to the trust that employees have in managers would help to achieve a long overdue realignment of corporate theory and policy (Child & Rodrigues, 2004, p143).

Governance is an interesting construct. At one time it was redolent of concerns about the composition and brief of Board of Directors (BOD). In turn BOD's were associated with keeping organizations legal, looking after the interests of shareholders and, to a greater or lesser extent, supervising duty of care arrangements for those in an organisation. Recently, such a narrow perspective has come under scrutiny and the concept of governance has been broadened to include 'administrative corporatism' (Öberg, 2002), the expansion of 'single bottom line' accounting to double (social accounting) and triple environmental accounting responsibilities of the firm (Elkington, 1998, 2003) and issues of social capital (Purdue, 2001). Notions of social corporate responsibility, both internal and external, have become associated with governance (Lorenz, 1992). We see governance working as a complex adaptive system where the competing claims on organizational energy result in constant adaptation in service of an organization's governing principles (Wheatley, 1992; Zohar & Marshall, 1994). In this section, trust will be considered within the knowledge and learning domains of governance. Argyris and Schön (1996) present two models of theory-in-action that determine many of the governance issues concerned with the principle of trust, honesty and organizational learning. Following this, trust will be considered in terms of competing theories from economics that would also have a direct effect on the recognition of the need for trust and its provision within organizational design.

Cross and Prusak (2003, p457) make a strong statement about the need for trust in a knowledge context. "People usually get knowledge from their organizational neighbours. The knowledge market depends on trust, and individuals generally trust the people they know. ...people will buy whatever knowledge the person in the next office may have rather than deal with the effort and uncertainty of trying to discover who in the company may know more".

They also say that trust is the second important element of a social context, following power (although we propose that employee power is sometimes underestimated in favour of the more accessible institutional power). In each of our studies we could identify individuals who had enormous influence, yet preferred to play a covert role in controlling the flow of information.

Our data from the DBTC research supports Cross and Prusak's assertion that trust almost plays an arbitrator role in the sharing of knowledge. In the DBTC case, trust in management was at the core of

the high-performing culture. From respondents' comments, a sophisticated and rather tacit understanding of trust relationships was very evident. What was also evident was the constant evaluation and appraisal of trustworthiness both within teams and between teams and management.

Knowledge to a great extent flows to and from places. Either it flows internally or it becomes the currency of external networks, whose members trade their knowledge and information. Always bear in mind that knowledge is a scarce resource (Van Wijk, Van Den Bosch, & Volberda, 2003), especially when situations are engineered, which they often need to be for technical reasons. Echoing Youngblood's (1997) notion of complexity, although coming from the very different perspective of economics, Bradach and Eccles (1989) agree that the previously delineated control mechanisms of price, authority and trust now need to be considered in a more complex way. They identify trust as a control mechanism of a special and general nature. "Trust is a type of expectation that alleviates the fear that one's exchange partner will act opportunistically. This expectation can not be raised simply by rational evaluation" The authors quote Arrow (1974, p23). "Trust is an important lubrication of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on the other person's word".

Although writers agree that trust usually begins with an expectation of non-opportunist behavior, they also agree that any trust given is provisional. Validation of expectations is the glue that holds trust together and trust links become stronger when validation is repeated. A critical comment about more formalized generators of trust such as structures, systems, processes and regulations is that whilst trust may well be generated by the explicit and transparent nature of communications, as soon as they come to be applied in practical situations which inevitably rely on human interactions, an additional dynamic enters the formal arrangements. Formal arrangements and organizational culture together represent a strong climate within which trust relationships must operate. Sometimes these can be challenging in ways that managers are not always aware. To demonstrate this point, we bring you the work of Argyris & Schön (1996). The authors have developed their 'theory of action' that enables organizations to learn and grow. First we will briefly present their two models of organizational thinking and action, *Model I and Model II Theories in Use*. These are, respectively, linked to single and double loop learning. Following the description of the models, we will relate them to trust.

Argyris & Schön (1996) propose that human beings hold two types of theories of action about effective behavior. Although individuals and managers may espouse their preferred ways of acting, Argyris & Schön found that when people deal

with issues that are embarrassing or threatening, their reasoning and actions conform to behaviors and principles which they call Model I. Many of our workplace conversations and some of our studies, including the Waterfront (Whiteley and McCabe, 2001) and DBCT study which follows, support the existence of such reasoning and behaviors. Unfortunately, it seems that very often it is the management group (members of which have *perceived* power to command and control) who are often cited as exhibiting some of the thinking and actions in Model I.

What we have found is that, especially in traditional management environments, formalization and the regulatory oversight given to managers renders them vulnerable to managing by goals and selective sharing of information. This is often connected to what we call a 'blame culture'. Within such a culture, the need to defend oneself against exposure, mistakes or even actions is paramount. Argyris & Schön (1996, p100). express such actions as 'defensive routines' which have a logic which follows a set of four rules:

Construct messages that contain inconsistencies;

Act as if the messages are not consistent;

Make the ambiguity and inconsistency undiscussable;

Make the undiscussability or the undiscussable also undiscussable.

This particularly affects people who have high integrity and are willing to accept responsibility (remembering that integrity is high on the most valued list of employee attributes of their managers). To show integrity in a Model I environment means taking on the manager who prefers not to discuss threatening or embarrassing issues. To not do so affects the individual's ability to act in keeping with his or her integrity. Argyris and Schön (1996) call this the double-bind. Again, traditional management renders Model I possible. Often employees come up from the shop floor and achieve management status. Managerial prerogatives come with it. Regulation and also the ability to defend prerogatives through judicious restriction of power makes preservation and the need to defend actions in a Model I way attractive, if not necessary. We see what Argyris and Schön (1996) call self-sealing behaviors and also self-fulfilling prophecies.

Thinking about trust, one can see that organizations who operate Model I environments are not setting themselves up for the requisite expectation that others will behave with integrity and honesty. Two things are then possible. First, employees might (or might not) decide to play the organizational game on the basis that they are somewhat powerless to change things. Secondly, as trust in people is a human given, an important part of the moral codes of individuals, they may see their 'real' environment as being the informal

organization where social relationships and trust can be built.

Model II theory in use could not be more different as we see in figure 2. [See appendices, Figure 2].

Having explored the qualities of trust, what writers say about trust and the various organizational models such as Model I and Model II, we report on an empirical and exploratory study.

Dalrymple Bay Coal Terminal (DBCT)

This case was chosen for two reasons. The first is that this organization operated on an assumption that each person in the business was an intellectual asset. As such autonomy and responsibility was given to individuals and also the teams within which they worked. The 'theory of the firm', on which the CEO acted, was complex adaptive systems following Stacey's (Stacey, 1998; 2003) model of close to and far from certainty and agreement. Every team in the organization was required to submit a business plan and part of that was to generate team values and behaviors that went with them. After a new CEO was appointed in 1997 all employees were appraised against the proposed culture of the organization. Restructuring left the usual negative residue but at the time of the study, this had somewhat dissipated. In other words, this was a positive environment within which to discuss trust and relationships.

Secondly, almost all personnel had worked in traditional primary sector organizations and it was likely that they had experienced the sort of environments that drew criticism from writers such as Child & Rodrigues (2004). It was possible for respondents to compare the autocratic environments most had encountered in the traditional management of the primary sector with the autonomous but accountable environment at DBCT.

The company Dalrymple Bay Coal Terminal Pty Ltd. is situated thirty-eight kilometres south of the central Queensland City of Mackay in Australia. Five coal mines feed into the terminal which occupies a site spread over six kilometres which operates 24 hours a day, seven days a week and 365 days a year. The deep water port services bulk carriers exporting coal throughout Asia. Since 1998 throughput rose from 26 million tonnes per annum to 40 million in 2001, and was on track to reach 55 million by 2004

Methodology and the Research Process

The research asked two questions. How important are relationships in this organization? Is there a risk to the organization if relationships are not perceived as effective?

The research adopted a constructivist ontology, interpretive epistemology and a qualitative methodology. The basis for this choice was the approach that relationships in this study were seen as implicit, tacit, and part of a social exchange

relationship (Blau, 1964). The assumptions were that personal constructs of reality were of interest to the study. Because of the tacit nature of the knowledge being sought, there was an intention to encourage respondents to interpret their 'theories' of relationships as well as to recount their experiences. Supporting these two intentions were protocols of symbolic interactionism (Blumer, 1969; Mead, 1963, orig. 1934) and phenomenology (Schutz, 1967).

As a theoretical perspective as well as practical procedure the grounded theory method was utilized (Glaser, 1998; Glaser & Strauss, 1967). According to the criticisms of Glaser, that theorists 'rewrote' grounded theory to suit their research, the modified grounded research was adopted (Whiteley, 2004). What this meant in practice was that the concept of 'true emergence' was recognized as being unobtainable as the study already selected the conceptual framework of relationships. Given that constraint, the other elements of grounded theory were adopted.

The research was carried out in five stages as follows:

Stage 1. Focused literature search on relationship management.

Stage 2. Familiarization with the organization through documentation and anecdotal evidence.

Stage 3. Semi-structured interviews with managers and operatives.

Stage 4. Interpretation and analysis of findings.

Stage 5. Insights on the research questions.

As the organization was distant, it was necessary to collect the data in one exercise. Managers and employees on all three shifts were interviewed according to their availability and access to various work-areas. Reported in this paper are twenty-four interviews carried out with the employee category which was an across the board sample, minus senior managers. All respondents had shop-floor duties and they were categorized as being implementers of management decisions. Data were collected through semi-structured interviews but as the research progressed it was recognized that respondents were more comfortable with conversational type interactions. Apart from making sure that the central issues (importance of relationships and nature of relationship risk) were included, we followed the lead of the respondents.

Data were analysed in accordance with the particular type of content analysis required in grounded theory. The procedure was as follows:

Step 1. Conversations were recorded in their entirety. They were transcribed verbatim.

Step 2. The unit of meaning adopted was an utterance, a 'chunk of meaning'.

Step 3. Utterances were invivo coded.

Step 4. Codes were allocated to categories of meaning using respondents own labels

Step 5. Coding happened until all codes were included. Constant comparison of codes within categories and categories themselves was done.

Step 6. Key Concepts emerged. Trust was linked to Giddens' theory of 'active trust' (Giddens, 1996) and Argyris and Schön's Model I and II theory of action (1996) and this constituted the theoretical sensitivity component of the study.

Data were managed using Atlas Ti workbench (Scientific Software, Berlin, www.atlasti.com). Facilities allowed documentary control, quotations as attached to codes, code network facility, family (category) manager with various display modes and memo manager which allows for documentation of the research procedure and also notation of emerging codes, categories and insights. It is important to note that data management is an automatic sorting and retrieval device. Decisions about units of meaning, population of codes and categories and the theorizing of concepts are researcher activities.

Insights

The first insight is that the respondents had an integrated and diffuse understanding of relational elements. However, trust seemed to play a pivotal role in terms of what might contribute to its loss. Here is a team leader telling us how trust can be lost. Notice that attached to trust are several other constructs. Not being autocratic is one. The need for discussion is another. Recognizing the intelligence of the workplace means that people can and should be exposed to more information. There is a need for explanation and the expectation is that people can understand risks. There is a need for empathy and understanding. Failure to discuss, explain, involve, empathize will lead through a lack of communication to a loss of trust. Respondents put it this way.

The wrong way would be to do it autocratically, just to come across the top and say that this is going to happen, this is in place now without having the discussion, or communication, We have an intelligent workforce and people in the workplace today are a lot more intelligent and exposed to a lot more information than they were previously. If we explain to them why we're doing it, they'll have an understanding then they have a common reason for supporting it. And that's the difference, because if we come in autocratically and say 'this is got to be in two weeks', the guys go 'why, why do I have to do this'. Whereas if you sit down and say to them this is the reason behind it, these are elements, the legislative elements, they understand that terminology they understand this risk, they're telling you to manage the risk, yeah it will impact on your days where one day you'll have to fix 'em up on the gate or a guy will have to wait 30 minutes for you because you're on another job...

That's what they're knowing but my big point at this time is they need trust and, communication

every day of the week. Trust is, 'you're not going out there on the wharf and sitting for two hours when you're supposed to be out there doing work'. 'Trust is, I'll have trust in you to do what you have to do during the week, you do it'. I'll do what I have to do for you, and the foundation in this process is trust. For this point of view is the trust that we actually treat 'em with enough concern or enough importance to communicate the process through to them in the organization. That's one of the reasons why I like working here.

It was difficult to extricate trust from other constructs and so a concept map is shown of the major relational categories to emerge from the relationships conversations. Although the focus here is on trust, one or two quotations from the other relationship categories will be presented. Barriers to effective relationships were intimated within other categories of meaning but the ones in figure 3 were identified particularly as barriers.

[See appendices, Figure 3].

The quotation below is about trying to change from what the respondents called 'command and control' leadership. Throughout the study, references were made to the difficulty of adapting to a participative style of management. This relates to trust in the sense that respondents recognized the time and energy needed before people could trust the participative culture.

From there to there you've probably got the riskiest piece of leadership management that you'll ever experience. It's very risky to go from control and command to getting people to participate in the business. It's such a risky step and this is why a lot of organisations don't take the leap because to go from here to here you've got to be prepared to make mistakes to get it wrong. You've got to be prepared to pick em up, and help em forwards and you've got to let go of some stuff. Some things might happen and say not the way that I would have done it but another guy would say to people who work with me, are you sure they can shift and I say yes, is what you're about to do is it going to stop that process? Mimicking the other guy. 'NO', OK well then let's give it a go, I still help them with some things and we help them to have a healthy discussion yesterday about in a issue but it's in order to help them to think their way through to make a decision, I didn't take it off them but I said I've got some issues with it, I look from the dark side and I tell them what I see and they go away and they fix it.

The next category was the most supported and the most difficult to isolate from issues of trust. Figure 4 shows the wide range of issues under the communication/consultation construct.

[See appendices, Figure 4]

There was a direct link to trust in many of the responses we categorized as „communication/consultation“ Note the two constructs 'communication/consultation' appeared to go together in the responses.

First off you cannot change the world, and I try and understand that the process, and the process is communication and consultation. The principles there about listening and the thing critical for him to move forward is to be able to listen...

Yeah...to me it just sounds like a normal part of business, communicating with whoever that's the key to success. That's why I reckon this place is to really good to work at because your conversation is on the organisation. In (ABC company) with the hierarchy you wouldn't have that conversation in the organisation. It's prescriptive it's not a conversation it's one line of communication.

Always try for open lines of open communication with people, it may seem trivial to you but if you share information and it only takes fifteen minutes and it makes a big step to sort of build that relationship with the person because you're sharing that information. They sort of tend to trust you because you are sharing things that are going on as well.

Actually for us it's our whole job, disseminate information, questioning it, gathering information. Yeah, I think it's important. You know like in where you are now, where you are going to get to, how much you can improve. // I think talking is an important part of building a relationship and building understanding for people, people need to understand what their role is and what is expected of them, you have two ways, communication is the best way to gain understanding

Two more categories emerged from the broader relationship questions. These will be shown briefly mainly to give the tenor of responses as we go into the trust construct. Building relationships seemed very important to the respondents. [See appendices, Figure 5]. Here is an example of positive relationship building in the experience of a respondent who had worked in several other organizations. Relationships inside of top-down management In this organisation if you look at our telephone directory you organise alphabetically by first name we don't differentiate between rank or position or size of desk we pretty much all muck in together, we tease each other and have some fun and we can do that with everyone in the organisation it doesn't matter we don't differentiate it kind of becomes a bit of a family. In that way relationships are quite important. Around here you learn a lot about people whether you want to or not, some call gossip but you do tend to know a lot about people so you tend how to treat people and when they need a bit of help and support and when they need to be left alone so it becomes a little bit more intimate.

I worked in (ABC company) for 10 years and just listening to 'name' then, I had a lunch with a new manager for HR over in services and I've seen a lot of changes in (ABC company) since and (ABC company) merged and he said one of the significant

changes was when he come in, the man took over the top job for a little while and what happened was that all the programmes were just disseminated across the whole of the (ABC company), [several thousand] people, when I was in there were [many] people employed by the XY group of (ABC company) including of course almost every country in Europe. Even so, they just sent all of these programmes out so that they had all of these management leadership, communication right through the organisation. Anyway, they get the big paintbrush out and they put a big lick on everyone. And it didn't make a diddly squat of difference to the way we did business but they disseminated this stuff right across.

Respondents identified some elements of organization which we have conceptualized as 'enablers'. In Figure 6 below, the sort of enabling experiences are in tune with some of the implicit issues contained in the literature on trust and trustworthiness. [See appendices, Figure 6]

One particular issue that seemed to foster great trust in the organization was the way in which teams and team members were a) expected to learn about the business in most respects and b) were required to be part of an encircling loop of information. This meant supplying it and also asking for it. Here are some of the comments.

Autonomy OK I understand, I understand, previous companies who I worked with before here might have been the old traditional style that the companies used, you were told what to do and you basically had a supervisor and were told what to do and you did it. Here you've been given like autonomous or a free rein to make your own decisions and I have a great deal of satisfaction with that type of approach. I feel, it makes you want to do your best for the company. You can make the decisions and things like that, I don't know how to explain it...you feel more a part of the company in a team building sort of structure. I definitely think so, well I prefer working in this type of environment, that's me personally.

Knowing the business I'd agree with that, if you are going to make your own decisions or have to ... you need to know how you relate to other parts of the business and how the other parts work... Commitment how would I get you to be committed? I'm not sure, it's nearly like a sort of culture sort of...to give them full support and make you understand what it means, the task that you're doing, that the outcome should mean something, it takes a company to such and such or does whatever it does, so that you would understand what the outcomes should be. // we don't do safety here, we train our people to work safely here, we don't do safety, we don't come into work and load a shift and then do safety, it's all communicated as part of the way we do business.

The next category and the subject of this paper is trust. The trust category itself emerged a variety of

issues. These are shown in a semantic map in figure 7.

Involvement was a strongly supported issue and this ran throughout the whole of the relational data.

Learn their language, gain trust, come back to trust again and involve himself with them, social dos, at barbeques or at team briefs come along have a yarn with the boys see if anybody has problems if he's got any problems come out with them and that's how you'll gain everybody's trust and they'll look up to you if you come up and be forward with them not nastily but straight down the line, this is what I want, this is what we're going to do what do you think?

[See appendices, Figure 7]

Many comments were associated with trust as lost or not held at all and this supports much of the literature cited earlier and in particular (Child & Rodrigues, 2004) who talk about when trust is breached and also (Kramer, 1999) who talks about barriers to trust.

But I guess it [trust] would be more of a problem if it wasn't there so I guess, things like that can get to problems, I can't trust that guy what he's saying and doing I wouldn't trust you if you were, the same things, had values that I didn't value, maybe you told me different and telling someone else different stories.

Trust's a big with me because I've been here in the years when you couldn't trust anybody. That's no way to gain respect for anybody. I would tell them you've got to get the respect of the blokes and to that you've got to go their team briefs make yourself one of them. It's hard when you embark on a new vision or direction it's hard to get the existing culture out if it, when you've had so many years of being trenched in negotiations and things like that you know people's mentality, the company never puts forward its best offer.

A similar reaction was made when talking about losing trust. Although these comments were selected because they particularly mentioned trust, it was an underlying principle in, for example, communication/consultation, enablers and building relationships. Below is a selection of responses about losing trust.

Losing trust Say I've lost their trust how could you get back on a good footing again, it might not even be your fault and you might have ...not known that you were doing it but let's say for example you knew something was going to happen and you were very busy and you forgot to tell them, or even it went around or something ...probably by being open and explaining what happened, I suppose and proving to them that it was a mistake, and you'll maybe try a little harder next time.

Yeah, I suppose that could be a fairly big one if you lose that, if you lose someone's trust or if you weren't being honest, I'm talking about fairly big things not just minor. // I think he'd have to be aware of why they're like that, where they've come from and

he can understand especially working in the mines. When you initially look at why people are like this you think you're just causing trouble, but when you find out why, and most of the time it's because trust has been broken in the past and the only way to mend it is to take a bit of time and sharing and getting them involved 'what do you think'? Some people mightn't want to come on the journey but you have to give them an opportunity I suppose. It's a difficult situation and it won't happen overnight and it's something that you have to grow and grow.

When you're working in that sort of [low trust] environment. Now look I'm a realist I know that there are things that you want and things that you can do but when you reach that level of mistrust then what happens is the union movement say the bloody organisation they've shafted us we've only got part of our increase so what are they going to do in the next negotiation so what you do is you've created an environment of mistrust, so you've created an environment, a dishonest environment, everybody is wary of everybody else 'I'd like to be able to all turn up and come into the room for the discussion because you put on tea and coffee biscuits and it's better than the canteen and they'll turn up and leave, and put on lunch and a few beers afterwards people will always turn up but the level of cooperation is always less than in an environment where you've got trust, honesty, respect and those sort of common values. Now the very person who's not providing the training that they have promised is now Vice President of [DEF] company.

Not too many writers have addressed trust as an emotional issue. An exception is (Fineman, 2003) cited above. Responses supported the emotional nature of trust as you can see by a selection of comments below.

When you say their trust, their perceived, their values, or if they perceive you to have certain values, if you broke those values it may go right across not only this project but a number of projects because you've either broken that trust or their values of you, it, how can I explain it, I personally put a lot of faith in people's values, most times when you sit down and talk to people face to face they come back to their values, and it's only sometimes when you're in a meeting or you're in a position where they put up a shield in front of them and they are viewing it as if this is what people expect of me so therefore I've got to portray this sort of image, but if you get them down and talk to them one on one, and they come back to their values, and I reckon they are really a strong driver for their commitment to projects and the way they actually work at work, you've got to get to a stage where they treat their workmates at work the way they treat their family at home and if you can get that and they enjoy coming to work because they enjoy being at home with their family.

You've got to get to know people, especially the guys in my team, I like to know what hurts them,

what makes them feel good, and if you can continue making them feel good then they will put in their hundred and ten percent effort. If you hurt them that takes a lot longer that takes a lot longer to rebuild and , to get one hundred and ten percent out of them, to get a hundred and ten percent out of people you've got to know what actually encourages them to keep going, if you do something very negative they might get that but it will take a long time to get that credit point, if you want to call it emotional credit points, they can credit, that's why I like to work with my guys you know, is to actually get to know them, know what they like to do everybody's got their strengths and weaknesses I expect, so you've got to be careful what you do with people because they're , in some cases they're quite fragile, especially when you're dealing with dealing with information like trust and values.

The soft area which is your emotions and relationships in fact back on to the success of the hard areas in a big way, in a big way. That's my perception of it, you can get in our field of expertise down there you can get people that may not have the best technical ability but are willing to put in one hundred percent and to make them go and find that technical ability, they may not have it themselves but they can find it, they can get the project done and get the job done very successfully, you could go the other way and have someone who is very technically orientated but cannot , only puts in a ninety percent effort , and sometimes those people are more hard to manage than somebody that you can be emotionally connected through values or things like that.

Kramer's (1999) proposal that people trust procedures and, to some extent formalization was supported to a degree but the responses were mostly values-related which supports the later work of (Elkington, 2003) on trusting values. In fact the values and trust constructs seemed to be used interchangeably by respondents.

Trust in others and help out. You have skills, use them, use them up, the boys get into trouble out there and they need a hand you know in yourself whether you're busy or not or whether that can be put back, you don't have to ask your boss if you can do this and this and this we make all the decisions ourselves you've got to be honest with yourself Alma, you've got to say well I can do that tomorrow but I don't really want to help those blokes, you know conscious decisions like that, we don't have a lot of that, you pitch in, you help out. I tell you what 99 per cent of the time the blokes will do it back for you and we don't rules on overtime, if the job goes overtime we're there we don't have to say we're there we're doing that.

Trust in procedures The trust area is fine and our managers say we've got to trust you guys to do the right thing. There are certain areas in the site where things don't get done correctly and we talk and talk and talk in meetings about it to try and get things

resolved and the managers still come back and say ' well what do you guys reckon we should do, what do you think is the best thing' and I say ' follow the procedure and the rule that's written down and until that's changed stick to that but their idea is, no, we trust you guys to sort of do the right thing, you might have three doing the right thing and two not doing the right thing until the system breaks down but the managers won't come out and say well you two are within the procedure, go back to the procedure and do it.

Oh yeah, if you say you're going to do something or I'm going to look at it, at least look at it, if you say I'm gonna do it well people expect you to do it, he said when he had a look at it down here he said I will do something about this standing out in the weather like that and dust is <*shit>, that's the word he used, and he said I'll do something about it, I'll get the planners on it, and it's going out for costing and everything and the money is in the budget, and we are going to get a control room but it's taken 20 years, the other management used to um and ar.

Discussion

There was no ambiguity about the consequences of trust. As Child and Rodrigues (2004 p143) said, "If employees, suppliers customers or others having contractual relations with a firm believe that its managers either intend to let them down or will do so because of incompetence they have no grounds for trusting these managers". Although there is a case for employees having trust in formal procedures because of their transparency and impartiality (Putnam & Fairhurst, 2001), we are constantly reminded in conversations with employees that it is managers who 'act for' formalized policies and processes. Perhaps this is why there was so much vehemence when respondents talked about their disaffection with autocratic management.

The image suggested by the data was that of employees who were cognizant of the importance of relationships in the organization. Unusually, they expanded their social relations to encompass their formal activities as well as the informal ones where social relations often reside (Griffin & Stacey, 2005; Stacey, 2003). The reciprocal relationship within teams and with managers was in evidence and this supported Blau's (1964) classic theoretical work on social exchange and power. The catalyst for social exchange and a focus on relationships in this inherently technical and engineering organization was the organizational environment and in particular its power posture. Using Argyris and Schön's (1996) Model II theory of action, power was seen from the inside to be devolved to an acceptable extent to teams and individuals. Their accountability principle was 'the good of the business' and they seemed to be

self-organizing up to the point when they called in management expertise.

The data stimulated thinking about Giddens' (1996) theory of generative politics. He is talking about 'active trust' and although his main focus is on government and society, he does not delimit his theory to this context.

Generative politics is a politics which seeks to allow individuals and groups to make things happen to them in the context of overall social concerns and goals (Giddens, 1996, p233)

Elements of generative politics include the following as adapted from Giddens, (1996, p6).

Seeking to achieve desired outcomes through providing conditions for social mobilization or engagement.

Even though DBCT had successfully engaged every employee from executive to operator in caring for the business, the spectre of autocratic management still loomed large. It permeated almost every conversation. The fear that a change of management would result in returning to 'the old days' was very real. The impression was that individuals and teams in the organization felt socially engaged. Throughout the conversations there was an unspoken but almost visible fear that conditions might change. The current circumstances appeared to allow trust to be maintained but there was almost a provisional quality to this. The idea of a cyclical process of endowing trust, validating it through experience and then deciding to maintain or modify the trust endowment came through strongly in the study.

According autonomy to those affected by specific policies and contexts.

The concept and appreciation for autonomy was widespread. Of the conversations, autocratic management was the most reviled style and, almost like trauma memory, respondents could cite instances from as long ago as thirty years with clarity of detail. The implication was that individuals could not be trusted to do jobs without being 'told to do this'.

Encouraging the principles of ethical action.

The data did not explicitly emerge conversations on ethics but tacitly, particularly on the point above on autocratic management, there was a feeling that it was not morally right to 'treat us like monkeys'.

Decentralizing political power with the requirement of bottom up information flow and the recognition of autonomy.

It was clear at DBCT that a new social order had been put into practice. Expectations were made of individuals and teams in the organization to know the business, make decisions for the good of the business within their own realms and, if information was not forthcoming, always ask "why" and expect an answer.

We can say, looking at the case organization that there was an environment of active trust. Hard on the heels of that statement was that active trust was always provisional. Endowed trust was only good up to the last transgression. Although trust was not automatically lost, the results of remedial efforts to regain lost trust were under scrutiny. In a previous study (Whiteley & McCabe, 2001) we found that talking about 'management' and the shortcomings thereof held centre court in the conversations. It was interesting in these conversations that the main topic concerning managers was the option to call them in for some sort of advice or arbitration.

Future Research Agenda

There are several areas that would benefit from further research. This study was a broader study of relationships, within which trust emerged as a priority for employees. From the literature, several qualities seemed to indicate the character of trust. Research to further explore organizational environments for their compatibility with trust requirements would be useful. Secondly, within the economics domain, attempts to generalize McEvily et al.'s (2003) trust as an organizing principle are being conducted. Replication of such studies in the

Australian environment would be useful for quantitative researchers.

In the psychology area Kramer (1999) has identified many kinds of trust including role trust, rule trust, category-based trust and third-parties as conduits of trust. Empirical research to support his powerful theories would benefit the domain.

The governance discipline with its interest in business, government and society/community offers rich fields of study in the trust domain. Giddens' (1996) idea of active trust could be studied in two ways. The visible elements of governance and organization are structures, systems processes and other regulatory arrangements needed to keep organizations safe and legal. Less visible elements are in the tacit domain. As Argyris (2004) has maintained throughout his and Schön's theory and empirical studies in organizations, sometimes senior executives are unaware of the discrepancies between their governing principles (espoused theories) and actual behaviors (theories in use). We have found in our studies that employees 'see' theories in use not only as the actions intended but also as the actions that are filtered through the lens of previous experience. Research into the match between what managers and executives espouse/practice and the received message interpreted by employees would allow deeper penetration into trust environments.

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Appendices

Stage	Primary Behavior	Description
Conventional reasoning (Ages 10-20)	Decisions based on a combination of internal guidance and social rules	Morality is partly internalized, but still largely based on social norms
Interpersonal Norms Social System Morality	Gain approval/avoid disapproval Conform to social rules	Trust caring and loyalty to others shapes reasoning Social order, law, justice and duty influence moral reasoning
Post-conventional reasoning (Ages over 20)	Decisions based on personal moral code	Morality is completely internalized and not based on others' standards
Community v/s Individual rights	Apply society's principles	Values and laws are understood to be relative and can be changed. Some values are understood to be more important than society's laws.
Universal Ethical Principles	Apply universal principles	Moral standards are based on universal human rights. People follow their conscience even though it may involve personal risk

Figure 1. The Development of Moral Reasoning (from 10 onwards)

Governing Variables	Action Strategies	Consequences for Behavioural World	Consequences for Learning	Consequences for Effectiveness
Valid Information	Design situations where participants can be origins of action and experience high personal causation	Actor experienced as minimally defensive.	Disconfirmable processes.	Increased long term effectiveness.
Free and informed choice.	Task is jointly controlled.	Minimally defensive inter-personal relations.	Double-loop learning.	
Internal commitment to the choice and constant monitoring of its implementation.	Protection of self is a joint enterprise and oriented towards growth	High freedom of choice, internal commitment and risk taking.	Frequent public testing of theories.	

Figure 2. Model II Theory in Use (Argyris & Schön, 1996 p118)

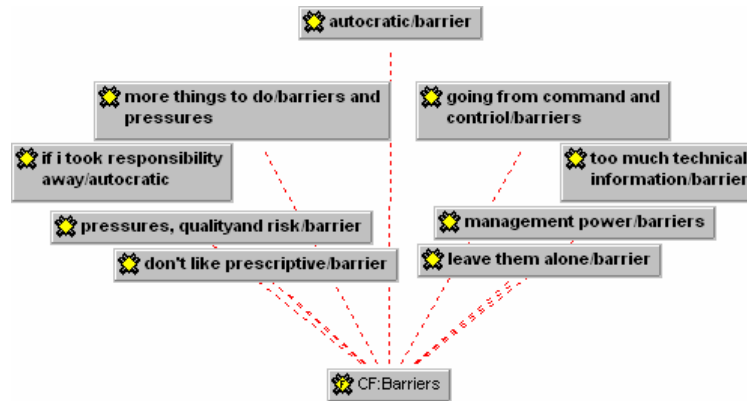


Figure 3. Barriers to Effective Relationships



Figure 4. Communication/consultation

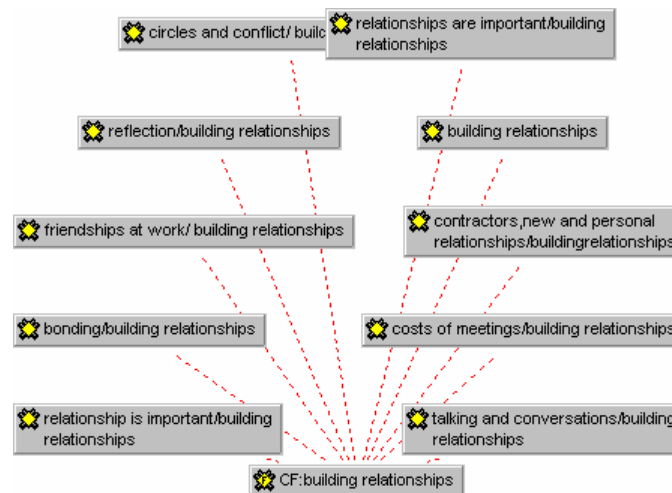


Figure 5. Building Relationships

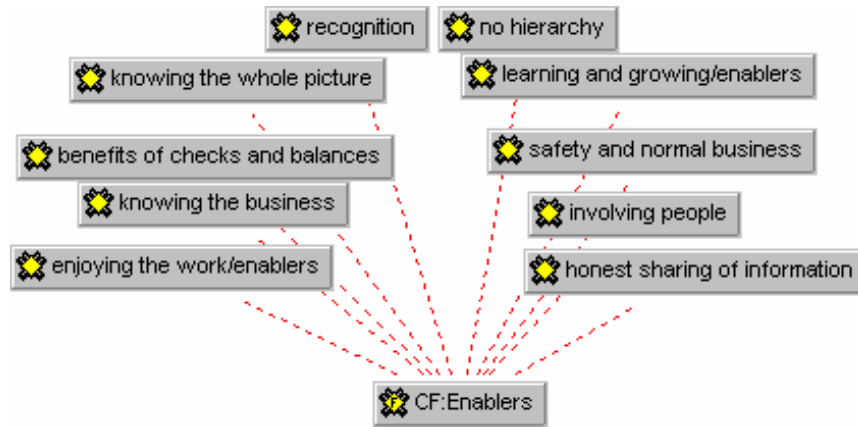


Figure 6. Enablers

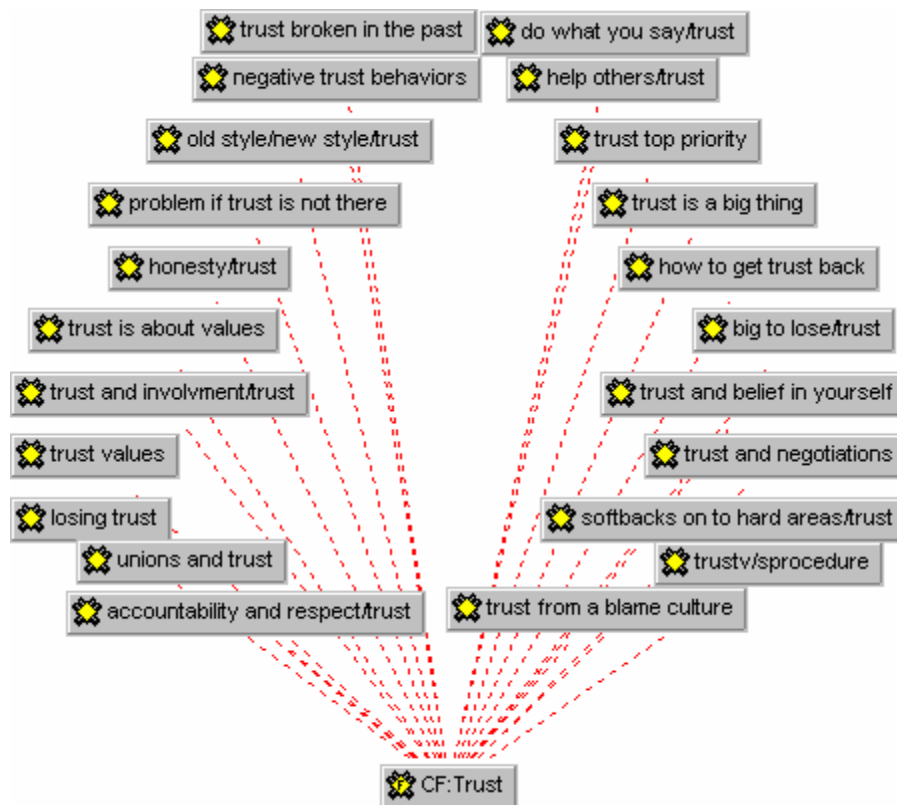


Figure 7. Trust

UNDERPRICING AND CORPORATE GOVERNANCE - EVIDENCE FROM TAIWAN SECURITIES MARKET

Tzong-Huei Lin*

Abstract

To enhance the corporate governance of listed firms, Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002, have to set up at least two independent directors and one independent supervisor who possesses financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market. Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricings of IPOs after 2002 are significantly smaller than those of before. This shows that the corporate governance can reduce the investors' uncertainty about the IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs. This study contributes to the literature in the following ways. First, as Ritter and Welch (2002) suggest that future progress in the IPO underpricing literature will mainly come from agency conflict explanation, this study provides evidence about the effect of corporate governance on IPOs market. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

Keywords: under-pricing, corporate governance, initial public offerings (IPOs)

**Department of Accounting, Yuan Ze University, Chung-Li, Taiwan 320, (886)-3-4624216, stanley.thlin@msa.hinet.net*

Introduction

Since 1997, the Asian financial crisis has deeply affected the development of emerging markets in Asia. Johnson et al. (2000) find that measures of corporate governance, particularly the effectiveness of protection for minority shareholders, provide powerful explanatory ability for exchange rate depreciation and stock market decline better than do standard macroeconomic measures. In 2001 and 2002, a number of corporate scandals in the U.S. and European have shaken the investors' confidence in the global financial market.

In order to enhance the development of capital market and to encourage economic development, the Securities and Futures Bureau of Financial Supervisory Commission of Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market.

Since the independent directors and independent supervisors may play a good role on monitoring the firms, outside investors will have more confidence

on the IPO firms. As a result, I expect the underpricing of the IPOs after the implementation of new rules would be smaller than that of before.

Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricing of IPOs after 2002 are significantly smaller than those of before. This is consistent with the expectation of the hypothesis. It implies that corporate governance can play monitoring roles and enhance the confidence of the investors on IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

This study contributes to the literature in the following ways. First, this study provides evidence about the effect of corporate governance on IPOs market. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

The remainder of this paper is organized as follows: section two discusses the related literature and constructs the hypotheses, section three

discusses issues about research design, section four is the empirical results, and section five provides a summary and conclusion.

Literature Review and Hypotheses

Several studies documents that there exists underpricing for initial public offerings (IPOs) firms (Stoll and Curley, 1970; Logue, 1973; Reilly, 1973; Ibbotson, 1975), researchers also offer many explanations for that, such as information asymmetry or liability concerns. However, Ritter and Welch (2002) suggest that future progress in the literature will mainly come from agency conflict explanation.

Since 1997, the Asian financial crisis has deeply affected the development of emerging markets in Asia. Johnson et al. (2000) find that measures of corporate governance, particularly the effectiveness of protection for minority shareholders, provide powerful explanatory ability for exchange rate depreciation and stock market decline better than do standard macroeconomic measures. In addition, many studies have found that there exist serious shortcomings of corporate governance in East Asia (Claessens et al., 2000; and so on).

In order to enhance the development of capital market and to encourage economic development, the Securities and Futures Bureau of Financial Supervisory Commission of Taiwan prescribes that the initial public offerings (IPOs) firms after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. This offers us an opportunity to investigate the effect of corporate governance on underpricing of IPOs.

Previous literature documents the outside directors can improve firm's performance and constrain firm's earnings management (Kaplan et al., 1990; Klein, 1998; Klein, 2002). In addition, majority of Taiwanese companies are family controlled. (Claessens et al., 2000; La Porta et al., 1999, Lin, 2004; Yeh et al., 2001). I expect the corporate governance reform of Taiwan in year 2002 can increase the confidence of investors on IPOs. As a result, I expect the underpricing of the IPOs after the implementation of new rules would be smaller than that of before. Based on above arguments, I construct the first hypothesis as follows:

H1. The underpricing of the IPOs after 2002 (the implementation of new rules) would be smaller than that of before.

Jensen and Meckling (1976) state that when the percentage of shareholdings owned by owner-manager does not equal 100 %, then there will result in the problem of conflict of interest. There are many empirical literatures support the statements of Jensen and Meckling (Shleifer and Vishny, 1997; Morck et al., 1988; La Porta et al., 1999; Johnson et al., 2000; Claessens et al., 2000; Lin, 2004, and so on). In

addition, the percentage of shareholdings owned by directors/supervisors may signal future prospects (Leland and Pyle, 1977). As a result, hypothesis H2 is constructed as follows:

H2. The underpricing of the IPOs will be negatively related to the percentage of shareholdings owned by directors/supervisors.

There is information asymmetry in the IPOs setting (Willenborg, 1999; Ritter and Welch, 2002). The responsibility of the auditor (underwriter) is to express the opinion about the financial statements provided by the IPOs. Previous literatures document that audit quality is positively related with the auditor size (DeAngelo, 1981; Dopuch et al., 1987; McKeown et al., 1991; Kellogg, 1984; Wilson and Grimlund, 1990; Bonner et al., 1998; Stice, 1991; Becker, et al., 1998; Lys and Watts, 1994; Reynolds and Francis, 2001). In addition, auditors (underwriters) may play the "deep pocket" role. As a result, I include the above two proxy in the empirical tests. Next section will present my sample selection and research design.

Research design

Sample selection

In this study I collect Taiwanese non-financial IPOs in the 1999-2004 sampling period. The financial institutions are deleted because they have special operating environment and are regulated by the special laws. Those observations with missing values are also deleted. Finally, the sample consists of 533 IPOs. The data source is from the database compiled by Taiwan Economic Journal Data Bank (TEJ).

Regression model

$$\ln(1 + \text{underpricing}) = \beta_0 + \beta_1 \text{After} + \beta_2 \text{Insiderhold} + \beta_3 \text{Hightec} + \beta_4 \text{Big4} + \beta_5 \text{Underwriters} + \beta_6 \text{Size} \quad (1)$$

where:

Underpricing = The adjusted initial return or initial return; Initial return is defined as the difference between the first trading day that is not closed at the price limit and offer price divided by the offer price. The adjusted initial return subtracts the corresponding market return from the initial return;

After = 1 if the data belongs to the year 2002, 2003 or 2004, and 0 otherwise;

Underwriter = 1 if the lead underwriter is one of the following underwriters: Grand Cathay Securities Corp. (GCSC), Taiwan International Securities Corp. (TISC), Yuanta Group, National Investment Trust Co., Ltd. (NITC), Chinatrust Securities, and Chiao Tung Bank, and 0 otherwise;

Insiderholds = The percentage of shares owned by directors/supervisors prior to IPO;

Hightec = 1 if the firm belongs to the electronic industry, and 0 otherwise;

Big4 = 1 if the firm employs a Big 4(5) auditor, and 0 otherwise;
Size = Ln(pre-IPO assets);

Results and Discussions

Table 1 presents the results of univariate t tests. From Table 1 we can see that, the coefficients of *After*, *Hightec*, *Underwriter* are all statistically significant at less than 0.01. The underpricings of the IPOs after 2002 are significantly less than those of before. As a result, the Hypothesis H1 is supported. [See appendices, Table 1 and Table 2].

In addition to the univariate t tests, I also test the hypotheses with equation (1). The empirical results of equation (1) are presented in Table 2. From Table 2, we can find that the coefficient of *After* is significantly negative. It means that the underpricings of the IPOs after the implementation of new rules are smaller than those of before. This supports Hypothesis H1 and is consistent with the result of univariate t tests.

Hypothesis H2 expects that the underpricing of the IPOs will be negatively related to the percentage of shareholdings owned by directors/supervisors. From Table 2, we find the coefficient of *Insiderholds* is significantly negative. It is consistent with the expectation of hypothesis H2.

The result also shows that the coefficient of *Hightec* is significantly positive. This implies that investors with less confidence on high-tech IPO companies.

In addition to the above tests, I also conduct some sensitivity tests. For example, I replace the adjusted return with the raw return, conduct chow test, and so on. In sum, from the results of sensitivity tests, our primary results are robust.

To sum up, using data from Taiwan's public companies, this study documents evidence that the underpricings of the IPOs after the implementation of new rules are smaller than those of before. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

Summary and Conclusions

At the advent of the new millennium, corporate scandals in the world have shaken the investors' confidence in the global financial market. In order to enhance the development of capital market and to encourage economic development, Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity

to investigate the effect of corporate governance on IPOs market.

Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricing of IPOs after 2002 are significantly smaller than those of before. This is consistent with the expectation of the hypothesis. It implies that corporate governance can play monitoring roles and enhance the confidence of the investors on IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

This study contributes to the literature in the following ways. First, as Ritter and Welch (2002) suggest that future progress in the literature will mainly come from agency conflict explanation, this study documents evidence about the relationship between corporate governance and underpricing. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

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Appendices

Table 1. The Empirical Results of Univariate t Tests

	<i>Underpricing</i>			
	Value=0	Value=1	Difference	p-value
<i>After</i>	0.2357	0.0441	0.1716	<.0001***
<i>Hightec</i>	0.1311	0.1834	-0.073	<.0001***
<i>Big4</i>	0.1506	0.1783	-0.044	0.1086
<i>Underwriter</i>	0.1313	0.1925	-0.079	<.0001***

Note: The definitions of variables are as follows:

Underpricing = The adjusted initial return or initial return; Initial return is defined as the difference between the first trading day that is not closed at the price limit and offer price divided by the offer price. The adjusted initial return subtracts the corresponding market return from the initial return;

After = 1 if the data belongs to the year 2002, 2003 or 2004, and 0 otherwise;

Underwriter = 1 if the lead underwriter is one of the following underwriters: Grand Cathay Securities Corp. (GCSC), Taiwan International Securities Corp. (TISC), Yuanta Group, National Investment Trust Co., Ltd. (NITC), Chinatrust Securities, and Chiao Tung Bank, and 0 otherwise;

Hightec = 1 if the firm belongs to the electronic industry, and 0 otherwise;

Big4 = 1 if the firm employs a Big 4(5) auditor, and 0 otherwise;

***, **, * Coefficient statistically significant at less than 0.01, 0.05, and 0.10, respectively.

Table 2. The Empirical Results of equation (1)

$Ln(1 + underpricing) = \beta_0 + \beta_1 After + \beta_2 Insiderhold + \beta_3 Hightec + \beta_4 Big4 +$					
	<i>Coefficient Estimate</i>	<i>t statistics.</i>	<i>p-value</i>	R^2	<i>(adj. R²)</i>
β_0	0.2420	8.99	<.0001***	0.1027	0.1010
β_1	-0.2018	-17.42	<.0001***		
β_2	-0.0015	-4.87	<.0001***		
β_3	0.0527	4.06	<.0001***		
β_4	0.0163	1.32	0.1879		
β_5	0.0289	2.39	0.0171**		
β_6	-3.25×10^{-4}	-0.24	0.8108		

Note: The definitions of variables are as follows:

Underpricing = The adjusted initial return or initial return; Initial return is defined as the difference between the first trading day that is not closed at the price limit and offer price divided by the offer price. The adjusted initial return subtracts the corresponding market return from the initial return;

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Insiderholds = The percentage of shares owned by directors/supervisors prior to IPO;

Hightec = 1 if the firm belongs to the electronic industry, and 0 otherwise;

Big4 = 1 if the firm employs a Big 4(5) auditor, and 0 otherwise;

Size = Ln(pre-IPO assets);

***, **, * Coefficient statistically significant at less than 0.01, 0.05, and 0.10, respectively.

THE FISCAL PIECE OF ADVICE AS INSTRUMENT OF PROTECTION AND GENERATION OF VALUE TO THE MINORITY SHAREHOLDERS. AN VISION OF CORPORATE GOVERNANCE

Sergio Antonio Loureiro Escuder*, Joao Eduardo Prudencio Tinoco**

Abstract

The present article inserted in the extent of the corporate governance has as objective contributes in the evaluation of the importance of the fiscal piece of advice in the structure of the organizations, with lucrative purposes, as control instrument and support to the shareholders' Assembly, to the light of the legislation of the limited companies and of the reduction entities, class organs, like IBGC, CVM, IBRACON and BOVESPA. It was observed, on the other hand, that the family company is preponderant in Brazil, and that that central aspect limits the performance of the fiscal piece of advice in the context of the corporate governance.

Keywords: fiscal piece of advice, corporate governance, family company

**Mestre em Gestão de Negócios – UniSantos/Brazil, Professor Faculdade de Administração de Empresas – Unisanta, Av. Conselheiro Nêbias, 726 – cj. 111 – Santos/Brazil – CEP 11.045-002, sescuder@vivax.com.br*

***Doutor em Contabilidade – USP, Professor do curso Mestrado da UniSantos/Brazil, Av. Carvalho de Mendonça, 244 – Santos/Brazil, tinocojoao@uol.com.br*

Introduction

Academic studies on the corporate governance have treaty, in his/her majority, on the forms of the shareholders' control in Council of Administration and of the Executive Management aiming at larger transparency in the actions of the administration and consequently the safety to the shareholders, government, society and other actors. The model of corporate governance in Brazil is that that be suitable with the reality of the companies, since, 85% of them are considered family, according to studies of Neubauer and Lank (1999). The corporate governance took space in the academic literature, mainly for the activist movement of the great pension bottoms, institutional investors and minority partners. The process of governance corporate search, inside of that scenery, to study the forms and roads of developing touchstone of more harmonious coexistence among the capital, the administration, the family and the society us which it is inserted. The sense more acquaintance of the corporate governance refers to the relationship among the company. In this context, he stands out the report Cadbury, 1992 (Cadbury, 2002) when the beginnings of the corporate governance were centered in the process of generation of value for the shareholders and partners (shareholders). More recently, the corporate governance started to treat also of the relationships with other groups that suffer impact of the decisions, as employees, suppliers, customers, government and community in general, denominated social (stakeholders) partners. Servant in the USA in the decade of 80, the govern concept Servant in the

USA in the decade of 80, the concept of corporate governance arrived in Brazil there is little time and it seems still to be beginning their first steps, heading for the sedimentation and popularization of what intends, accordingly (Tinoco and Winckler, 2004). Though, it took force after the appearance of the great embezzlements in companies in the United States and, since then, mechanisms of the investors' protection were created as the Lei Sarbanes-Oxley in 2002. The main objective of that legislation is to do with that the companies, through their executives have larger controls on the financial reports published to the market, with the simple premise that to "the good corporate governance and the ethical practices of the business are not more refinements. they are laws." Like this, he/she grew up referred her Law, forcing the companies strengthen her/it their mechanisms of internal control with three practical objectives: effectiveness and efficiency of the operations, reliability of the reports finances the execution of laws and applicable regulations, turning like this the executive directors and financial directors explicitly responsible for establishing, to evaluate and to monitor the effectiveness of the internal controls about those reports and popularizations. For the family companies, the beginning of the corporate governance wins importance for the performance in the relationship among the company, the shareholders, the family and their heirs. In this pitch, the shareholders are all of the members that compose the family that, that compose the family that, at the same time, they are partners of an organization. In function of the complexity, of the overlap and of the conflicts of

interests, with the affectionate relationships and of consanguinity, the governance in the company's family raises the being one of the themes of larger relevance for several fields of the knowledge. This is due fundamentally to the following reasons:

- The scandals in companies of everyone, especially in the United States, in Japan and Italy;
- The disappearance, the bankruptcy or the sale of a high number of family companies in the transition among a generation and other; or,
- In function of collisions, of disagreements and fights among family, inside and out of the company;
- The controlling shareholders' disproportionate enrichment, as the holders of the administration power:
- Of the minority shareholders, when holders of the administration power, or of the managers in general, when external;
- Disregard to the minority shareholders, bearers of preferential actions and institutional investors.

In Brazil, one of the control mechanisms and defense of the interests of the shareholders is fiscal piece attorney whose paper is foreseen in the article 161 of the Law 6.404 of 1976, modified by the Law 10.303 of 2001, denominated Law of the Limited companies.

The importance of that organ appears with a norm emitted by SEC Securities and Exchange Commission equivalent CVM in Brazil, that when regulating the relative norms to the constitution of the auditing Committee for the American law Sarbanes-Oxley, applicable to the Brazilians companies that possess ADRs (American Depositary Receipts, striped in the levels 2 and 3 of the Bag of New York, they will be able to, at first, to use the permanent fiscal piece of advice in substitution to the auditing committee, for her demanded to leave jully,25.

For the definitive acceptance of the fiscal piece of advice in substitution to the auditing committee, it would be necessary to promote some adaptations in the form of performance, in the composition and also in the culture of the fiscal piece of advice, in way to assist the demands requested by SEC.

The fiscal piece of advice in that structure of corporate governance has a fundamental paper exercising a control about the administrators' actions, as much of the administration piece of advice as of the executive management, since it is chosen directly by the shareholders and he/she has his/her independent performance of the managers of the company. In the family companies, the administrators stop not only the control, but mainly the power, that translates her naturally in conflict with those that it doesn't stop the control and they are far away from the power. With the existence of the conflict of interests, they are surrogating the rights of those that are not in the control of the company, hindering his/her access to the information. The

fiscal piece of advice, elect in shareholders' assembly, it can collaborate with those that are far away from the control and power (minority shareholders) acting from form inspectorate to the administration of the businesses.

That important paper is translated in the attendance of the internal controls, of the strategic and budget planning, in the recruiting of the independent auditing and improving the transparency of information and the other actors' actions, facilitating the decision in the sphere of the shareholders' assembly. It happens that the legislation in spite of mentioning the existence of that piece of advice, didn't make him/it in a clear way as for the action limit, as well as, being observed that his/her installation is not obligatory, unless shareholders holders of at least 10% of participation request his/her installation in shareholders' assembly.

A lot although the culture of the society understands that the paper of the fiscal piece of advice is complementally to the of the independent auditing, there are a basic difference and logic of those organs:

1. The auditing expresses if it worries with the formality and the legality of the accounting records, serving, besides, as support instrument and of safety to the administration piece of advice, because it is hired exclusively by that organ.

2. The fiscal piece of advice, elect organ for the shareholders, independently of the administration he/she has for objective to accompany and to verify the actions of the administration piece of advice, with participation in the investment decisions, strategic planning, internal controls, and, mainly if the shareholders' interests are being preserved in the search of the perennial of the businesses.

In that sense the present article seeks to expose in conceptual lines the meaning of the corporate governance; of the corporate governance in the family company; of the fiscal piece of advice. legal and practical aspects, propitiating a wide vision of the practical benefits of the existence of that organ in the structure of the corporate governance.

Objective of the Study

The study of the corporate governance in Brazil advances overweight to the aspects related to the minority shareholders' safety for the reason of the capital structure in the Brazilian companies.

The safety's subject is very close to the aspects related to the fiscalization since difficultly the minority shareholders get access to the information besides those foreseen in the Law.

This way, the present study seeks to characterize the instruments of the corporate governance in the structure of power relating them with the importance of those elements in the family companies as control form and generation of wealth to the shareholders.

Methodology

The present work uses as methodological instrument for elaboration of the article the theoretical research, according to the deductive and deductive-hypothetical methods, for the reading of goods and texts developed by other researchers, class entities and that presented effective contributions to the study of the corporate governance in Brazil. He understands each other as method or deductive reasoning that that comes from the general for the matter, of the beginning for the consequence, traveling levels of abstraction of an observation of a general phenomenon, looking for to particularize him/it (Discards, 1969).

As for the deductive-hypothetical method, Viegas (1999) establishes that the science is not a system of concepts, but, to the opposite, a system of statements, taken to the falseabilidade criterion. In that method, a statement as controlling "shareholder expropriates the minority shareholder", for instance, he is unreliable because, although she cannot demonstrate that all of the family companies or controlled by families possible, last, presents and future, existent or to exist, anywhere in the world, practice through their controllers actions expropriate. However, to find a single controlling family of company that uses of methods to expropriate the minority ones so that the affirmation becomes false. Tends in view that the corporate governance denotes the need of wide academic discussion, the bibliographical research is constituted in a resource that puts the authors in contact with what was produced already and it registered regarding the theme, validating their efforts.

Theoretical Fundamentations

Family Company of the Origin a Present Time

The origin of the family company is in the origins of Brazil. The hereditary captaincies were the first modalities of private (Martins, Menezes and Bernhoeft, 1999) enterprises, when, starting from a concession of the King of Portugal, the deprived initiative exercised almost feudal rights on the granted earth, collecting imposed and enforcing the law, tends as obligation, just the loyalty to the King as well as to pay their taxes in day. The wave of European immigration of the end of the century XIX and beginning of the century XX was responsible for the next important economical cycle for Brazil, that was the industry, and for the I begin of a new phase of the family company. Behind a Brazilian economical cycle, there was always a category of involved entrepreneurs, that you/they abandoned their lands, even with their origin problems, as in the typical Italian case, for us to enter in ignored lands and with incipient markets and without any

protection type and regulation. Different from the American companies that were formed and they grew for mechanisms of financings for the stock exchange, as it puts Amendolara (1997), whose result was the pulverization of the property. In Brazil, in reason of the Portuguese and Italian culture of origins, the attachment to the property did of the companies here constituted if they develop through own capital and or with onerous financings, concentrating the capital. Like this, the growth and development of the Brazilian economy felt stepped on in the family companies that they are today, or they were even little time, in the most several sections of the economy. Being small, averages or great companies were and they are of vital importance for the economy and development of Brazil since they represent an universe high overweight in the generation of income and job. That situation is raising a curiosity of the researchers and linked professionals to the life of the family companies. In spite of numerous and old businesses in the modern society, it is verified that only three decades ago, that theme started to wake up researches in the academic world. The processes of succession of family companies and his/her survival are among the main precautions of any family involved with businesses. Handler (1994) affirmed that researchers in the field of the family company agree that the succession is the most important subject than most of the companies should face. Studies of the development of the family company in their several dimensions. property. family and company. they suggest that the involvement of the family with the daily of the company, with the relative subjects his/her property and to the application of their resources it is the spring propulsive of the conflicts for being able to, money, attention and recognition. Still according to Donelley mentioned by Bernhoeft (1991), it is possible to end that in the family company the interaction of this with the family results in it influences reverse in the general politics of the firm and in the interests and objectives of the family. This way, the control of the property of the business, as well as the outstanding presence in yours day by day forms the appropriate atmosphere for a family to develop the characteristic dynamics of the family companies. Like this, for the end the one that this work, a family company is destined will be that that to possess the characteristics below:

- 1) A family possesses majority participation in the capital of the company, controlling the process decision;
- 2) Members of the family holder of the majority capital of the companies are present in the direct administration of the businesses;
- 3) There is a clear desire to transfer the property to future generations, maintaining like this the perpetuity of the business inside of the family structure.

Aspects of Corporate Governance

Andrade and Rosseti (2004) comment on that in spite of the diversity of concepts on the corporate governance, a very defined group of key expressions exists, linked to the beginnings, models, practices, regulation mechanisms and to the purposes of the corporate governance. The main ones are: the shareholders' (shareholders) rights; right of other interested (stakeholders) parts; conflicts of it negotiates; system of relationships; system of values; government's system; structure of power; regulation structure; patterns of behavior. For OCDE (2001), the corporate governance is the second system which the business corporations are driven and controlled, aiming at and specifying the distribution of the rights and responsibilities to the different participants of the company, as the administration piece of advice, the executive directors, the shareholders and too much interested parties. Blair (1999) defines the corporate governance for the means of the which the corporations are used to establish processes that adjust the interests in conflict between the shareholders of the companies and their leaders of high level. For a very generic way, the corporate governance can be described as the mechanisms or their beginnings that govern the process decision of a company, in other words, it is the group of rules that you/they seek to minimize the problems of it negotiates. It is a movement that seeks to democratize the relationship among: shareholders, independent and executive auditors of the company, motivating the invigoration of the power Council of Administration in the socket of decision. According to Shleifer and Vishny (1997), the corporate governance is the field of the administration that treats of the group of relationships among the direction of the companies, their administration pieces of advice, their shareholders and other interested parts. She establishes the roads for which the SUPPLY VESSEL of capital of the corporations is insured of the return of their investments. At the present time, the governance is being more and more emphatically discussed in association with events and as different as the coalition movements business transformations and acquisition of companies, the succession processes in family, the high capital cost, the low professionalization of the companies. The several concepts of corporate governance are associated, or even a direct derivation of the differences of the models practiced at different countries, tends his/her linked nature to the own cultures and needs demonstrated along the history. Babic (2003) and Oliveira (2000) developed competent and explanatory rehearsals on that aspect, according to the ones which, several governance models are current of conditions historical, cultural and institutional of the countries in that each one of them prevails as well as it is due to the economical formation, highlighting, in this case, the maturity of

the financial system, the development of the market of capitals.

Andrade and Rosseti (2004) to explain that those different models can be gathered in two great groups:

1. Defined for the typology of property of the companies and for the preponderant form of financing of the corporations, being the focus the shareholder (shareholder) in the aspect of their interests and rights. Property-administration-return..

2. Defined for the posture of the corporate world as for his/her involvement and to his/her commitment with objectives of larger width, no limited to the of economical-financial nature. They are models to be going besides the return of the investment and of the generation of wealth for the shareholders, assuming commitments with other interested (stakeholders) parts, in the development of the company and in the impacts of their actions.

Besides, the quality of the governance has been focus in serious discussions on the great business crises of the last two decades. A lot of the literature on the corporate governance bases on the beginning that the companies belong to the shareholders and that, therefore, his/her administration should be made in benefit of these. However, a new series of studies, of this done, by La Carries et al. (1997) it has been demonstrating that the paradigm of Berle & Means (1932) is a restricted exception just to the United States and England, whose property is dissolved in the hands of thousands of shareholders. In most of the countries, the model prevails it is of a majority shareholder that stops the control of the company and it points their administrators. In such situation, there is change in the paradigm of the corporate governance, whose paper doesn't limit in protecting the shareholders' interest, but in avoiding that the controlling shareholders expropriate the minority ones. Like this, the subject of the corporate governance in Brazil involves, mainly, a relationship of power between the majority shareholders and minority shareholders. In Brazil, the structure of the predominant stock property is concentrated. The great transformations that happened in the economy of the country and, for extension, in the corporate atmosphere, they implicated more changes in the controllers' identity than in the concentration (Okimura, 2003) degrees. In agreement with the research of Okimura (2003) the results of rising of data of the beginning of the nineties and of the turning of the century they are not significantly different as for the majority controllers' presence: the larger three have been maintaining a superior participation to 80% of the capital voter in most of the great companies. At the same time, Okimura (2003) concludes that it is usually low the relationship between the property of control actions and the total of emitted actions, as historical result of the legal permission of release of the two classes of actions, ordinary and preferential. In that pitch, the

problems of structure of power that you/they happen in Brazil they are much more linked to conflicts of shareholders' interests property and power that for stakeholders problems.

Systems of Government and Structure of Power

The corporate governance treats of government's system, of the majority shareholders' relationship and minority, of the administration piece of advice with the shareholders and executive management, of the stakeholders with the administration piece of advice, in other words, it navigates in the structure of power of an organization. According to Cadbury (1992), the corporate governance is the system and the structure of power that govern the mechanisms through which the companies are governed and driven.

Already Babic, (2003) affirmed that the field in that the corporate governance gravitates is defined by a given structure of power, that involves subjects related to the process of socket of strategic decisions, to the exercise of the leadership, to the methods with that is assisted to the established interests and the emerging cases. In synthesis, he is related the sociology of the elites and for that reason it is influenced strongly by the legal institutes and for the marks regulations of each Country.

However, Hitt, Ireland and Hoskisson (2001) said that, as the corporate governance he/she was born of the divorce between the property and the administration of the companies, his/her focus is the definition of a governance structure that maximizes the relationship between the shareholders' return and the benefits gained by the executives. In this sense, it involves the strategy of the corporations, the operations, the generation of value and the destination of results.

Their concepts, leaving of an administration model that defines his/her inclusion, the corporate governance are a group of purposes that governs the system of power and their mechanisms of administration of the companies, including: 1. The enterprising shareholders' purpose. 2. System of relationships shareholder-piece of advice-direction. 3. Maximization of the shareholders' wealth, minimizing conflicting opportunisms with this end. 4. Regulation structure and of fiscalization of the corporate actions. 5. He/she structures advisory, deliberative & of command. 6. Formulation process and execution of the strategy. 7. Administration system, of control and of gauging of results. 9. System of relevant information to the interested parts. 10. Service patterns.

Corporate Governance as System of Relationships

The promises and the power in the governed companies are clear and they develop processes

more vigorous and adaptable decision. The new ideas are more frequent and the administration is less personalized, therefore he is not in the main executive's hands, but, yes, in the effectiveness of the organization. The risk of the isolation, of the inertia and of the false consensus it is almost null, as well as in the long period, the open and flexible systems that they foment the counselors' involvement and shareholders, they increase the stability and they reduce the probability of traumatic and contentious changes. Independent of the values in that it is found, of the practiced model, of his/her apprenticeship and of the actors indeed involved, the corporate governance settles down for the proprietors' interaction, administration piece of advice and executive direction, three anchor ace which you/they add other interested parts. The relationships that settle down among the involved actors are that will define the effectiveness of the governance process. As Montgomery and Kaufman (2003), the balance of the corporate power prevail is delicate. It depends on three anchors crucial: shareholders, administration piece of advice and executive direction. Although each one has his/her important responsibility, his interaction is fundamental for effective governance. When they operate committees as a system, he/she becomes strong mechanism of brakes and against-weights. Of this point of view, the governance gathers the administration practices, exercised inside of a structure of power, involving a group constituted for at least three subsets: property, piece of advice and direction. Each one of these subsets has, on one side, own demands and on the other hand responsibilities for tasks and deliveries. For the effective performance of this triangle of power, besides shareholders with aligned purposes, it is demanded that, inside of the administration piece of advice it is practiced among their members a strong constructive interaction that, on a side, care for for the proprietors' interests and, of other, monitor the administration and copper the results that have been awake. The break of this system of relationships, wherever happen, be inside of each sphere of power, be in the demand lines and deliveries that relate them, certainly it reduces the effectiveness of the governance and harmonization of the corporate interests. Those relationships in the structure of power among shareholders, administration piece of advice; piece of advice of executive administration-management should involve criteria and mechanisms of controls and monitoring. The own American legislation, Lei Sarbanes-Oxley (2002) looked for and to impose instruments of responsibility to the involved actors aiming at larger transparency and safety in the information transmitted to the market.

The relationship between the administration piece of advice and the executive management is at first having protected for a third actor's action: the independent auditing. This is contracted under responsibility of the administration piece of advice,

whose paper is to analyze the reports and financial demonstrations emitted by the executive management, validating and attesting that the information and constant registrations in the financial demonstrations are in accordance with the legal foundations and they represent a reality. The executive management, for his/her time, has at your disposal with objective of to attest and to accompany the internal controls and global actions, the auditing interns whose paper is, among other, to verify the internal controls used by the management are skilled and reliable. Tinoco and Winckler (2004) expose in his/her research that the paper of the accounting had increased his/her criteriosidade level in the sense of turning more independent of the executives than compose the high direction of the companies, as well as the independent auditors started to be more demanded and controlled, looking for to turn them immune to the improper pressures of the directing body, with objective of making up the information to obtain dubious benefits and to the costs of the investors' damage and shareholders. The shareholders, as much controllers as minority, he has at your disposal, in the form foreseen in Law, the fiscal piece of advice, as independent organ of the administration and with exclusive performance for the shareholders' interests.

The Fiscal Piece of Advice

In Brazil, as mentioned, the model of adopted governance is in relation to the property form, whose capital is concentrated strongly and in hands of families, holder of more than 75% of the capital of those companies. Being concentrated, the administration piece of advice is chosen by the controlling shareholders, whose effects relapse in the executives' choice. It happens that the executives, in these cases, act under command of the administration piece of advice, whose control comes from the controlling shareholders, doing with that the other parts interested parties are distant not only of the power and of the box, but, mainly of the control of the social businesses. In that pitch, it hinders the controls of the company for the other shareholders and stakeholders, since the property and the direction (cash flow) stay in the same people's hands. With objective of neutralizing that posture, other organ appears in the structure of Corporate Governança: fiscal Council.

Birth of the Fiscal Piece of Advice

The conception of an organism supervisory of the social businesses, or the need of fiscalization of the businesses of the societies for actions, already existed since those first moments of the creation of the Dutch companies, as he/she writes down Valverde (1959, p. 33): *"If, in the privileged Company of western India, the one that, for special*

reasons, we already referred so many times, (ns 2;4 and 599) he/she still doesn't appear, perfectly characterized, those control organ or fiscalization, though, in the agreement done between directors and main copartners of the Company, with the approval of the Noblemen and High Potencies you General States, in 1623, it appears, clear, that control organ or fiscalization: all the bills mentioned in the air. XVI of the I privilege should be done Those commissaries should communicate a summary of those bills to the other main copartners and they will be forced by oath the no more to discover and to maintain secret everything on that the directors should keep secret. It is them extensive the prohibition that art. XXXI of the Privilege, makes to the directors, relatively to you buy and sales. Those representatives should have and to exercise, on behalf of the main ones and copartners, the given right and granted to the agents by the art. XXVII and besides they can consult Already other current is unanimous in recognizing that Napoleon's Code, dated of 1807 it constitutes a true divisor of waters in it recounts them of the societies for actions. It was with the French code that you/they settled down the general lines of the mercantile society, putting an end to the privilege that assisted to the interests of the state, feeling access to the men of I trade in the formation of the limited companies. (Valverde, 1959). That code, however, that he/she didn't take care of Fiscal Council of the companies; it inspired all the subsequent legislation that regulates the societies. He/she points out Valverde (1959), that the first law to turn obligatory audit committee attorney was the French law of 1867, although the use of fiscal organisms in the companies already acted to the time, a practice in consolidation. Several legislations started to conceive apparel and fiscalization forms starting from the French law of 1867, being adopted different systems, the commissaires aux comptes in France; the collegio sindacale in Italy; the fiscal piece of advice in Brazil and in Germany. Being adopted the external control by professional auditing, as well as for the creation of it negotiates state of fiscalization, the call Anglo-American system appeared, standing out on this last one, in the United States of North America, the performance of the Securities and Exchange Commission, SEC, in 1976 through the Law 6.385 grew up in Brazil the similar Brazilian, our CVM.

The Juridical Nature of the Fiscal Piece of Advice

In Brazil the fiscal piece of advice is understood in the goods 161 to 165 of the Law 6.404 of December 15, 1976, with established modifications for the Law 9.457 of 1997 and for the Law 10.303 of October 31, 2001. Although for the Law of the Limited companies the fiscal piece of advice is an organ of obligatory existence in the societies for actions, the

same law doesn't demand his permanent operation. His/her installation can be demanded by shareholders, and the organ stays until the next ordinary general assembly, when the fiscal counselors' mandates of they extinguish; their knower competences and that flow of the Law are:

- To supervise for any of their members the administrators' actions and to verify the execution of their legal and statutory duties;
- To say on the annual report of the administration and on the demonstrative ones financial;
- To say as for the administrators' actions;
- To denounce for any of their members, to the administration piece of advice and the shareholders eventual irregular actions or swindle that come to be of his/her knowledge;
- AGO to attend and he/she ACTS and to say on matters of his/her competence;

To analyze signings and demonstrative financial and to emit opinion Fiscal Council renders bills to the shareholders of his fiscalization of the actions of the executive management and of the administration piece of advice and he/she offers his/her opinion as for the demonstrative financiers examined by the external auditor. In the acting of their functions it can be been worth of the I aid of the external auditor and other specialists, that they can be requested by any counselor, the they be paid by the company. The counselor's performance is a performance at the same time college and individual. For Bulgarelli (1998), the certain functions for the law for the district attorney performance involve a wide strip of performance and subjective evaluation to be filled out by the individual initiative; for that author, the situation of the fiscal Counselors he locates in two plans: the plan of the link to his electorate and another linked plan the district attorney situation in the extent of the piece of advice, to the projections before the other organs and his/her connection the regime of responsibility. The functions of the position subject the title-holder to the duties and responsibilities preset in the law, added or not for the statute of the company. The wide strip of performance and subjective evaluation to be filled out by the counselor's individual initiative are concern of the companies and of the legislator that brought by the Law 10.303 of 2.001 in the reform of the Law 6.404 of 1976 it introduced an additional paragraph to Art. 165: Art. 165... Paragraph 1st .

The members of the fiscal piece of advice should exercise their functions in the exclusive interest of the company; he/she will be considered abusive the exercise of the function with the end of causing damage to the company, or to their shareholders or administrators, or of obtaining, for itself or for somebody else, advantage the one that doesn't make right and that it results, or it can result, damage for the company, their shareholders or administrators. The district attorney has a duplex link: with the shareholders that indicated him/it and

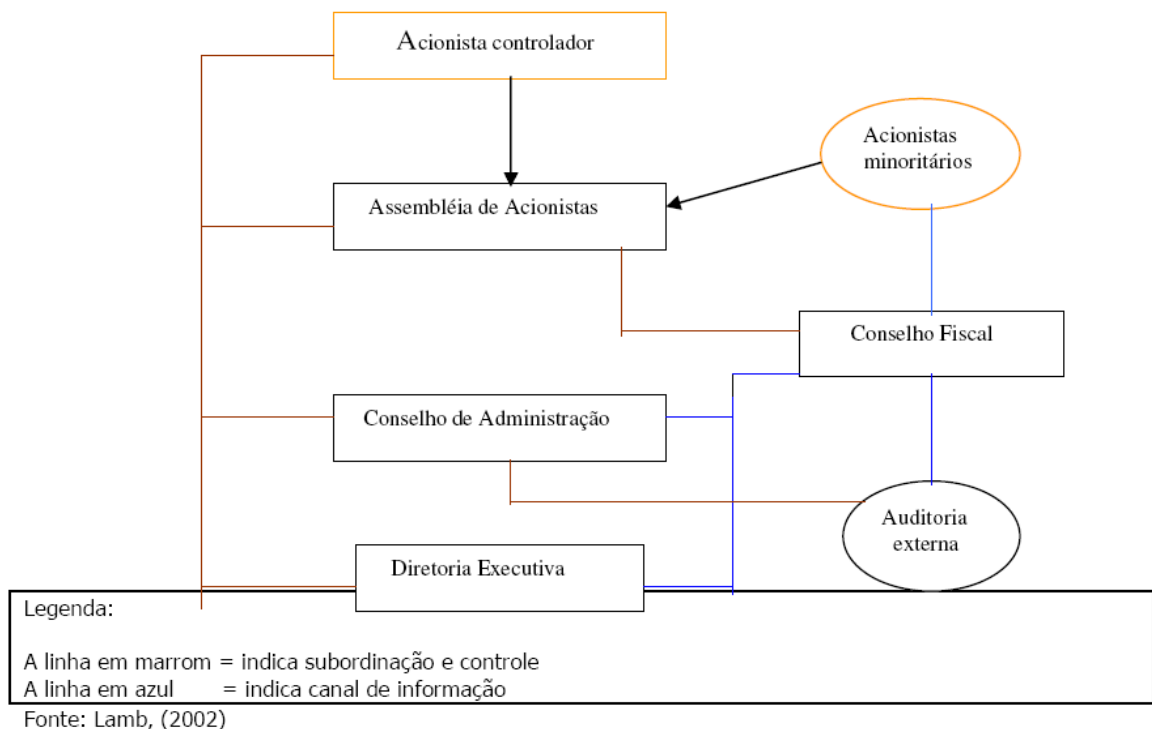
with the company; to the first ones a trust connection, of defense of interests; Monday, executing their functions the limit in the social interest. Bulgarelli (1998). The individual performance and group inside of the organ it is corroborated still by the paragraphs 2nd and 3rd of the art. 165 of the Law 6.404 and renowned for the Law 10.303 of 2001.:Art. 165... Paragraph 2nd. The member of the fiscal piece of advice is not responsible for the illicit actions of other members, except for if with them it was connive, or if it competes for the practice of the action. Paragraph 3rd. The responsibility of the members of the fiscal piece of advice for omission in the execution of their duties is solidary, but of her the dissident member is exempted that does to consign his/her divergence in record of the meeting of the organ and to communicate to the organs of the administration and General Assembly. For the Law, the power fiscalization of the fiscal piece of advice extends to the actions of the administration of the company and that includes his/her opinion about the performance of the administration piece of advice. According to Bulgarelli (1998), for the functional and systematic aspect the fiscal piece of advice appears as one in the control ways about the administration, including the bills and the administration, or only the bills.

The Fiscal Piece of Advice Under the Optics of Corporate Governance

The separation of the property and control between shareholder and their managers through offer of actions through the stocks exchange, strong characteristics in the great companies did with that the need of the creation of mechanisms that you/they adjusted the managers' interests with the one of the shareholders so much appeared majority as minority. Based by the Law 6.404 of 1976 and modified by the Law 10.303 promulgated in October of 2001 search with the alterations to propitiate that minority shareholders reduce the risks and maximize his/her participation in the control of the company. The main inspiration was to do with that the Brazilian market of capitals reduced his/her stock concentration, turning him/it accessible to the small investor. Therefore, governance practices that provided the shareholders' equalitarian treatment were fundamental. With that I aim at, innovations are implanted as the tag-along, the new rules for seat in the piece of advice, the refinement of custody subjects, the limit of emission of preferential actions in relationship the ordinary ones, the use of the arbitration as mechanism of solution of divergences between the controllers and the minority shareholders, among others. However, Kozlowski (2004) emphasized that the changes observed in the Law of the limited companies are still modest in the sense of providing incentives to the minority ones. That point of view is clearer still when mentioning

Salomão Filho: It "is not of frightening, therefore, that the typical profile of the minority Brazilian is it of the speculator, that enters in the society already with the perspective and expectation of the exit. Not just to the minority any is denied right to participate in the society, as it is strong the incentive so that he/she leaves." Bulgarelli (1998) mentions that the composition of the law seems to have the intention of checking mechanisms and control instruments of the administration to the minority shareholders and those without right to I vote for. The counselors' risk to disturb the administration of the company it is faced by the Law checking the controller most in the piece of advice. On the other hand, Valverde (1951) ends that when attributing independence and responsibility of personal diligence to the counselors, and when establishing the law that the counselors are the shareholders' representatives and not of the group that indicated them, it created the concrete possibility of defense of the interests not only of the excluded

shareholders of the control block, but of the shareholder in his/her totality. Also, to the power to request explanations to the independent auditor, besides you summon him/it, it creates, in a certain way, a control of the minority ones on the external auditor. Such possibilities, however, they are submitted to the preparation and diligence individual of the fiscal counselors. The corporate governance, in his/her breast, tries to establish the separation of the control and of the power in the organization, creating like this, administration organs and control in government's structure. The fiscal piece of advice, as control organ is subordinated the shareholders' assembly directly, tends the controller the domain of all of the organs of the company, which, he/she would bring a larger presence of a fiscal counselor properly qualified to the defense of the interests of the minority ones. For best to understand that operation, he/she comes an organization chart of the exposed condition below. Robert Lamb (2002):



The objective of the organization chart is to demonstrate the possibility of performance of the fiscal piece of advice in the extent of his/her it executes responsibility that is to take to the general assembly of their shareholders impressions on the administration of the company as for: 1. Strategic planning. 2. Control budget. 3. Mechanisms of internal control. The three mechanisms indicate indeed if the managers internal or contracted are collaborating with the maximization of the value of the patrimony and acting in the structure of the business for the long period. In this way, that that caused the conflict among the minority shareholders and majority as the administration of the business in

control aspects and attendance is minimized by the action of the fiscal piece of advice.

Conclusion

The authors of this research end that, as the model of existent property in Brazil whose concentration is very big, the minority ones are without capacity of to accompany and to obtain better information regarding the company of the which you/they are shareholders. On the other hand, the legislation of the Limited companies. Law 6404/76 - he/she still didn't make clear which the true competences of the fiscal piece of advice, taking a lot of times, organs

regulators as impeding CVM of acting in benefit of the society. It was observed that the corporate governance whose paper is to facilitate the relationships of power creating control mechanisms and separation, is not, still, it forces legal to clean up the several existent divergences between the majority ones and the minority ones, in spite of the constant recommendations in his/her regulation. The structure of family property, in his/her majority composed by limited companies of closed capital, contrary to the opening of the capital, they are not reached by the regulations and controls of CVM and with that, they ignore the recommendations inserted in the beginnings of the good corporate governance. He can her, to end, this way, that the existence of an organ in Council District attorney molds, without clearer definitions on his/her performance and inclusion, becomes innocuous in the performance of the companies with characteristics of family companies, for not representing fiscalization conditions and performance appropriately.

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THE MECHANISMS OF GOVERNANCE IN NONPROFIT ORGANIZATIONS

Cláudio Antonio Pinheiro Machado Filho*, **Adalberto Fischmann****,
Luciana Rocha de Mendonça***, **Sandra Guerra******

Abstract

This paper discusses the governance issues in nonprofit organizations (NPO). The theoretical framework of agency theory is used to analyze the relationship between agents and principals (donors and volunteers) in such kinds of organizations. Similarly to the for-profit organizations, the mechanisms of incentives and monitoring are crucial to the alignment of interests among principals and agents. However, considering the NPO's intrinsic characteristics, due to the difficulty to implement external and internal governance mechanisms, the challenges of alignment are far more complicated. The NPOs are idiosyncratic, being in many situations complex to establish performance comparisons with similar organizations.

Keywords: governance, NPO, agency theory

**Professor at the School of Economics, Business and Accountancy of University of São Paulo
e-mail: capfilho@usp.br*

***Professor at the School of Economics, Business and Accountancy of University of São Paulo
e-mail: aafischm@usp.br*

**** PhD candidate at the School of Economics, Business and Accountancy of University of São Paulo
e-mail: lurocha@usp.br*

***** Corporate Governance Consultant, e-mail: sandraguerra@bettergovernance.com.br*

1. Introduction

What parameters can the donors use to monitor the effectiveness of social projects implemented by a nonprofit organization? How can these parameters be unfolded in efficiency indicators in the allocation of the donated resources? What is the role of governance mechanisms faced with these demands? These questionings are more and more frequent in the nonprofit organizations (NPO).

The nonprofit organizations, more specifically those included under the third sector framework, are constituted by organizations which belong neither to the State nor to the market. They are nonprofit and nongovernmental organizations. According to the BNDES (2000), the third sector is defined as:

"The group of private activities with public purposes and nonprofit purposes, composed by civil (of any origin) - religious, community institutions, institutions of workers, institutes and corporate foundations, nongovernmental organizations and others - differing from the government's strict logic (public with public purposes) and of market (private with private purposes)".

Just as in the for-profit organizations, in the nonprofit organizations the implementation of incentive mechanisms and monitoring over the management are crucial for the organization's effective performance. Zylbersztajn (2003) supports

this verification, questioning the still incipient discussion of the governance theme in nonprofit organizations. Regarding its scope it becomes very important to understand the governance dimension of nongovernmental organizations, due to its growth and enlargement of the focus on the social capital.

The concept of Corporate Governance is based on the principles of transparency, equity, accountability and ethics. The Brazilian Institute of Corporate Governance (IBGC) defines it in the following way: "They are practices and the relationships among the shareholders / stockholders, board of directors, management, independent auditing and fiscal council with the purpose of optimizing the company's performance and facilitate access to the capital." (IBGC, 2001)".

According to Zylbersztajn (2003), in its most basic form the problem of corporate governance appears when a shareholder wants to control making decisions which differ from the directors of an organization.

In the heart of governance practices is the need to reduce the "Agency Costs", in a way to search to reconcile the undertaking's long-term interests. From the seminal work of Spence and Zeckhauser (1971) and Ross (1974), the scholars of the science of organizations started giving more attention to the development of "Theory of Agency" developed later by Jensen and Meckling (1976), Fama and Jensen

(1983a). The agency problem is an essential element within the company's contractual view, brought by Coase (1937). The agent-principal relationship is always conflicting when a certain individual - agent - acts on behalf of the other, the one named "principal", and the objectives of both don't fully coincide.

The issue of property and control separation within modern organizations was brought to discussion by Berle and Means (1932), and today it has a central position in the development of the theory of organizations, as emphasized by Demsetz and Lehn (1985).

Thus in a relationship principal/agent, for instance, employer / employee, shareholders/executives or institutors/executives, the "principal" tries to implement an incentive and monitoring structure aiming at aligning the interests of the agent to its interests. The alignment in agency relationships takes place when some premises are reached:

A) Agents don't have hidden information (absence of informational asymmetry). The principal knows what constitutes an efficient action and which the expected product is.

B) The principal has complete information on the actions and results.

C) The agents act under low risk.

From this conceptual discussion, the present paper will discuss the NPO's characteristics and the governance mechanisms susceptible to implementation in order to reach efficient social performance. The premises presented in items A and B can generate an important unfolding for the study of the agent-principal relationship in NPO, because the separation between property and control takes place in both the company as well as in this type of organization. Even though they don't distribute financial results there is an agency relationship among the organization's managers (agents) and their donors and volunteers (principals).

The structure of this paper is divided in the following way: the introduction positions the reader about the theme in analysis. Topic 2 presents the evolution and the intrinsic characteristics of NPO and the inherent governance problems. Topic 3 discusses the main classic governance mechanisms, making a parallel between the companies and NPO. Finally, in topic 4 an investigation agenda on the subject is proposed.

2. The Governance Problems in NPOs

2.1. Characteristics of Nonprofit Organizations (NPO)

According to Cardoso (2000), it was the American John D. Rockefeller who coined the expression Nonprofit, publishing in 1975 the first detailed study on the importance of the business initiatives with public meaning in the American society. In the

eighties, the term also became popular in Europe. In Brazil, that happened in the 90s, with researchers such as Landim and Fernandes (Coelho, 2000).

In Brazil, a strong relationship is evident between the performance of organizations of civil society and the performance of the State. Landim *apud* Mendes (1999) indicates the role of the Catholic Church in the configuration of Brazilian society and in the legitimacy of the colonizing State: *Where there were, in the first centuries of colonization, organizations in charge of social welfare, teaching and health, we will find, together, the Church - with the State mandate - in its fostering.*

The relationship with the State was also clear in the appearance of the unions and Brazilian non-government organizations. Herbert de Souza *apud* Santana (1992) mentions the period between the 1960s and 80s as the landmark of the appearance of NGOs, born due to the society's political fight against the authoritarian regime. Within this context, they acted very closely to secrecy, linked to base social movements coming from the Church – which, acting by pastoral action, assumes a critic position and opposition to the dictatorial State -, union and popular movements. In the appearance process of non-government organizations the international organisms also had a base role (Medina, 1997). It is necessary to remember that nonprofit organizations include all kinds of nonprofit entities and that, therefore, they are not homogeneous in scope. Fernandes (1994) comments: "Thinking about nonprofit organizations means to gather under a same conceptual class so many different activities that, in the past used to be seen as contradictory or even antagonistic. To realize the importance of this possibility of ideal grouping implies to move a step to make it effective."

Fischer and Falconer (1998) argue that "part of this difficulty lies on the definition of what these nonprofit organizations are, of how the organizations are which can be considered as components of these NPOs".

Therefore, due to the need to make international comparisons among organizations of this nature, Salamon and Anheier (1992) proposed a structural-operational definition for NPOs. Thus they should be: *formal; private; non-distributive of profits; autonomous and voluntary.*

To be considered part of NPO sector, an organization has to have all these five criteria and should have their own governance procedures. This definition is not based on the organization's function, opening a space so that a wide range of social undertakings can fit under the scope of nonprofit organizations.

In spite of an increasingly common use of that expression, little is known about the organizations that are part of nonprofit organizations.

2.2. Separation of property and control at NPO

The separation tendency between principal and agent at the NPO's, takes place mainly due to two aspects: the first one, of internal character, refers to the founders and idealists of the organizations who have been leaving the administrative function in order to meet the need for professionalism of the sector; the second one, of external character, is related to the increase of strictness in the accountability to the principals, especially the partners and donors. However, in the absence of dividends, *what is the incentive the principal have to control the agents?*

O'Neill *apud* Falconer (1999) mentions some specificities regarding NPO. Unlike the for profit companies, the principals (institutors) don't have residual rights based on the percentage of participation of the shares and quotas. The characterization itself of *who* are the principals is more fluid and there are among them individuals with fewer incentives to the monitoring and the control. The donors and volunteers act to protect, instead of dividends, the positive externalities created by organization's activities (Herrero, Cruz and Merino, 2002).

However, Glaeser (2001) defends that, in the same way that in any economy sector, the maximization of the objectives of donors' and societies is not inherent to the administrative activity. Even when the manager is a volunteer, the agency problem remains, for the altruism - the concern with the welfare of others - doesn't make an individual a perfect agent - one who acts on behalf of the principal (Misorelli, 2003). That means that the agency problem cannot be solved only by the incentive to the increase of altruism in people (Jensen, 1994).

Ricketts (1994 *apud* Misorelli, 2003) affirms that the principals of a nonprofit organization have little incentive to monitor the manager's efficiency, giving him a considerable discretionary power, also to reallocate resources aiming at his own benefit.

According to Herrero, Cruz and Merino (2002) this lack of the donors' interest in monitoring happens since usually after the donation, the concerns with the generated results are small and there are a few mechanisms to control the process. That happens, mainly, for three reasons:

The motivation, which leads the individual to make the donation, is usually little focused in measurable results.

The lack of understanding by donors about the object of the organization's work.

The manager's difficulty in communicating the object of the organization's work in a clear way.

To analyze this situation, it is necessary to consider two aspects related to the donors and to the beneficiaries:

As Fama and Jensen (1983b) recognize, the inexistence of dividends doesn't mean that there are no risks of losses for both the donors and for the beneficiary public. And since the beneficiary public, many times, does not have the means to monitor the services, the donors end up by assuming the risk of allocating resources given by the organization.

Internal management mechanisms which assure the principals that the resources were not expropriated by the agents are necessary (Fama and Jensen, 1985).

This way, the process of selecting an organization which will receive resources indicates the donor's concern as for its use and the maximization of results. Thus it becomes essential for nonprofit organizations to develop and show which and how effective their control mechanisms are to keep the managers within the discretionary acceptable limits.

The next topic deals with the internal and external governance mechanisms, with the objective of minimizing the misalignment problems among the managers (agents) and principals (donors) at NPOs.

3. The Governance Mechanisms and the Organization for NPOs

According to Jensen (1993) there are four control forces for a company that can solve problems caused by divergences among the decisions taken internally and those which would be better from the society's point of view. These control mechanisms can be classified in:

- a) external - political-legal and regulatory system; stock and product markets;
- b) internal - board of directors, compensation incentives and internal auditors.

Although imperfect, the monitoring and incentive mechanisms in the *for-profit* companies are for the reduction of misalignment of interests among managers and principals, having as base the decrease of informational asymmetry.

From that classification it is possible to draw some parallels between the application of internal and external governance mechanisms in the for-profit and non profit organizations.

3.1. Stock Market and the Donation Market

The institutional mechanisms for private companies, the state and self enforced regulatory devices and the market itself, although imperfect, have a disciplinary role to guide the conduct of agents. In other words, the administration inefficiency can be reflected on the prices of shares in the market, and due to that, the principals have a stronger incentive to monitor the manager's activities and the destination of their resources.

The stock market, in the developed countries, acts as a governance mechanism for the companies, because they reflect directly or indirectly its performance. In the event of administration inefficiency (company's potential value less than its real value), there is in theory, a strong incentive for external investors to takeover the control of the company (hostile takeovers). This way, the threat of control change becomes an incentive for the managers to keep the value of the company high, aligning this way, their interests with that of the shareholders' (Denis MacConnell *apud* Okimura, 2003).

In the third sector organizations this possibility is inexistent. The "stock market" of nonprofit organizations is represented by the "donation market", based on the donors' freedom to address their resources to the organization they choose. However, this choice is not based on a transparent relationship, because there is a strong informational asymmetry between the organization manager and what is widely published and that influences the donors' choice (Akerlof, 1970).

The institutional environment can also have an important role to inhibit the manager's opportunistic attitudes, under the penalty of the loss of the organization's reputation. The "donation market" could this way regulate the agents' behavior in the reception and, mainly, in the use of resources for the financing of social projects. The more restricted the "donation market" is the higher is the agents' concern with the maintenance of the organization's reputation capital.

3.2. The Board role

In a NPO, the board gains importance before the fragility of the external ways of monitoring the organization's activities. However, the board's participation as a control tool has been incipient. The motivation of their members to monitor the organization's results is small, since its composition rarely takes into account the technical skill and the representation of the stakeholders (Herrero, Cruz and Merino, 2002).

According to Jensen (1993), some of the council's lacks of commitment causes have fallen on their size, composition and independence. In NPOs, the council tends to be less efficient than at the companies, due to the difficulty in establishing indicators of individual and organizational performance associated to the object of social performance. Even in an organization, which acts in a transparent way, the efficient allocation of resources is not easily susceptible to monitoring by the donors. The agency problem, in this case, is associated to the difficulty of the principal in certifying that the donated resources - financial and non-financial - were not expropriated or used in little effective projects (Shleifer and Vishny, 1997).

Each principal needs to develop ways of control and monitoring the resources in order to avoid its expropriation by the agent (Becht, Bolton and Röell, 2002). However, the difficulty in evaluating the manager's efficiency still remains, mainly due to the lack of clear information and of specific knowledge, since the results are, most of the times, intangible and the indicators which enable the comparison among organizations are rare since it is difficult to establish parameters of efficiency indicators.

Some authors consider that the efficiency of a nonprofit organization should be measured by indicators related to social welfare. However, Frumkin and Keating (2001) argue that it is difficult to obtain this measurement due to the complexity of activities and to the social benefits which can only be reached in the long run, associated to the projects. It is not always possible to establish causality between the accomplished programs and the effects to the beneficiaries. The measures would need to match the manager's role and the organization's philanthropic reputation.

In the third sector, in spite of the efforts to improve the evaluation of results in nonprofit organizations (Chianca, 2001; Cohen, 1994; Roche, 2000) the culture of evaluation is still little developed. The difficulty in creating performance indicators and of social impact gives rise to moral hazard, in other words, the principal becomes dependent on the information provided by the agent. The moral hazard happens when one or more parts of a relationship have post-contractual opportunistic behavior (ex-post) due to the informational asymmetry (Akerlof, 1970). The minimization of this risk implies an increase of information cost that in turn, increases the transaction cost.

3.3. Remuneration policies of NPO's managers

In the for-profit companies' logic, the manager's role in the maximization of the shareholders' wealth is directly proportional to the reward he receives at the end of the period. Therefore, participation policies in the organization's results or stock options, among others, are ways, although imperfect, which, at the companies, can provide a better alignment of interests between managers and shareholders.

In the nonprofit organizations, the alignment through financial benefits is inexistent. There is no expectation of this type of return, but of social gains or for a specific cause.

3.4. Property Structure

There is a parallel between the property structure of a company and the one of an NPO, which needs more conceptual deepening and empiric studies.

There is a wide debate in the Governance literature, analyzing property structure of the for-

profit companies and the possibility of better monitoring and alignment among agents and principals (Becht et.al., 2002). Two models of property structure can be referred: The Anglo-Saxon model, in which the companies' property structure is dispersed, and the shareholders individually have less control power and the Nipo-Germanic model, characterized by property structures with concentrated capital.

In the first case, the conflict of interest takes place among the external investors (dispersed shareholders) and the managers. Zylbersztajn (2003) summarizes: "The disperse property of actions makes the problem more serious, generating interest conflicts among the holders of dispersed decision rights. It is a typical collective action problem among investor".

In the event of concentrated property structure, the conflict takes place among the controlling shareholders and the minority shareholders. In this case, the blockholders, if on one hand they have better incentive to monitor the agents, unlike the small dispersed investors; on the other hand they can generate conflicts with the minority one. In Brazil, the concentrated property structure prevails, with the control of companies being held by family groups.

In the nonprofit organizations, according to Herrero, Cruz and Merino (2002), there are no studies, which prove that the existence of a big donor implies in a better monitoring. However, it can be thought that the hypothesis that in NPOs with big donor, the risk of non-alignment would be smaller, because the hegemonic donor would have better incentives to monitor the agent. In the event of an organization with dispersed donors, the incentive of each donor for monitoring the use of resources would be comparatively smaller.

In a nonprofit organization, which is maintained with dispersed donors' resources, it prevails among the donors the hypothesis that the agents will allocate the resources in the most efficient possible way, but that is not assured by a wide monitoring from the principals. In this case, the governance mechanisms to reduce the conflict of interest between donors and managers can be characterized as a typical problem of the donors' group action.

4. Final considerations

The need to deepen the study of several corporate governance dimensions in the nonprofit organization is clear. This paper attempted to approach the intrinsic implications of NPOs and their relationship with the problems arisen from corporate governance, starting from a revision of the Theory of Agency concepts. The deepening of this discussion is pertinent from the viewpoint of practical application and aims at offering inputs for a better management of NPOs.

An agenda of effective investigation should stimulate the development of empiric studies to evaluate the external and internal mechanisms of applied governance to non-profit organizations:

External mechanisms - It is important to follow up the regulatory guidelines and the unfolding analysis of the legislation's proposal in the improvement governance of different types of nonprofit organizations. Still among the external mechanisms, the role of "donation market" and of the reputation in the reception of resources by NPOs needs to have an analytical increase.

Internal mechanisms - The role, composition and *modus operandi* of the council are extremely relevant and can improve the governance practices and of management at NPOs.

Future researches can investigate the subject of performance indicators for the NPO's agent's evaluation in subsidizing the council's strategic decisions. This subject will grow in importance more and more as NPOs become professional and need to compete for scarce donations.

The active professional remuneration systems study in the nonprofit organization is another extremely important investigation issue. Due to the NPOs intrinsic characteristics, empiric researches can be developed to a deeper understanding of the profile of the NPO's professionals, enabling the proposal of suitable remuneration policies.

Another research line to be deepened refers to NPO's structure and the unfolding regarding Governance. Are NPOs with dispersed "principals" less efficient in relation to NPO with few institutors?

In spite of the conceptual and methodological limitations, this paper had as scope the contextualization and the analytical deepening of the central issues of Governance applied to nonprofit organizations enlarging the empiric investigation field of Administration of Nonprofit Organizations.

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РАЗДЕЛ 2
КОРПОРАТИВНАЯ
СОБСТВЕННОСТЬ

SECTION 2
CORPORATE
OWNERSHIP



FAMILY OWNERSHIP, PREMIUMS PAID AND PERFORMANCE:
EVIDENCE FROM CORPORATE TAKE-OVERS IN MALAYSIA

*Saw-Imm Song**, *Ruhani Ali***, *Subramaniam Pillay****

Abstract

This study examines the relationship between ownership identity of the largest shareholders, premiums paid and take-over performance, with reference to 63 large acquisitions by Malaysian public listed firms from 1990 to 1999. It is found that the premiums paid are much higher than those in developed countries. It has a curvilinear relationship with take-over performance. At lower to moderate levels of premiums, it improves post-take-over performance while excessive premium drags down the performance of the bidding firms. The finding shows that there is an interaction effect between family ownership and premiums paid which has contributed positively to the post-take-over performance. The evidence suggests that family ownership mitigates agency problem in corporate take-overs.

Keywords: Corporate take-overs, performance, ownership identity, take-over premiums, Malaysia.

*Universiti Teknologi MARA, songsi@tm.net.my

**Universiti Sains Malaysia, ruhani@usm.my

***University of Nottingham in Malaysia, Subramaniam.Pillay@nottingham.edu.my

Corresponding Author: SONG SAW IMM songsi@tm.net.my Tel: 604-6440730/6012-4735730. Financial support from the Ministry of Science and Technology (IRPA Project No: 09-02-01-005-EA0059) is gratefully acknowledged.

1. Introduction

As highly concentrated ownership especially in the hand of family is a characteristic of Malaysian corporations, the role of the controlling parties to act in the best interest of minority shareholders is still debatable¹. Most studies on take-overs in developed countries highlight agency conflict between shareholders and their managers (Morck, Shleifer

and Vishny, 1988; McConnell and Servaes, 1990) where managers try to maximise their own utility. However, La Porta et al (1999) and Claessens et al (1999) contend that the primary issue for large corporations in East Asia is limiting expropriation of minority shareholders by controlling shareholders, rather than mitigating the conflicts of interests between managers and shareholders. One critical issue remains unexamined is the impact of equity ownership on firms' decision making and what are the mechanisms used to exploit the private benefits of control. Thus, this study seeks to examine investment behaviour in an environment with high concentration of control and to shed light whether take-overs are used as a mechanism to expropriate

¹ Minority shareholders in developing countries such as Malaysia have long adopted a passive role and as a result of that their rights have been often ignored. Recent corporate governance initiatives by the Malaysian Government to establish Malaysian Institute of Corporate Governance (1998), Minority Shareholder Watchdog Group Limited (2000) and mandatory training for company directors, are among others, to enhance shareholders activism.

minority shareholders or enhance its operating performance.

Very often when a bidding firm takes over a target it needs to pay a premium. This is to induce the existing shareholders to relinquish their ownership so that it can gain control of the corporation. It is not only acquiring the stock but also the right to control and change the direction of the company. However, if the controlling parties are not acting in the best interest of the minority shareholders, this would be a channel for them to expropriate private benefits from the firm such as excess compensation or overpaying take-over premiums.

The results show that the bidders' control adjusted cash flow returns on asset under-performed before the take-overs but no difference after the event as compared to the benchmark firms. Evidence of curvilinear relationship between the premiums paid and post-take-over performance are found and thus support the hypothesis that managers pay a low to moderate premiums to get required improved performance; however excessive premiums leads to a deterioration of the firms performance. It also supports the hypothesis that family ownership mitigates the agency problem in Malaysia.

This study is structured as follows: Section 2 discusses related literature and provides a conceptual framework in examining the relationship between ownership structure, premiums paid and post-take-over performance. Section 3 describes variable definition and data, and findings are highlighted in section 4. Section 5 concludes.

2. Literature

This section discusses literature on corporate ownership, bid premium, and their impact on the post-take-over performance of the bidding firms.

2.1. Ownership

Corporate take-over research has primarily focused on US companies with widely held ownership structure. Many concerns have been raised about this type of ownership structure as being too costly for the minority shareholders to exert any control on the managers. It is believed that managers, being professional and propertyless, would act in their own self-interest rather than maximising the wealth of their shareholders. Thus, the conflict of interests between managers and owners arises in corporate decision-making.

However ownership structure of East Asian firms is characterised by high concentration of ownership, especially in the hands of family members. As shown in this study, at a 20 percent cut-off point of the largest shareholders' ownership, 70 percent are owned by families, which is consistent with the findings by Claessens et al

(1999). Given such a high concentration of ownership, there is rarely any hostile take-over in disciplining the controlling parties. Furthermore, the separation of management from ownership control is rare, with management of two-thirds of the firms related to the controlling owners.

Recent research by Claessens, Djankov, Fan and Lang (1999) and La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998), Lemmon and Lins (2003) and Chang (2003) point to the fact that the agency problem in East Asia is expropriation of minority shareholders by the controlling owners rather than the conflict of interest between managers and dispersed shareholders². However, Morck and Young (2004) highlights that in countries with weak institutions (education system, courts, financial regulators, and organ of government), a concerted effort to improve a country's institutions is needed before diffused ownership is desirable. This is because in a weak legal protection environment for the shareholders, professional managers may be deeply unreliable and opportunistic. They may simply loot the firm, with no concern for its future or for the wealth of its shareholders. This is supported by Wiwattanakantang (2001) who argues that controlling shareholders acts as monitors who increase the value of the firm for other stakeholders. She found that managers tend to entrench at the 25-50 percent ownership but when the ownership is extremely concentrated at higher than 75 percent, the ownership variable is positively associated with Tobin's q.

In terms of the identity of the large shareholders, this study shows that Malaysian corporate ownership structure is highly concentrated in the hands of family owners, followed by ownership by state agencies³ and others⁴. It is consistent with the survey by Claessens, Djankov, Fan and Lang (1999). Semkow (1989) contends that heavy family board representation is more likely to have larger agency problem. The promotion of

² 39.3 percent of the controlling shareholders of the public listed companies (PLCs) in Malaysia gain effective control through pyramidal structure and 14.9 percent through cross holdings (Claessens et al, 1999). This type of ownership structure would enable the controlling owners to exercise effective control over a company despite owning relatively few of its cash flow rights. When the controlling owner have rights in excess of their proportionate ownership (control right > cash flow right), the consumption of private benefits of control is especially likely as this type of ownership structure reduces cash flow incentive alignment and increases the potential for managerial entrenchment (Claessens et al, 1999; Du and Dai, 2005).

³ State-owned institutions are defined as institutions established under an Act of Parliament. For instance, ownership is classified as State if it is owned by a statutory body established at federal or state level, for example, Perbadanan Nasional Berhad (PNB), Employee Provident Fund (EPF), LTAT, Socso, Urban Development Authority (UDA), State Economic Development Corporations (SEDCs), etc.

⁴ Mainly those in nominee accounts by financial institutions and foreigners.

family members to senior management or board position would dilute the pool of non-family talent and lead to corporate failure when family members are not capable of maintaining and enhancing the business left by the founder. This is supported by Shleifer and Vishny (1997) who argue that one of the greatest costs that large shareholders can bring about is remaining active in management even if they are no longer competent or qualified to run the firm. This has a profound negative consequence to the performance of the firm.

However, Chami (1999) argues that founding families view their firms as an asset to pass on to their descendants rather than wealth to consume during their lifetimes. As such, they are willing to invest in longer-term projects and are less likely to forego good investment to boost current earnings. Furthermore, the presence of family members may provide superior oversight on the firm's technology as their lengthy tenure permits them to move along the firm's learning curve. The sustained presence of families also suggest that suppliers or providers of capital are more likely to deal with the same governing bodies and practices for longer periods than in non-family firm and thus the firms will enjoy lower cost of debt financing compared to non-family firms (Anderson and Reeb, 2003). Thus, performance should be better for family controlled firms, and likewise the post-take-over performance. This is supported by Chu and Cheah (2006). They find that by using Tobin's q and ROA, firms with dispersed structure in Malaysia under-performed as compared to family and foreign controlled firms. They infer that family controlled firms still maintain the passion for entrepreneurship, output efficiency and expansion as well as maximisation of shareholders' value.

Other major types of investors in the Malaysian capital market are investors from state-owned investment arms, investors from financial institutions (who usually hold shares in the form of nominee accounts) and foreign investors. The state-owned institutional investors constitute 13 percent of the sample in this study, which is very close to that in the survey by Claessens et al (1999). Ownership held by other institutions in the form of nominee accounts and foreign ownership constitutes about 14 percent of the sample. Foreign ownership, like most of the domestic institutional ownership, does not play an active role in corporate governance⁵. It would be easier for them to sell their shares rather than intervene in 'problem' companies. Short and Keasey (1997) argued that the move of intervening will be perceived by the market as bad news and will cause a reduction in the value of the investment. Furthermore, effective monitoring is costly,

especially for institutional investors who hold diverse portfolios. Thus, the focus of this paper will be on family ownership and its impact on take-over performance.

2.2. Bid Premium

In the US, Jarrell and Poulsen (in Jarrell et al, 1988) highlighted that the average premiums paid were 19 percent in the 1960s, 35 percent in the 1970s and 30 percent from 1980-1985. Similar results were also found in Jensen and Ruback (1983) who indicate that targets of successful tender offers and mergers earned positive returns ranging from 16 to 30 percent before 1980s. Hanouna, Sarin, and Shapiro (2001) reported that the control premium for acquiring majority position in the US is 20-30 percent higher than the premium paid for a minority position. Similar levels of premium were also paid in other "market-oriented" countries such as UK and Canada, which are higher than that of the "bank-oriented" countries, namely Japan and Germany. Slusky and Caves (1991) and Walkling and Edmister (1985) using samples from 1980s and 1970s, respectively show that the premiums paid in the US were higher at about 50 percent of their market price. Shawky, Kilb and Staas (1996) used the 1980s sample for bank acquisitions and highlighted that the average premium paid was 2.24 times more than their book value for smaller targets while the bigger targets commanded lower premiums of 1.79 times. A similar range was found in Palia (1993)'s study.

Since the majority of targets in this study come from private companies, thus a more appropriate measure for premium paid is the purchase price divided by the book value of the target.

2.2.1. Premiums and post-take-over performance

In order to induce the existing target shareholders to relinquish their ownership so that the bidder will gain control of the corporation, paying a premium above the value of the target is often required. The willingness of the bidders to pay for a premium signals that the combined firms will be worth more than the two firms operating as separate entities. Thus, the synergies generated should be big enough to compensate for the costs of combination. However, Roll (1986) and Sirower (1997) contend that the higher the premium, the greater is the value destruction from the acquisition strategy. This is because the acquirer is expected not only to meet the existing performance levels but also to meet the even higher levels of performance implied by the acquisition premium. This is not an easy task as the current market price has already been built in the expected performance in an efficient market. Unless, the motive for M&A is a carefully thought out strategy and it is driven by synergies that must be

⁵ Under the Banking and Financial Institutions Act, the financial institutions are not allowed to assume any management role or take up a board position.

translated into performance gains beyond those that are already expected. This is echoed in a study by Boston Consulting Group which reported that during the pre-merger stage, eight of ten companies did not even consider how the acquired company would be integrated into operations following acquisition (Zangwill, 1995). If they are poorly considered, they can damage the underlying business. Thus we hypothesise that there is a curvilinear relationship between the premiums paid and post-take-over performance.

2.2.2. Premiums and ownership

In the theory of principal – agent relationship, managers may indulge in any non-maximizing transaction such as excessive consumption of perquisite or sub-optimal risk taking activities, such as M&A, when they do not have a significant ownership stake in the firm (Hubbard and Palia, 1995; Lewellen, Loderer and Rosenfeld, 1985). Although there are many weaknesses in family ownership structure, given the weak legal protection for the minority shareholders in developing countries such as Malaysia, firms run by families with concentrated ownership are expected to perform better than others. This is because professional managers in diffused ownership firms might act in their own self-interest rather than the shareholders'. Thus, bidders with family ownership structure are expected to pay a premium that would have a positive impact on the performance of the combined firm.

2.3. Performance

Previous studies in mergers and acquisitions have primarily focused on the impact of take-overs over a relatively short-term window, which may be several months or days before and after a take-over. Generally, it is found that the short-term performances of the bidders using event study method are negative (Dodd, 1980; Jarrell and Poulsen, 1994; Hubbard and Palia, 1995; Agrawal, Jaffe and Mandelker, 1992; Walker, 2000; Sudarsanam and Mahate, 2003). A summary of the results of US M&A by Andrade et al (2001) for the past 30 years indicates that on average targets consistently earn about 16 percent upon announcement and 24 percent till the close of the deal. In contrast, bidders earn negative returns of -0.3 to -1 percent upon announcement and about four percent till the close of the deal.

Although the event study employing CAPM method has been widely used to estimate the abnormal returns in M&A studies, there are limitations in the model used, such as the difficulties to get 'clean data' to estimate the beta and identification of the exact time of announcement. Accounting-based studies, which measure the actual

performance of the firms is thus adopted in this study.

Most accounting-based studies report no improvement in performance after M&A. For instance, Ravenscraft and Scherer (1989), Mueller (1986) and Peer (in Mueller, 1980) who examine earnings performance have concluded that merged firms have no operating improvement. A study by Denis, Denis and Sarin (1997) on corporate diversification suggests that diversification significantly reduces excess value (as measured by the percentage difference between a firm's total value and the imputed value of its benchmark).

Most of the earlier work (Ravenscraft and Scherer, 1989; Mueller, 1986; Peer, 1980) uses profitability measures such as profit before tax or profit after tax deflated by total assets to measure the accounting performance. This measure has been criticised as it is affected by managerial decisions such as on the treatment of goodwill and depreciation. A better measurement is using the cash flow returns as this method is unaffected by managerial decision and represent the real economic performance. As such the method used by Healy et al (1992) is deemed to be a superior measure compared to the traditional profitability measures and thus is adapted in this study.

3. Methodology

This section discusses variable definitions, data and sample used in the study.

3.1. Variable definitions

The variables used in this study are discussed as follows:

3.1.1. Dependent variable-ACFRPOST

The method used in Song et al (2005) is repeated here. The operating performance in any year is measured by income before taxes and extraordinary items, plus depreciation and total interest expenses. Thus, the adjusted income is unaffected by depreciation, or the type of financing used to fund the take-over. Therefore, the measure should provide an accurate indicator of efficiency changes as a result of the combination and thus is used in this study. To compare performance across firms, the operating performance is deflated by the book value of the total assets of the relevant years and average for three years for pre-take-over performance and four years for post take-over performance (CFR) for both bidders and control firms.

Control firms are used to isolate any economic disturbances in the market that could have a systematic effect on the performance of firms. The control firms were chosen by matching their principal activities based on the sub-sector

classifications as reported in the KLSE statistics (KLSE, various issues). Changes in operating performance resulting from a take-over are evaluated by comparing the post-take-over performance of the bidders with the benchmarks. The take-overs imply that the bidders were trying to be at par or outperform their counterparts in the same business or those having similar size by acquiring another company.

3.1.2. Control variables

Pre-take-over control adjusted cash flow return (Healy, 1992), method of payment (Myers and Majluf, 1984), and new dominant shareholders created in bidders as a result of the take-over (Chang, 1998), are used as control variables as they may have an impact on take-over performance as in previous studies. The pre-take-over control adjusted cash flow return (ACFRPRE) is used to capture any correlation in cash flow returns between the pre- and post take-over years. The coefficient of ACFRPRE measures the effect of the pre- take-over performance on post- take-over returns.

Myers and Majluf (1984) contend that if the management of the bidding firm has superior inside information that its assets are undervalued, cash financed acquisition is more likely to happen. This is a positive signal sent by the bidder to the market that the bidder's existing assets are undervalued. Thus, a dummy value of 1 is assigned for take-over transaction involving cash payment, otherwise a 0 is assigned.

In a study by Chang (1998) on the returns of bidders on the acquisition of privately-held targets, he found that in stock offers, bidders experience positive abnormal returns, which is in contrast to the negative abnormal returns typically found in acquiring a publicly traded target. He contends that this is due to the creation of large blockholders in the bidding firm from the target if common shares are issued to the target shareholders. These blockholders can serve as effective monitors of managerial performance. Thus, if the take-over results in the creation of a new dominant ownership in the bidding firms, a dummy value of 1 is assigned to the variable otherwise a zero is assigned.

3.1.3. Ownership and classification

In order to examine the impact of controlling shareholders on post-take-over performance, only the largest shareholders (including deemed interests) are identified. The identities of the largest shareholders are classified into family-owned, state-owned and others (foreign and nominee accounts) by using 20 percent as the cut-off point. For instance, if the biggest shareholder of the firm is from a family or an individual and hold more than 20 percent of the

shares in the corporation, the firm is deemed as family owned.

3.1.4. Premiums

There are a few methods in computing premiums. Most studies in the developed countries such as US use the abnormal returns at the take-over announcement. Alternatively, the measure is the difference between the offer price and the target firm's stock market price before the take-over announcement. (Walkling and Edmister, 1985; Slusky and Caves, 1991; Sung, 1993). Walkling and Edmister use the target's market price 14 days prior to offer announcement date while Slusky and Caves and Sung measure the target's market price one month and sixty days, respectively before the first take-over announcement. This is the most common method used in the US as targets' share prices are readily available. The premiums or abnormal returns reflect the cash flow benefits that shareholders expect to receive under the new management (Barclay and Holderness, 1989). If the shares are traded privately on negotiated transfers of controlling blocks, Barclay and Holderness (1989) and Dyck and Zingales (2004) measure the premiums paid as the difference between the purchase price and the post-announcement price. The premiums paid reflect the private benefits of control accruing to the controlling shareholders. If a company has multiple classes of stocks traded with differential voting rights, then the difference in the market value of a vote represents the premiums and private benefits of control.

Alternatively, premiums paid can be computed as the ratio of the purchased price to the book value of the target (Palia, 1993; Shawky, Kilb and Staas, 1996). This is especially popular for non-public listed firms when market prices of the targets are usually not readily available. The computation of premiums paid in this study follows this measure as most of targets in the sample involved non-public listed firms. This ratio gives an indication of how many times more the bidder is willing to pay for the target firm than its book value.

In order to reduce the problem of multicollinearity, the premium variable is then centred as suggested by Cohen et al (2003), Jaccard et al (1990) and Frazier et al (2004). It also enable ease of interpretation of the explanatory variables as zero premiums do not have meaningful interpretation because there is non zero purchase price nor zero book value in our sample. Thus, the coefficient represents, e.g. the regression of dependent variables (ACFRPOST) on independent variable (e.g FOWN) at the mean premiums (MPREM) in the sample. In order to test the curvilinear relationship, the premiums variables (which has been centred) is squared to reflect the quadratic function of the equation. In order to assess the interaction effect of

premiums paid and performance, the product terms of premium variables (MPREM and MPREMSQ) and family ownership variables are created by multiplying the variables (MPREM*FOWN, MPREMSQ*FOWN). Table 1 summarises the variables used

3.2. Data

To identify the bidders and targets, a procedure similar to that of Song et al (2005)⁶ is used here. Initial M&A announcement list was identified from the Investors Digest published by KLSE (various issues). The actual combinations of the firms were confirmed by checking through the Companies Announcement Files⁷, Annual Reports and the KLSE Annual Companies Handbook. The pre- and post-takeover performance data was collected for three years prior to and four years after the takeover. Only successful takeovers were used in the analysis. The ownership data was obtained one year prior to M&A and the new block created was examined after the takeover year. If the dominant owner was a company, the owner of the dominant ownership was traced further in order to get the ultimate owner from the records kept by the Companies Commission of Malaysia (CCM, formally Registrar of Companies).

As the majority of the targets were from non-listed companies, which were relatively smaller and closely held, only those with more than 51 percent acquisition stakes were included. This is to ensure that the takeover will result in a change in control of the targets. The selected target should have a purchase price of not less than RM5 million as too small a target will not have any significant impact on the bidders (Seth, 1990). Minority buyout or situations where the controlling parties purchase the remaining shares of the firms from the minority shareholders were excluded, as the impact of these kinds of acquisition would not be as apparent. For the public listed firms that were relatively larger, only those with more than 20 percent acquisition stakes were considered, as this is sufficient to effect a change in control (Loh, 1996). Other exclusion criteria for the sample included those targets which did not have the profit and loss account or balance sheet before the announcements. This was typically found in those newly incorporated companies, dormant companies, foreign targets, and targets that hold concession or licenses for operation⁸. The control companies should not experience any major

M&A activities during the period of study in order to provide a performance benchmark to the effects of M&A. It was found that only about 60 percent (466/781) of the targets announced were successfully taken over by the bidders. Table 2 shows the selection criteria for the targets included in this study. 136 targets were available for analysis. However, the final sample consists of only 63 bidding companies, as multiple targets by a single bidder were treated as one observation. It only includes the latest acquisition during the period or if the second acquisition had an interval of four years. In the event that bidders announced a few targets in a single announcement, the biggest target was selected as the matched sample for the bidders. It also excluded banks, other financial institutions and utility companies in order to improve comparability of balance sheet and income data.

Table 3 shows the distribution of types of ownership by family, state, nominee and foreign. Family ownership constitutes about 73 percent of the distribution while state ownership makes up about 13 percent, followed by nominee and foreign ownership of 14 percent. The distribution is consistent with the corporate ownership surveyed by Claessen et al (1999). Concentrated ownership, where the largest shareholders hold more than 20 percent of the corporation's share, constitutes about 82 percent of the sample while dispersed ownership only constitutes about 18 percent of the sample. It is also found that new blocks of ownership (16 percent) emerge in the bidding firms after the take-over, indicating that there were reverse take-overs.

Generally, the majority of the targets come from the trading and services and property sectors. The premiums paid are much higher than those in the developed countries as shown in Table 4. It is found that 50 percent of the bidders paid more than 3.48 times the book value of targets. On average, the consumer sector, property sector and trading and services paid the highest premiums. The mean is very much higher than the average paid in the US (Shawky, Kilb and Staas, 1996, 2.24x; Slusky and Caves, 1991, 1.5x; Walkling and Edmister, 1985, 1.5x; Hanouna, Sarin, and Shapiro, 2001, 1.3x). The centered value for premiums paid ranged from -7.4 to 74⁹.

Table 5 shows the descriptive statistics used in the analysis. ACFRPOST and ACFRPRE show negative median value implying that half of the bidders under-performed as compared to their counter-part in the same industry. Consistent with Song et al (2005), Table 6 shows that the bidders were under-performing the benchmark but there was no difference after the take-over.

⁶ The sample in this study involves those targets with RM5 million and above. To improve the accuracy of the calculated premiums, target firms with negative book values are excluded.

⁷ It contains documents related to companies' announcements such as Circular to Shareholders in relation to take-overs, etc.

⁸ For instance, acquisition of Sampling Plywood (Baramas) Sdn Bhd which held timber concession by Glenealy Bhd were valued based on the estimated cash flow of the concession and thus financial statement were not applicable

⁹ Premiums with negative book value computed (14 cases) were excluded from the study.

Table 1. Variables Used

Variable		Definition of measurement	Proxy for
Symbol	Name		
Performance			
ACFRPOST	Control-adjusted cash flow returns after take-over	The difference between the $CFR_{i, post}$ and $CFR_{ci, post}$	Performance
Bidder's Ownership			
FOWN	Family ownership	Dominant shareholder (holds more than 20% of the corporation's shares) is family	Managerial entrenchment/ Alignment
Premium			
PREMIUM	Premiums paid	Purchase price/ Book value of targets.	Potential hubris and expropriation.
MPREM	Premiums paid	Centred PREMIUM	
MPREMSQ	Premiums paid	MPREM square	
MPREM*FOWN	Product of MPREM and family ownership	The interaction effect of premiums and family ownership	Managerial entrenchment/ Alignment
MPREMSQ*FOWN	Product of MPREMSQ and family ownership	The interaction effect of premiums square and family ownership	
Control Variables			
ACFRPRE	Control-adjusted cash flow returns before take-over	The difference between the $CFR_{i, pre}$ and $CFR_{ci, pre}$	Pre-take-over Performance
MPAY	Method of payment	Dummy = 1 for payment involving cash, 0 otherwise.	Asymmetry of information and signalling.
NEWBLOC	New dominant block created	If the take-over resulted in the creation of a large new block in the bidding firm	

Table 2. Sample Selection Criteria

	1990s
Announcement	781
Confirmed M&A	466
Lapsed	315
Targets from non-public listed companies	376
Targets from public firms	62
Targets from foreign firms	28
Purchase price more than RM 5 million	314
Purchase price less than RM 5 million	80
Incomplete information	72
Purchase stake more than 20% for PCs	58
Purchase stake more than 50% for non-PCs	321
Others and foreign companies	87
Purchase stakes of more than 20% for PLCs and purchase price more than RM5 million	44
Purchase stakes of more than 50% and purchase price more than RM5m	226
Total	270
Minus	
Incomplete information/with major confounding events	110
Total available targets in sample	160
Bidders with multiple targets	55
Cases with negative book value/extreme values/Finance companies	42
Total available bidders for accounting-based performance analysis	63

Table 3. Category of Ownership

	Frequency	Percent
Panel 1: Type of ownership		
Family	46	73.0
State	8	12.7
Nominee/Foreign	9	14.3
Total	63	100.0
Panel 2: Ownership concentration		
Dispersed	11	17.5
Total	63	100
Panel 3: New dominant block of ownership created		
Yes	10	15.9
Total	63	100

Table 4. Distribution of Bidders' and Targets' Sectors and Premiums Paid

	Bidders' sector		Targets' sector		Premiums paid	
	Frequency	Percent	Frequency	Percent	Mean	Median
Trading and Services	14	22.22	23	36.51	9.10	3.89
Properties	14	22.22	23	36.51	10.84	4.03
Industrial Products	16	25.40	9	14.29	2.43	2.61
Plantation	7	11.11	4	6.35	1.45	1.31
Construction	5	7.94	2	3.17	2.16	2.16
Consumer Products	6	9.52	1	1.59	15.45	15.45
Mining	1	1.59	1	1.59	1.10	1.10
Total	63	100	63	100	8.05	3.48

Table 5. Descriptive Statistics

	N	Mean	Median	Std. Deviation	Skewness	Minimum	Maximum
	Valid						
ACFRPOST	63	-0.0001	-0.0065	0.1147	0.1089	-0.2662	0.2806
ACFRPRE	63	-0.0200	-0.0021	0.0884	-2.2043	-0.4714	0.1442
MPAY	63	0.2540	0	0.4388	1.1582	0	1
NEWBLOC	63	0.1587	0	0.3684	1.9137	0	1
MPREMIUM	63	0.1784	-4.3874	12.6999	3.7861	-7.4742	74.6609
MPREMSQ	63	158.7585	34.0475	708.4600	7.4694	0.1057	5574.2573
FOWN	63	0.7302	1	0.4474	-1.0625	0	1
FOWN*MPREM	63	0.6913	-1.4705	12.0884	4.2067	-7.4742	74.6609
FOWN*MPREMS	63	144.2869	23.4351	709.7991	7.4886	0.0000	5574.2573

Table 6. One-sample t-test for ACFRPRE and ACFRPOST

Test Value = 0				
	t	df	Sig. (2-tailed)	Mean Difference
ACFRPRE	-1.7920	62	0.0780	-0.0200
ACFRPOST	-0.0088	62	0.9930	-0.0001

Table 7. Family ownership, premiums and post-take-over performance

	Model 1	Model 2	Model 3	Model 4
CONSTANT	-0.0087	-0.0034	0.0300	0.1074 **
ACFRPRE	0.2723 *	0.2842 *	0.3285 *	0.3859 **
MPAY	0.0144	0.0075	-0.0002	0.0096
NEWBLOC	0.0654 *	0.05896 *	0.0604 *	0.0647 *
MPREM		0.0044 **	0.0046 **	0.0139 **
MPREMSQ		-0.0001 *	-0.0001 *	-0.0012 **
FOWN			-0.0330	-0.1128 **
MPREM*FOWN				-0.0093
MPREMSQ*FOWN				0.0011 **
N	63	63	63	63
R square	0.096	0.165	0.179	0.238
Adj R square	0.050	0.092	0.091	0.126
F-statistics	2.079	2.252	2.036	2.114
Sig. F-change	0.113	0.103	0.330	0.132

* Significantly different from zero at the 10 percent level, using a two-tailed test.

** Significantly different from zero at the 5 percent level, using a two-tailed test.

4. Findings

The hypotheses are tested using a four-step hierarchical regression analysis (Cohen et al., 2003). A check on the assumptions indicates that the error terms are normally distributed, it has constant variances and it does not violate the no multicollinearity assumptions¹⁰.

Table 7 shows the determinants post-take-over performance of the bidding as compared to their benchmark firms. The control variables namely ACFRPRE, MPAY and NEWBLOC explain about 10 percent of the variation in ACFRPOST. The post-take-over performance is affected by the pre-take-over performance; however it is only marginally significant at 10 percent level. This goes against the prediction that the post-take-over performance is unaffected by the pre-take-over performance as in Healy et al (1992). The method of payment is not significant at the conventional level. However, if the method of payment resulted in the creation of new block of equity holders in the bidding firms by way of equity financing, it has a positive impact on ACFRPOST. This is consistent with Chang (1998) and Shleifer and Vishny (1986) findings that blockholders can serve as an effective monitor of managerial performance. The willingness of target shareholders to take large positions in a firm also conveys favourable information about the firm.

Model 2 shows that there is a curvilinear relationship between ACFRPOST and the premiums

paid. The second derivation of the equation, $\frac{d^2y}{dx^2}$

shows a negative value indicating that there is an inverted U relationship between the dependent variable and the independent variables. This shows that excessive premiums paid have a negative impact on the performance of the bidding firms.

This supports the argument by Roll (1986) that many M&As fail because the bidders paid too much. Apart from the hubris explanation, it could also possibly be due to tunnelling effect by controlling parties as shareholders activism is relatively weak in developing countries like Malaysia. To investigate the effect of ownership identities on subsequent operating performance, Model 3 includes variable FOWN. The result indicates that this variable does not affect the performance of the bidding firm individually. However, when we interact the MPREMSQ and FOWN (Model 4), the explanatory power improves by 6 percent to 23.8 percent. The coefficient of this interaction variable is positive and significant. This suggests that family ownership mitigates the negative effect of premiums paid on performance. The ownership by family has a positive

influence as to the level of premiums paid and thus the post-take-over performance of bidding firms. This goes against Semkow's (1989) assertion that heavy family board representation is more likely to have larger agency problem. On the contrary, it supports Chami's (1999) argument that founding families are willing to invest in longer-term projects and are less likely to forego good investment to boost current earnings. This is consistent with Anderson and Reeb (2003) that the presence of family members may provide superior oversight on the firm's technology as their lengthy tenure permits them to move along the firm's learning curve. Chu and Cheah (2006) also find that firms with dispersed structure in Malaysia under-performed as compared to family firm. They infer that family controlled firms still maintain the passion for entrepreneurship, output efficiency and expansion as well as maximisation of shareholders' value.

5. Concluding Remarks

This study attempts to find out the relationship between the ownership identity and the premiums paid by the bidding firms and its post-take-over performance, with reference to 63 acquisitions by the public listed firms in Malaysia. The results shows that the bidders' control adjusted cash flow returns on asset under-performed before the take-over but improved or are at par with the benchmark after the event. By year 2005, there are more than 1000 firms (a relatively large number as compared to other countries in the region) listed in the KLSE; however, many smaller firms are actually not actively traded. This study suggests that it would be beneficial if these smaller public listed firms be merged if they can find a right fit. This will improve the attractiveness of the Malaysian capital market in the long term.

This study also finds evidence of curvilinear relationship between the premiums paid and post-take-over performance. This supports Roll's (1986) argument that excessive premiums paid cause M&As to fail. The interaction effect between family ownership and premiums paid shows that firms run by families have investment decisions that are more carefully thought out. This has resulted in firms paying a premium that justifies for the positive performance of the combined firm. The findings do not support the view that family ownership lead to the expropriation of minority shareholders as highlighted by La-Porta et al (1999) and Claessens et al (1999). The positive impact of dominant ownership created as a result of the take-over supports Chang (1998), Shleifer and Vishny (1986) and Jensen and Meckling (1976) argument that block ownership would be beneficial to corporations as it allows for greater monitoring of managers.

¹⁰ Although there is a correlation between MPREMSQ and MPREM, since MPREMSQ is a non-linear function of MPREM, it does not violate the no multicollinearity assumption (Gujarati, p.218,1995)

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CORPORATE OWNERSHIP AND TECHNICAL EFFICIENCY ANALYSIS IN THE SPANISH REAL ESTATE SECTOR

Douglas Nanka-Bruce*

Abstract

The real estate sector keeps contributing significantly to the Spanish economy. A recent news article reports the existence of inefficiencies in the nature and delivery of new properties. We investigate the technical efficiency of this sector using a non-parametric “reasonable” benchmarking frontier, acknowledging the marked influence of the sector’s shadow economy. We then relate the results applying a panel data analysis to the shareholding concentration and identity of firm ownership. We find no systematic support for the effect of corporate ownership on technical efficiency.

Keywords: Corporate Ownership; Data Envelopment Analysis

**Department of Business Economics, Universitat Autònoma de Barcelona*

Author’s address: Department of Business Economics, Edifici B. Universitat Autònoma de Barcelona, 08193 Bellaterra (Cerdanyola del Vallès), Barcelona, Spain. Email: Douglas.NankaBruce@uab.es.

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Introduction

The twin motors of tourism and construction have been argued to be current driving contributors of the Spanish economic engine. In recent years, Spain has recorded more new houses than in France, Germany and Italy combined, with a result that 20% of all houses in Spain have been built within a decade. The increasing demand for both domestic and foreign buyers has led to speculations that this property market boom will not crash soon. This has also led to significant increases in purchasing and rental properties. The low interest rates and significant lowering of unemployment rates are some factors for the increased demand.

Research on the real estate sector has mostly focused on the demand side with little importance given to the internal processes of product supplying firms to meet this ever-increasing demand. According to a recent report (Stucklin, 2004), a sample of 82 properties in Valencia, Madrid and Barcelona that had recently been constructed revealed that more than half of these had either being delivered late or with construction faults. Because of the dynamic nature of this sector, illegal workers mostly without appropriate skills tend to be employed.

Poor finishes and workmanship seem to be the worst complaints of clients. There is therefore the need for firms in this sector to analyse their productive processes in order to be more efficient with their outputs, as increasing the efficiency of an organisation is also a desired output when enhancing

product delivery. Firms with more efficient productive processes are seen to be more associated with profitable outputs than inefficient counterparts.

The construction industry of which the real estate sector is a very important part is the most dynamic of the basic sectors in terms of job creation and activity. The contribution of the construction sector as a percentage of total gross value added in 2000 was 8.5% as opposed to 5.3% for the EU-15 average. It employs 11% of the working population but three-quarters of this are workers hired on a temporary basis. Because of the temporary nature, illegal employment (shadow economy) continues to thrive although since 2001, the law imposes heavy penalties against companies employing illegal labour. From the government side too, corruption and time wastage continue to thrive when acquiring land for new properties. There are irregular sales of properties in a bid to avoid company taxation that serves to fuel the shadow economy as well.

In terms of the labour force in Spain, even the indigenous youth still hover between a “fixed term, precarious job; the shadow economy; and, now increasingly, a stable job” (Chislett, 2002: 39). Spain can boast of the third largest shadow economy after Greece and Italy fuelled on by the increased tax and social security contributions putting its size at about 22.5% of GDP. In the real estate sector, house prices increased in 2001 because of the flushing of “black” money due to the single EU currency switch pushing it up to 11.4% in real terms. Between 1980 and 2001, the real price increase was 124% compared to a 19% global index. 86% of Spanish households own a house as compared to 61% of the EU average (Chislett, 2002).

Despite the drain in this sector's shadow economy it still contributes significantly to the main economy. When a sector experiences a boom, it attracts new investors. Other existing investors would like to purchase more shares to be able to control the performance of the firm. Therefore, the ownership structure in this sector is also worth investigating. Studies on ownership structure, usually analysed in an agency theoretical framework, have usually been carried out as to the effect of insider ownership or ownership concentration on performance. Although, several studies report the positive (but sometimes non-monotonic) effect of insider ownership on performance, the literature on ownership concentration has seen conflicting results as to its effect. Very few studies have looked at the effect of ownership identity on performance.

In the Spanish real estate sector, the variables that are used to determine performance need to be examined for all the firms and those that serve as influential outliers removed before any statistical inferences can be deduced as a way of reducing the impact of the illegal employment in this sector. An outlier is an atypical observation in that its movement is out of pattern with other observations in dataset analysis. Most nonparametric models for determining productive efficiency do not distinguish between influential and non-influential outliers.

The rest of the paper is organised as follows: in the next section, the theoretical background and state-of-the art in corporate ownership is discussed to examine the problems to be analysed followed by an explanation of technical efficiency achieved through data envelopment analysis, our proxy for firm performance. The data is then defined and variables selected. After getting the technical efficiency scores using the reasonable frontier approach which is explained prior to its application, we perform a panel regression analysis, present the results with discussions and conclude within the limitations of the paper.

Background Literature

Ownership Structure

Corporate ownership refers to residual claimants of a firm. The fewer owners a firm has, the more concentrated the shares. Shleifer and Vishny (1986) find large shareholders to increase firm performance. Ownership concentration is the share of the largest owner (Pedersen and Thomsen, 1999). Contrary to the classical publication by Berle and Means (1932) about dispersed ownership in the public corporation, empirical findings over the past twenty years point to the issue of concentrated ownership (see for example Shleifer and Vishny, 1986; Holderness and Sheehan, 1988; Morck, Shleifer and Vishny, 1988; La Porta, Lopez-de-Silanes and Shleifer, 1999).

The theoretical argument by Demsetz (1983) that ownership concentration was endogenous to the owner's risk propensity and the benefits obtained from monitoring managers has sparked an interesting debate. Demsetz and Lehn (1985) having controlled for some variables did not find a significant relationship between ownership and accounting profitability. Still treating ownership as an endogenous variable but multi-dimensional, Demsetz and Villalonga (2001) found no statistically significant relationship between ownership structure and corporate performance. Thereby in their view, whether the ownership is dispersed or concentrated does not matter. This result was also reported in Pedersen and Thomsen's (1999) multi-national European survey testing a model initially developed using U.S. data. Cho (1998) applies ordinary least squares (OLS) regression where ownership structure affects investment and consequently corporate value. But, in applying simultaneous regression, the endogenous nature of ownership comes into play. Corporate value is seen to affect ownership structure while ownership structure has no effect on corporate value, in support of Demsetz and Lehn (1985). Morck, Shleifer and Vishny (1988) however argue that Demsetz and Lehn's (1985) inability to find a significant relationship between ownership concentration and performance may be due to their use of a linear specification, which failed to capture any non-linear relationship. Leech and Leahy (1991) however report significant results using a linear specification of ownership concentration. In other studies, Gorriz and Fumas (1996 & 2005), and Lee (2004) look at the effect of family ownership and management on firm performance. Short, Keasey and Duxbury (2002) argue that large external shareholders have incentives to monitor and curb the self-serving behaviour of managers because of their economic interests. These monitoring and curbing costs all generate costs of agency. The nature of agency cost-reducing mechanisms in terms of being complementary or substitutable as regards to shareholder/managerial equity and debt is still a subject of academic debate. Dispersed ownership is still of significance for very obvious financial reasons. Firms with funds acquired through dispersed ownership can assume larger scale operations, even diversify and thus make use of scale and scope economies. Lauterbach and Vaninsky (1999: 189) suggest it "facilitates complex-operations allowing the most skilled or expert managers to control the business [...] even when they do not have enough funds to own the firm." This leads diversified ownership firms to compensate for agency costs with improved efficiency and profitability. These developments discussed above have led to inconclusive results that either support or do not support the ownership concentration-economic performance relationship. Pedersen and

Thomsen (1999) and Gedajlovic and Shapiro (1998) have attributed this development to “system effects”. Stock market data however continue to lend support to the positive association between ownership concentration and performance (Leech & Leahy, 1991; Zeckhauser & Pound, 1990; McConnell & Servaes, 1990, 1995; Smith, 1996; Short, Keasey & Duxbury, 2002). Highly concentrated ownership can however generate operational inefficiencies when these owners are interested in short term gains rather than long term profit maximisation. This is because they may encourage managers to engage in risky short-term strategies not aimed at cost maximisation (Kohler, 1990). Large controlling shareholders may collude with managers to siphon resources from small shareholders (Short, 1994). The exercise of control to expropriate firm value, at the detriment of minority shareholders, has been referred to as the expropriation hypothesis (Lange and Sharpe, 1995).

Ownership Identity

A controlling shareholder or ultimate owner is regarded as having more than 20% direct and indirect voting rights (La Porta, Lopez-de-Silanes and Shleifer, 1999). Applying this cut-off point to their empirical survey on medium-sized publicly traded firms in Spain, only family, State, and widely-held institutions /corporations are ultimate owners in Spain. Widely-held financial and miscellaneous ultimate owners are under 1%.¹ Cross-shareholdings and pyramids are not frequent in their study, a viewpoint supported by Gorris and Fumas (2005). While empirical studies lend support to the managerial hypothesis that owner controlled firm have higher profitability than manager controlled firms, these results have often been highly statistically insignificant (Short, 1994). Her surveys (1994: 208-215) covers studies where in some cases manager controlled firms outperform owner controlled firms. With this as a factor, controlling for insider ownership is not expected to have any effects on ownership identity/ concentration and performance (Cho, 1998). Thomsen and Pedersen (2000) argue that the identity of the owners has objective performance implications through how they exercise their franchises. The categories of ownership identity are discussed below:

Institutional Ownership

With institutional ownership (for example insurance companies and pension funds), firms tend to have a long-term planning horizon, adequate financial outlays and a low aversion towards risk (Thomsen and Pedersen, 2000). They also tend not to interfere

too much with the daily management of the firm as characterised by their arms-length relationship (Sarkar and Sarkar, 2000). They pursue firms that share similar goals and objectives (Li and Simerly, 1998). Mostly however, they have minority shares in companies that do not encourage them to monitor managerial discretion. But for a given shareholding value, McConnell and Servaes (1990, 1995) and Smith (1996) have argued that they tend to have a performance impact.

The empirical results from studies on the effect of institutional ownership on firm performance are very mixed. Goergen, Renneboog and Correia da Silva (2005), Hellwig (1998), and Morck, Nakamura and Shivdasani (2000) find a negative relationship. Boehmer (2000) and Gorton and Schmid (2000) find a positive relationship. Prowse (1992) and Zoido (1998) find no systematic relationships which leaves the subject still open to empirical debate.

Family/personal ownership

Family ownership has similar characteristics to owner-managed firms in that they tend to have a disproportionate share of their wealth invested in the company. They tend to be risk-averse and suffer from capital rationing. Nickel, Nikolitsas and Dryden (1997) find no relationship of family ownership on productivity. This category is however argued to have the best positive influence on firm performance from the agency theoretical framework.

Bank ownership

Several studies group banks with institutional ownership. In Spain, banks especially savings banks play a key role in firm ownership. It is worthy to note that saving banks have no shareholders to restrict their interest in becoming shareholders in other firms. When banks are part owners of a firm, they can internalise financial relationships. These firms are therefore less likely to be credit rationed by their banks (Ramirez, 1995) and hence bank-owned firms have the necessary capital to improve productivity (Cable, 1985).

Corporate/ industrial company ownership

Corporate ownership is when other firms are also shareholders in other firms. Specific assets (Williamson, 1985) lead to related firms acquiring shares in a company so as to be able to monitor managerial discretion. Kester (1992) however argues that there could be a significant loss of flexibility as well as the risk of inadequate mutual monitoring. Aside from financial capital outlays, this ownership form also facilitates knowledge transfer (Thomsen and Pedersen, 2000).

¹ This is even the case when applying a 10% cut-off measure (The authors employed data from 1995).

Government ownership

Hart, Shleifer and Vishny (1997) suggest they are more interested in welfare economics like low prices for outputs, higher employment goals and other objectives that drain profitability. In terms of financial profitability, government-owned firms are argued to be the worst performers. Government ownership however leads to increased financial capital “in terms of credit, liquidity, or costs of capital” (Thomsen and Pedersen, 2000 :694).

In another study, Thomsen and Pedersen (1996: 153; 1998: 388-390) identify six classes of ownership based on the identity and share of the largest owner and the type of ownership contract. Table 1 shows the different classifications according to these researchers. This classification has also been used by Leech and Leahy (1991).

La Porta, Lopez-de-Silanes and Shleifer, (1999: 476) also classify ownership by voting rights with firms that are widely held or have ultimate owners. They have come up with five types of ultimate owners which are: a family or an individual, the State, a widely held financial institution such as a bank or an insurance company, a widely held corporation, and miscellaneous which include cooperatives, voting trust or a group with no single controlling investor.

Studies on Ownership in Spain

Martínez and Giné's (2005) empirical study of shareholders in Spain show that 80% of firms have the largest shareholder usually commanding 69% of the shares, while the second largest commands 12%. Therefore only the largest two shareholders have reasonable control of the firm. Demsetz and Villalonga (2001) have however argued the importance of the first five largest shareholders in their U.S. study. This is thus applicable in a different institutional regime.

Martínez and Giné (2005) also find a significant number of the largest shareholders being families and individuals. For financial institutions as shareholders, they report only 2% in their sample and 5% as second largest shareholders. They however admit that 42% of the firms in their sample are small firms. What they conclude is that financial institutions are keen on having controlling shares in their target firms as in 70% of the cases; where the first 10 largest shareholders are considered, they are either the largest or second largest.

La Porta, Lopez-de-Silanes and Shleifer (1999) in their global empirical study also find that, in Spanish firms, the probability of control by a single shareholder in a family firm, State, and widely-held financial firms are all 1.0 while widely-held corporation is 0.5. Górriz and Fumas (2005) using listed Spanish firms discuss the highly concentrated ownership even among very large listed firms (see

also Crespi & Garcia-Gestona, 2001; Górriz & Fumas, 1996). They highlight the importance of the institutional environment in shaping ownership and performance. Table 2 is a sample of some studies in ownership.

Inference from Literature Review

Based on the literature on corporate ownership as discussed above, two key issues that need to be investigated further are the concentration and identity of ownership. Studies on ownership concentration employing stock market and profitability measures as performance proxies have been seen to have a positive impact on performance. Other studies have shown a negative or no relationship but most of the studies have revealed this positive (but sometimes non-monotonic) relationship.

We expect to follow that trend; *the more concentrated the ownership, the better the firm's performance.*

Following an agency theoretical perspective and extending it to the relationship that exists between the identity of the owner(s) and the external manager, family and individual firm owners usually with a lot of personal financial commitment would find better ways of aligning their interests to that of managers and by so doing seek to increase the performance of their ventures.

We thus expect individual/family-owned to have the most positive influence on performance followed by firms owned by industrial companies, while State-owned firms will be the worst performers.

Performance and Control Variables

For our proxy of performance, we adopt technical efficiency computed through data envelopment analysis (DEA).

The concept of DEA is explained after reviewing the usual proxies used to measure performance on ownership studies. A shortcoming of most of the papers on ownership and performance is the use of financial performance mostly stock valuation data. Lee (2004) argues that they are indirect measures of firm productivity.

Short (1994) argues that ownership concentration does not necessarily lead to control and that debt holders play an important role. Hence it is necessary to control for a firm's financial structure.

Most studies control for firm financial risk with gearing ratios. The most commonly used is the debt-to-equity ratio. Gearing is a measure of financial leverage, demonstrating the degree to which a firm's activities are funded by owner's funds versus

creditor's funds. Firm leverage and liquidity are used to control for firm's financial structure.

Leverage is measured as the ratio of the aggregate of short-term and long-term debt to net worth. Liquidity is defined as the ratio of working capital to total assets.

Anderson and Reeb (2003) use the ratio of long-term debt to total assets as leverage. Dimelis and Louri (2002) controls for financial structure with leverage and liquidity while equating performance as return on assets (ROA) divided by total assets.

Data Envelopment Analysis

DEA compares decision-making units (DMUs) that use the same inputs to generate outputs to get the relative (technical) efficiency measures of individual DMUs.

Technical efficiency is when a firm uses minimum input(s) to have maximum output(s). DEA uses a mathematical programme to estimate the efficiency frontier. It does not need a pre-specification of the production function coefficients. DEA models thus construct a non-parametric frontier over data points so that observations may lie below the frontiers (Charnes, Cooper & Rhodes, 1978; Färe, Grosskopf & Lovell, 1994; Thiele & Brodersen, 1999).

Unlike parametric approaches, DEA makes no assumption of the distribution of the underlying data, and all deviations are assumed to be due to inefficiency (Banker et al., 1989).

For our analysis, we adopt an input-oriented radial measure where $A = \{(x, y) | x \text{ can produce } y\}$ under free disposability, convexity and variable returns to scale technology.

The relationship between agency theory and DEA

Some authors such as Bogetoft (1994, 1995) and Agrell, Bogetoft and Tind (2002) have modelled a relationship between DEA and agency theory by assuming that the best production function of a firm is not certain a priori, although the production possibility set is known.

DEA is therefore a useful tool of solving this problem based on firms that use a similar production function to minimise the extent of uncertainties.

Data Analysis

Data Selection, DEA Input and Output Specifications

The sample we employ in the analysis is selected from the SABI database which is managed by Bureau Van Dijk. The Activity NACE Rev. 1.1 Code 7011 (4 digits) involves firms engaged in the

development and selling of real estate. There are 63,329 firms with 56,474 currently active. Restrictive criteria that involve firms employing between 30 and 50,000 people and formed between 1900 and 1996 (2005 data) have been used in selecting private firms. Firms that lack data on selected variables for at least one year are eliminated leading to 530 firms for further analysis. We then checked the input and output variables for data usefulness, concentrating on dropping out firms with very low employee costs, material costs and operating turnover (the first stage of potential outlier detection process) resulting in 486 firms for benchmarking frontier analysis.

The total number of the final unbalanced panel for the technical efficiency analysis is 346 (1998), 360 (2000) and 391 (2002). Data has been taken for the 1998 to 2003 period but the years 1998, 2000 and 2002 are utilised because of the iterative nature of the analysis. The variables selected from unconsolidated accounts (in thousands of Euros) are; fixed assets, material costs, employee costs and other costs as inputs, and operating turnover as an output. These are shown in table 3. Due to the effect of the shadow economy on accounting data, we use cost of employees rather than number of employees as an output variable. One reason for this is because most of the employment in this sector is temporary making the number of employees unsuitable. The effect of the shadow economy is also reflected in some extremely low employee costs for some firms. These firms together with those with very low material costs and operating turnovers have been omitted from the sample even before running frontier analyses since they serve to be potential outliers. This serves to limit the effect of the shadow economy on data input as well as sub-normal firm conditions.

DEA Results and the Use of a Reasonable Frontier

Outlier detection with technical efficiency scores has been investigated (see Wilson, 1995 for a comprehensive analysis and Simar, 2003). We perform Andersen-Petersen (Andersen & Petersen, 1993) super-efficiency tests for the period to rank efficient units and detect outliers. These outliers may be either influential or non-influential. To determine which outliers are non-influential so that we keep them in the sample, we perform a systematic super-efficiency test beginning with the outlier with the biggest score. In this case, we omit that DMU and perform another Andersen-Petersen super-efficiency test. We iteratively repeat the procedure for all outliers. We then run *Wilcoxon's matched pairs signed-ranked* tests on the results with and without the reference outliers. This is because we do not make assumptions on the efficiency distribution. The

Wilcoxon test z checks for the same median in two probability distributions as shown below.

$$z = \frac{K_+ - \frac{n \cdot (n+1)}{4}}{\sqrt{\frac{n \cdot (n+1) \cdot (2n+1)}{24}}}$$

where n is the number of *DMUs* under investigation, K_+ is the lower of two values given as the sum of positive ranks or sum of negative ranks. If the differences in means are significantly different, we remove those outliers. We keep the outliers that have statistically insignificant differences in means. As can be seen in table 4, three more outliers are influential in 1998 while four are influential in 2000 and 2002 (when compared to that achieved using the procedure proposed by Wilson, 1995). We then perform a normal technical efficiency test in VRS technology to achieve our reasonable contemporaneous frontiers. The concept of a reasonable frontier has already been applied by Prior and Surroca (2004) where the theoretical explanation and its comparison to Wilson's (1995) procedure has been given in detail.

In applying this reasonable frontier, we solve for two problems usually encountered with DEA models; the presence of a firm whose performance cannot be matched and a firm whose presence masks the performance of others.

Variables and Measures

The pure technical efficiency values, European ratios, and ownership for 1998, 2000 and 2002 are applied in the analysis. These are:

- Pure technical efficiency measure – VRS (performance measure)
- Liquidity ratio – Liquidity (controls for financial structure)
- Gearing ratio – Gearing (controls for financial structure)
- Independence indicator (A, B, C and U) – Ownership concentration
- Identity of ultimate firm owner – Ownership identity
- Date of establishment of the firm – Age (controls for firm size)
- Natural logarithm of total assets – Control for firm size

We are unable to control for insider ownership due to the use of a database that does not include this. In any case, Cho (1998) found no significant impact of insider ownership on ownership structure and performance relationship. Tables 5 and 6 describe

statistics of the quantitative and qualitative variables used. The pure technical efficiency score is used as a proxy for performance. We use gearing ratio (debt-to-equity ratio and indicating a firm's leverage) and liquidity ratio (liquidity) to control for a firm's financial structure. Firm age and the natural logarithm of total assets are used to control for firm size. The variables that are related to ownership structure is the independence indicator. The ownership identity is measured by shareholder type. With this, we have as an ultimate owner: individual or family shareholders, an industrial company or a State or public organisation. For banks, a financial companies (investment companies, insurance companies, mutual and pension funds, trusts, and trustees), foundations or research institutions, the database has very few of these types necessitating their omission from the analysis as already observed in other studies in Spain. About half of the firms in the sample do not provide information on the identity of the ultimate owner. As regards to independence indicator, we use the measure applied by Bureau Van Dijk where A^+ , A and A^- are denoted by A and imply no shareholder has more than 24.9% direct or total ownership. B^+ , B and B^- are denoted by B and imply a shareholder has more than 24.9% but not more than 49.9% direct or total ownership. C implies a shareholder has more than 49.9% direct or total ownership. U is the situation where there is an unknown degree of independence.

Ownership Analysis and Results

Because DEA provides comparison to extreme as opposed to average observations, there is no assumption of normal distribution necessitating the use of regression techniques that are not based on this assumption. It is also very important to remove influential outliers from the sample since these observations serve as wrong yardsticks.

A Tobit regression analysis (for panel dataset) is used with technical efficiency (VRS) scores obtained through the reasonable frontier approach as a dependent variable to test the effect of *ownership concentration* and *identity* on *performance*.

We perform the regression in stages, by introducing each of the independent variables with the control variables and checking for the magnitude and sign of coefficients. We then perform a multivariate regression with both independent and control variables. The regression results are presented in table 7.

Table 1. Ownership classification

Dispersed ownership	No single owner owns more than 20% of the firm's shares
Dominant ownership	One person/family/firm owns a sizeable share between 20% to 50% of the firm
Personal/family ownership	One person/family owns a majority of the company
Government ownership	Government owns a majority of the company
Foreign ownership	Foreign firm owns a majority of the company
Cooperatives	The firm is registered as a cooperative or owned by a group of cooperatives

Source: Adapted from Thomsen and Pedersen (1996: 153).

Table 3. Descriptive statistics for DEA variables in 1000s of Euros

Variables	Minimum	Maximum	Mean	Standard deviation
<i>Year = 1998: N = 346</i>				
Operating turnover	87.38	108360	7991.19	12516.72
Fixed assets	1.70	469369.6	6848.71	29603.04
Other costs	24.16	31476.04	2114.58	3274.50
Material cost	11.35	70537	4919.97	8586.78
Employee cost	17.33	11392.07	1005.56	1385.29
<i>Year = 2000: N = 360</i>				
Operating turnover	100.06	236365	10232.31	17967.35
Fixed assets	16.74	615364.5	8063.47	35985.56
Other costs	59.54	33834.9	2641.47	3595.91
Material cost	8.96	150979	6054.58	12042.46
Employee cost	18.03	11755.02	1268.99	1570.35
<i>Year = 2002: N = 391</i>				
Operating turnover	239.03	363731	15145.63	27020.06
Fixed assets	2.507	646992.7	10873.91	39187.11
Other costs	24.54	43190.68	3684.832	5141.86
Material cost	8.604	256866	9187.46	19111.16
Employee cost	9.38	16588.62	1660.26	1982.74

Table 4. Wilcoxon tests with Andersen-Petersen super-efficient units with and without ranked reference outliers

1998		2000		2002	
DMU	Z	DMU	Z	DMU	Z
F236	-3.22***	F39	-5.21***	F70	-3.08***
F334	-3.51***	F183	-10.02**	F114	-1.68*
F340	-2.79***	F208	-1.99**	F274	-9.67***
		F351	-2.15**	F352	-2.43***
5 2outliers; 3 more influential		36 outliers; 4 more influential		35 outliers; 4 more influential	

*** ** * => significant at 10% | 5% | 1% levels respectively. This test is carried out based on the assumption that the DEA efficiency is a random variable with a statistical distribution function. The reasonable frontier identifies non-influential outliers which are maintained in the sample for VRS efficiency analysis. We identify more influential outliers than with the procedure proposed by Wilson (1995).

Table 5. Descriptive statistics of variables used in analysis

Variable	N	Minimum	Maximum	Mean	Standard deviation
<i>Year = 1998</i>					
Technical efficiency	297	0.3022	1	0.84	0.14
Firm age	530	2	57	12	9.22
Total assets*	472	2.76	1126910	20766.64	73845.11
Liquidity ratio	466	0	3902	10.84	181.18
Gearing ratio	412	-819.29	994.95	123.19	221.53
<i>Year = 2000</i>					
Technical efficiency	329	0.123	1	0.61	0.23
Firm age	530	4	59	14	9.22
Total assets*	483	3.005	1644346	26785.63	93799.69
Liquidity ratio	477	0	141.07	1.91	8.69
Gearing ratio	437	-640.74	981.29	126.85	215.41
<i>Year = 2002</i>					
Technical efficiency	362	0.056	1	0.62	0.21
Firm age	530	6	61	16	9.22
Total assets*	505	23.1	1051358	33045.45	78191.05
Liquidity ratio	502	0.004	626.42	3.92	34.87
Gearing ratio	465	-855.03	962.63	130.76	198.12

* Total assets is in thousand of Euros

Table 6. Statistics of qualitative variables

Ownership type	N	Independence indicator	N
Individual/family firm	90	A	25
Industrial company	101	B	49
State or public entity	7	C	181
Others*	7	U	275

* Others includes banks, financial and insurance firms, and foundations

A denotes no shareholder has more than 24.9% of total shares

B denotes ultimate shareholder has between 25% and 49.9% of total shares

C denotes ultimate owner has 50% or more shares

U denotes an unknown degree of independence

Table 7. The relationships between technical efficiency vs. ownership concentration and identity

M1: Ownership concentration and identity		M2: Ownership identity		M3: Ownership concentration	
Tech efficiency	Coef.	Tech efficiency	Coef.	Tech efficiency	Coef.
Individual/Family	-0.2639**	Individual/Family	-0.2516**	A	-0.0265*
Industrial Co.	-0.1668	Industrial Co	-0.1628	B	-0.0265
State	-0.3173	State	-0.2961	C	0.0667***
A	-0.4677	Ln Total Assets	-0.0245**	Ln Total Assets	-0.0337***
B	-0.1354	Liquidity	0.0093**	Liquidity	0.0126***
C	-0.0584	Gearing	-0.0002***	Gearing	-0.00002
Ln Total Assets	-0.0242**	Constant	1.3062***	Constant	1.1095***
Liquidity	-0.0095**				
Gearing	-0.0002**				
Constant	1.382***				
Prob > chi2	0.0005	Prob > chi2	0.0006	Prob > chi2	0.0000

*/ **/ *** => significant at the 10%, 5% and 1% levels

Ownership Identity

To test for the effect of ownership identity on performance, we create dummies for individual/family firm owners, firms with ultimate owners as industrial companies and State-owned firms. The agency view argues that individual/family firm owners should perform better than those owned by industrial companies while State-owned companies will be the least performers. Controlling for firm financial structure and size, the regression model M2 (table 7 above) gives negative values for the variables used apart from liquidity which has a positive sign. Total assets, liquidity and a firm's gearing as expected are all significant with coefficient magnitudes of 0.0245, 0.0093 and 0.0002 respectively. Only individual/family owned firms systematically affects technical efficiency, although in a negative way. In the sample used however, industrial companies seem to have the least negative influence while State-run firms negatively affect technical efficiency the most.

Ownership Concentration

Similar to the analysis of ownership identity, we create dummy variables for the ownership concentration variable as seen in model M3 (table 7 above). From the agency theoretical perspective, the more concentrated the ownership, the lesser the agency costs and hence better firm's performance. To this extent, the coefficient of *C* should be lower than that of *B*, and *A* should be the least. We find partial support for this as the coefficient of *C* is

positive and significant. *A* is negative and significant while *B* is negative and not significant. The effect of the control variables are the same as in ownership identity.

Corporate Structure

In model M1 (table 7 above), we run a multivariate regression with both independent variables with the control variables for financial structure and size. All the coefficients in this case are negative. Of the two independent variables, only individual/family owned firms have a systematic negative effect. Industrial firms have a better effect on technical efficiency than individuals though the effect is not systematic. State-run firms have the least influence albeit, unsystematically. Looking at the statistically insignificant coefficients of ownership concentration, *C* has the best influence on technical efficiency, followed by *B* and *A* as hypothesised.

Discussion

The technical efficiency results in table 5 indicate an average of 69% technical efficiency over the period but under contemporaneous frontier considerations. Reductions in these inefficiencies can lead to significant improvements in outputs reflecting in improved profitability since technical efficiency is argued to be positively associated with performance. The reasonable frontier helps identify firms whose productive efficiency can distort the frontier with which other firms can be compared to. Detecting and

removing these outliers that do not fit in the pattern (or are atypical) of the remaining observations make DEA efficiency scores more reliable.

In the 1998 contemporaneous reasonable frontier, the average technical efficiency of the firms was highest at 84%, declining to 61% in 2000 and a marginal increase in 2002 at 62% (and increasing just below 80% in 2003, although results for this year is not reported in this paper). During this period where firms experienced reductions in technical efficiency, profitability also increased due to an increasing demand for new properties, due in part to the freeing of "black" money because of a monetary currency switch. The real estate market was booming in this period so as long as firms became increasingly profitable due to demand factors, productive efficiency was not taken seriously. Firms in the real estate sector can become more profitable by becoming more technically efficient by up to a potential average of 31%.

The effect of ownership structure on performance as regards to ownership concentration measured by the independence indicator has not been fully supported and thus cannot be statistically generalised. Kohler (1990), Lange and Sharpe (1995) and Short (1994) have all given their perspectives as to why concentrated ownership might fail to give the expected results. The Tobit regression model yields both significant and insignificant differences (as observed also by Prowse, 1992 and Zoido, 1998) contributing to the debate on the mixed effect of ownership structure on performance.

As already pointed out earlier in the literature review, most studies that have had a positive association between ownership concentration and performance relate to stock market data (Leech & Leahy, 1991; Zeckhauser & Pound, 1990; McConnell & Servaes, 1995; Smith, 1996). Lauterbach and Vaninsky (1999) in their use of both profitability and DEA proxies of firm performance gave similar results in ownership evaluations.

The hypothesis on the effect of ownership identity is not supported. Although not statistically significant, the regression models M1 and M2 put firms with industrial companies as ultimate owners to have better technical efficiency than individual/family owned firms. The State-owned firms are seen as the worst performers.

This statistically insignificant result is not too surprising, given the mixed outcomes of studies on this subject. The effect of individual/family owned firms and those owned by industrial companies is worth investigating though as some non-parametric Kruskal-Wallis tests (not reported here) yielded similar results of the latter being more technically efficient, but then of course this study is only limited to the real estate industry in Spain and a significant number of firms do not report their ownership identity in the database employed.

Conclusion

The reasonable frontier approach has been useful in ameliorating two of the problems usually encountered with DEA models; the presence of firms whose performance cannot be matched and firms whose presence mask the performance of others. In this case, only firms in the real estate sector whose patterns follow a general trend are used in computing the frontier and thus a useful benchmark for inefficient firms.

The general observation has been that firms in the real estate sector are only 69% efficient in their productive efficiency. However, there has been a downward trend in technical efficiency recorded from 1998 to 2002 attributable to the increasing demand for new property. State-owned firms have been observed to be the most inefficient while companies with industrial companies as ultimate shareholders tend to be more productively efficient than individuals/families-owned firms although only at the sample level. It goes to buttress the now increasing literature on the endogenous nature of ownership structure and the consideration of more sophisticated techniques and more managerial variables to achieve practical outcomes.

The ownership concentration is seen to affect the technical efficiency when this is considered alone but in the presence of ownership identity too, this assertion becomes statistically insignificant necessitating the concomitant analysis of these and other variables rather than carrying out individual research.

As a final remark, of implication to policy is the 31% technical inefficiency that exists in the real estate sector. The reports of poor workmanship and finishes as well as delays in delivery of finished products can be traced in part to these inefficiencies and the demand for new property. As a major driver in the Spanish economic progress in recent times, firms in this sector when made aware of the levels of technical inefficiencies (and recommendations given for practice) will give shareholders the right value for their investments.

Limitations

We do not distinguish between individual and family owned firms that have an insider or outsider manager because of data limitations. We also assume from the agency theoretical framework that a single owner is able to align his interests with the manager more than several owners because of the increased costs due to opportunism. Then also, the use of a panel censored regression limits the use of more sophisticated models that have been applied in examining the ownership-performance relationship. The use of a database also denies the use of some managerial variables that could be used in the DEA

specifications or as control variables in the regression analysis to adequately control for ownership structure, and the effects of the shadow economy. We have only used *contemporaneous* frontiers and thus can only comment on average efficiencies for single time periods. The use of *intertemporal* frontiers can show the relative changes in efficiency across time periods.

Directions for future research

We presented a table based on some corporate ownership studies that showed many different analytical tools, techniques and variables used to moderate the relationship between ownership structure and performance. Applying these to the same sample can be a useful indication of which one explains the variability of performance best. In the field of DEA, recent studies have employed techniques for statistically generalising technical efficiency results as for example through bootstrapping as proposed by Simar and Wilson (2000). Its use can help in giving some global credibility to technical efficiency levels by estimating the sample variation of efficiency estimators. The idea of a reasonable benchmarking frontier also needs to be simplified computationally to handle very large datasets.

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Appendix

Table 2. Previous studies on the effect of ownership structure on performance

Author / Year	Theoretical framework	Hypothesis	Data	Techniques and measures	Results
Cho M.H. (1998)	Agency theory	The effect of ownership structure on investment. The endogenous nature of ownership structure.	1991 data of 230 Fortune 500 firms.	Piecewise linear OLS and 2SLS regressions. Dependent variables: Corporate value (Tobin's Q-ratio), Investment (capital and R&D expenditures), Insider ownership. Control variable: Market value of the firm's common equity to control for managerial wealth constraints and risk aversion. Investment and liquidity to control for financial structure.	Significant relationship between insider ownership and corporate value. Non-monotonic relationship between insider ownership and investment. Positive for <7% and >38%. Negative for 7%-38%.
Demsetz H. & Villalonga B. (2001)	Agency theory	Ownership structure is endogenous. The fraction of management shares and that of the 5 largest shareholders might represent conflicting interests.	5 years of data on 223 US firms.	OLS and 2SLS regressions. Equation 1: Dependent variables; Firm performance measured by Tobin's Q. Predictor variables: % of shares owned by management; % of shares owned by the 5 largest shareholders; Advertising expenditures as a fraction of sales; R&D as a fraction of sales revenue (FoSR); Fixed plant & equipment expenses as a FoSR; Value of debt as a fraction of book value of assets, Four-firm market concentration ratio; Indicator variables for industries. Equation 2: Dependent variable; Fraction of shares owned by management. Predictor variables: Firm performance (Tobin's Q); Market risk of stock; Firm-specific risk; Firm size measured by book value of assets; Indicator variables for industries.	Ownership structure is endogenous. Biases in previous empirical study might be due to failing to account for the complexity of interest in ownership structure. Markets succeed in bringing out ownership structures in different kinds of firms such as scale economies, regulation and environmental stability.
Earle J.S., Kucsera C. & Telegdy A. (2005)	Agency theory	A group of block holders decrease firm performance as opposed to a single large block holder.	6 years of data on 168 Bulgarian publicly listed firms.	Piecewise linear logit regression. Dependent variables: ROE, and operational efficiency (ratio of sales to number of employees). Explanatory variables: Largest block holder, largest 2 block holders, largest 3 block holders, all block holders, second largest block holder, third largest block holder	Only the largest block holder has a systematic effect on improved corporate performance. Effects of total block holdings are much smaller and statistically insignificant.
Frick B. (2004)	Agency theory	Owner-managed firms are more efficient than outsider-managed firms because of monitoring. In terms of knowledge and skills, managers of private firms are more successful than those of public firms. Organizational form has no impact on performance.	3 years of non-financial data for 305 German wineries.	OLS, SE and 2SLS regressions. Dependent variables: Price per bottle of wine and Jury grade. Predictor variable: Ownership type. Control variables: Annual production, geographic region, membership in professional associations, acreage, and firm size.	The higher the foreign ownership, the higher the efficient production of the firm. Employee-managed firms are more efficient than owner-managed firms attributable to human capital advantage.

Table 2. continued: Previous studies on the effect of ownership structure on performance

Author / Year	Theoretical framework	Hypothesis	Data	Techniques and measures	Results
Gedajlovic E., Yoshikawa T. & Hashimoto M. (2005).	Agency theory	6 distinct categories (or 3 classes) of shareholders in the Japanese context according to investment objectives	3 years of data for the largest 247 Japanese manufacturing firms listed on the Tokyo Stock Exchange	GLS regression. Independent variables: 6 shareholder categories. Dependent variables: ROA, dividend payout ratio and the beta of a firm's stock. Control variables: age, firm size, ratio of bank-mediated debt to total outstanding debt and industry dummies.	Japanese corporations are sensitive to investment objectives of shareholders. The influence of ownership on performance is complex when shareholders with different investment objectives are considered.
Gorritz C.G & Fumas S.V. (1996).	Agency theory, classical managerial theory.	Family-owned firms are smaller than non-family owned firms. They are more efficient but not more profitable.	2 years of data for 81 non-financial firms quoted on the Spanish stock market.	OLS regression. Dependent variable: Size (value added per worker, capital stock and sales). Independent variables: Capital to labour ratio, ownership type. Control variables: Debt-to-equity ratio, scale economies and market power.	Family-owned firms have higher productive efficiencies than non-family owned firms. Family-owned firm sizes are smaller. Family-owned firms are not more profitable due to their size constraints.
Gorritz C.G & Fumas S.V. (2005).	Institutional theory, transaction cost theory	Family firms grow at a slower rate, choose less capital-intensive production technologies and more technically efficient. Economic profits, financial structure and cost of capital is however the same.	15 years of data on 53 of both Spanish publicly listed family- and non-family-owned firms	Parametric estimation of productivity. Dependent variables: TFP (ratio of assets to employees), Growth/size constraint (asset, age and average growth – ROA and invested capital), Profitability – ROA (controlling for debt structure), Tobin's Q-ratio. Predictor variable: Listed family and non-family-owned firms. Control variables: Long-term debt to total debt ratio, debt to assets ratio.	Differences in family and non-family owned firms are as a result of the objective function of decision-makers and constraints in productive efficiency.
Lauterbach R. & Vaninsky A. (1999).	Agency theory	Diffused ownership firms perform better than closely held firms.	3 years of data for 280 Israeli public firms	Regression and DEA. Input variables: Ratio of equity to total assets, Total firm assets, CEO pay, pays of four other top managers. Output: Net income	Owner-managed firms are less efficient in generating net income than outsider-managed firms. Concentrated ownership is less efficient than diffuse ownership. DEA and regression gave similar results.
Li M. & Simerly R.L. (1998).	Agency theory	Environmental dynamism moderates positively on the insider-ownership performance relationship.	4 years of data for 90 large companies in the US IT and Food and Beverages sectors.	Multiple regressions. Dependent variables: ROA, ROI, OROA, ROE. Predictor variables: CEO stock ownership. Control variables: Market value of CEO's stockholdings, long-term debt to total equity (leverage), Herfindahl index to control for diversification, degree of institutional ownership, size, firm age, CEO duality (as a board chairman).	Increased insider ownership may lead to better returns under conditions of greater environmental dynamism.

Table 2. continued: Previous studies on the effect of ownership structure on performance

Author / Year	Theoretical framework	Hypothesis	Data	Techniques and measures	Results
Nickell S., Nicolitsas D. & Dryden N. (1997).	Agency theory	External shareholder with a high degree of control can enforce a higher productivity performance.	13 years of published accounts of 582 (125 have appropriate shareholder control data) companies.	Use of Cobb-Douglas production function for firm productivity growth. Variables: Profits less capital costs normalised on value added, Shareholder control. 22 industry dummies to control for industry-specific technological factors.	Firms with a dominant external shareholder from the financial sector have higher productivity growth rates.
Sarkar J. & Sarkar S. (2000)	Agency theory	Block holder activism increases corporate performance but depends on the identity of the shareholder.	2 years of data for 1567 private and foreign manufacturing firms.	OLS regression. Dependent variables: MBVR and a proxy for Tobin's Q ratio. Predictor variables: fraction of equity share by directors and relatives, corporate bodies, government, and foreign entities. Control variables: leverage, size, capital intensity, intangible assets, diversification and age.	All categories of large shareholders increase firm performance. Institutional investors do not take active part in corporate governance.
Seifert B., Gonenc H. & Wright J. (2005)	Agency theory	Positive relationship between managerial ownership and performance at low levels of managerial ownership occurs across difference governance regimes. The relationship at higher levels of managerial relationship will be unclear. Block holders or institutional ownership should improve performance.	5 years of data for 2198 firms from US, 319 firms from Germany, 674 firms from UK, and 1015 firms from Japan.	OLS and 2SLS regressions. Equation 1: Dependent variable; Performance (Tobin's Q). Explanatory variables: Ownership, Leverage, Capital expenditures, Sales growth, and Industry. Equation 2: Dependent variable; Ownership. Explanatory variables: Performance, Leverage, Capital expenditures, Size, Cash flow, and Risk.	There is no universal relationship between ownership equity by insiders and performance. Positive for UK and Germany, negative for US and UK. Ownership structure therefore matters with specific local laws, i.e. good minority shareholder protection. Ownership does not appear to be an endogenous variable. No significant differences between OLS and 2SLS regression results. ²
Thomsen S. & Pedersen T. (2000).	Agency theory Transaction cost theory	Institutional ownership increases profitability (but lower sales growth) than family, bank, government and corporate ownership types.	6 years of data for 435 of the largest European non-financial companies in 12 countries.	Duncan grouping and regression. Dependent variables: MBV, ROA and sales growth. Control variables: nation industry and debt-to-equity ratio. Predictor variables: the ownership types.	Ownership structure is seen as an exogenous variable with economic performance. Evidence of a bell-shaped effect of ownership share on MBV and ROA but not sales growth (particularly strong MBV for institutional investors).

² The effect of control variables on performance is fairly consistent across different countries in the study. Leverage has a negative effect, sales growth (investment proxy) has a positive effect, capital expenditures has mixed effect, Block holders and institutions have a very mixed effect on performance, with only a positive impact in Germany. Foreign ownership has a positive influence in Japan while employee ownership is negative. Risk has a negative effect, size has a negative effect, and the higher the insider ownership, the higher the performance (Seifert et al., 2005).

**РАЗДЕЛ 3
КОРПОРАТИВНОЕ
УПРАВЛЕНИЕ
В АФРИКЕ**

**SECTION 3
NATIONAL PRACTICES OF
CORPORATE GOVERNANCE:
AFRICA**



**THE RELATIONSHIP BETWEEN BOARD SIZE, BOARD
COMPOSITION, CEO DUALITY AND FIRM PERFORMANCE:
EXPERIENCE FROM GHANA**

Anthony Kyereboah-Coleman*, Nicholas Biekpe*

Abstract

The paper examined board characteristics and its impact on the performance of non-financial listed firms in Ghana. Data covering 11 year period (1990-2001) was used and analysis conducted within the panel data framework. The study shows that most Ghanaian firms adopt the two-tier board structure and are largely non-independent. The regression results, though relatively mixed, confirm other studies and show that there should be a clear separation of the two critical positions of CEO and board chairman in order to reduce agency cost for enhanced firm performance.

Keywords: Corporate Governance, Firm-Performance, Tobin's Q, Ghana

**University of Stellenbosch Graduate School of Business, (acoleman@usb.sun.ac.za, acoleman@ug.edu.gh), South Africa.*

***Professor of Finance and Econometrics and Head of Africa Centre for Investment Analysis, University of Stellenbosch, South Africa. (Email: nbiekpke@acia.sun.ac.za)*

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1. Introduction

The concept “corporate governance” has attracted various definitions. Metrick and Ishii (2002) define corporate governance from the perspective of the investor as “both the promise to repay a fair return on capital invested and the commitment to operate a firm, efficiently given investment”. The implication of this definition is that corporate governance has an impact on a firm’s ability to access the capital market. Metrick and Ishii argue that firm level governance may be more important in developing markets with weaker institutions as it helps to differentiate firms from each other. Cadbury

Committee (1992) defines corporate governance as “the system by which companies are directed and controlled”. According to Zingales (1998) corporate governance is “the complex set of constraints that shape the ex-post bargaining over the quasi rent registered by the firm”. While we acknowledge that there are several definitions of corporate governance, for the purpose of this study, we define corporate governance as the systems, structures and processes put in place to ensure that there is a clear line of accountability and responsibility in a firm, aimed at ensuring that the firm operates effectively with a notable reduction in ambiguity regarding functions, responsibilities and duties.

One must point out that the concept of corporate governance has been a priority on the policy agenda in developed market economies for over a decade especially among very large firms. Further to that, the concept is gradually warming itself as a priority in the African continent. Indeed, it is believed that the Asian crisis and the relative poor performance of the corporate sector in Africa have made the issue of corporate governance a catchphrase in the development debate (Berglof and von Thadden, 1999). A number of recent studies show that good corporate governance increases valuations and boosts the bottom line. For example, a study by Gompers *et al* (2003) showed that companies with strong shareholder rights yielded annual returns that were 8.5 percent greater than those with weak rights. Related to that, it was also observed that the more democratic firms also enjoyed higher valuations, higher profits, higher sales growth, and lower capital expenditures.

Again, poorly governed firms are expected to be less profitably, have more bankruptcy risks, lower valuations and pay out less to their shareholders, while well-governed firms are expected to have higher profits, less bankruptcy risks, higher valuations and pay out more cash to their shareholders. Claessens (2003) also argues that better corporate frameworks benefit firms through greater access to financing, lower cost of capital, better performance and more favourable treatment of all stakeholders. The position has been stated that, weak corporate governance does not only lead to poor firm performance and risky financing patterns, but are also conducive to macroeconomic crises like the 1997 East Asia crisis. Other researchers contend that good corporate governance is important for increasing investor confidence and market liquidity (Donaldson, 2003).

1.1. Corporate governance in Ghana

In Ghana corporate governance has been gaining roots in response to initiatives by some stakeholders such as the Ghana Institute of Directors (IoD-Ghana), in collaboration with the Commonwealth Association of Corporate Governance, to address corporate governance in Ghana. Again, there have also been other initiatives designed to address corporate governance issues in the country. For instance, a study, conducted and launched by IoD-Ghana in 2001, pointed out that there is an increasing acceptance of good corporate governance practices by businesses in the country.

Notwithstanding the above developments, it must be indicated that more formal corporate governance structures and institutions are relatively not widespread though a number of laws provide for governance structures for companies in Ghana. These laws include:

- The Companies Code 1963 (Act 179), which provides for governance of all companies incorporated in Ghana;

- The Securities Industry Law, 1993 (PNDCL 333) as amended by the Securities Industry (Amendment) Act 2000, (Act 590), which provides among other things for governance of all stock exchanges, investment advisors, securities dealers, and collective investment schemes licensed by the Securities & Exchange Commission (SEC).

In the Companies Code, there is a deliberate attempt to streamline corporate practices in the country. For instance, the code stipulates a minimum of two directors for a company with no ceiling on the maximum number, whilst the Ghana Stock Exchange (GSE) Listing Regulations are silent on board size. With regards to board composition, there is no requirement under the Companies Code for the appointment of independent directors neither is there a provision for the balance of executive and non-executive directors. However, there is allowance for the interests of different stakeholders to be represented on a board. This is however a requirement under The Securities and Exchange Commission's Code of Best Practices on Corporate Governance (SEC Code) for the GSE. The Companies code in Ghana makes provision for the appointment of executive directors by allowing directors to hold concurrently with the office of director, any other office or place of profit in the company, except the office of auditor. In the case of board structure based on duality or otherwise of the CEO, Companies Code does not prevent the appointment of the same person to the two offices. The SEC Code on the other hand advocates for but does not insist on the two-tier board structure where the CEO is different from the board chairman. On the whole corporate governance structure development in Ghana have been somewhat modest, there is need for more advancements in corporate governance issues given the effect these have on firm performance.

Developing countries such as Ghana are now increasingly embracing the concept of good corporate governance, knowing it leads to sustainable growth. In Ghana a study by Mensah *et al* (2003) on corporate governance and corruption, it was revealed that poor corporate governance practices amongst a sample of surveyed firms resulted in corrupt practices and dealings with the government which firms were unwilling to disclose.

However, in the context of Sub-Saharan Africa, the issue has received very limited empirical attention. This present study provides empirical evidence on corporate governance and firm performance from the context of a developing economy. The paper specifically investigates the

relationship between various variables of corporate governance and performance of companies listed on the GSE during the eleven year period (1990 – 2001).

The rest of the paper is organized as follows: section two looks at the review of literature; section three is devoted to data and methodology, section four discusses empirical findings and section five draws conclusions, policy implications and offers suggestion for a new research focus.

2. Review of literature

There is no gainsaying of that fact that the principal-agent theory is generally considered as the starting point for any debate on the issue of corporate governance. Indeed, the theoretical underpinnings for the extant research in corporate governance come from the classic thesis, “*The Modern Corporation and Private Property*” by Berle & Means (1932). The thesis describes a fundamental agency problem in modern firms where there is a separation of ownership and control. It has long been recognized that modern firms suffer from a separation of ownership and control. They are run by professional managers (agents), who are unaccountable to dispersed shareholders (principals). This view fits into the principal-agent paradigm. In this regard, the fundamental question is how to ensure that managers follow the interests of shareholders in order to reduce cost associated with principal-agent theory? It is the responsibility of the owners to find, retain managers and also ensure that the managers pursue objectives in line with theirs in order to reduce agency costs.

Previous empirical studies have provided the nexus between corporate governance and firm performance (see Yermack (1996, Claessens et al., 1999; Klapper and Love, 2002; Gompers et al., 2003; Black et al., 2003 and Sanda et al (2003) with inconclusive results. Others, Bebchuk & Cohen (2004), Bebchuk, Cohen & Ferrell (2004) have shown that well governed firms have higher firm performance. The main characteristic of corporate governance identified in these studies include board size, board composition, and whether the CEO is also the board chairman.

While some contend that small boards are effective for enhanced firm performance (1993) and Lipton & Lorsch (1992), Yermack (1996), Eisenberg et al. (1998), Mak and Yuanto (2003), Sanda et al (2003), others hold the opposing view. Regarding board composition, while, some contend that it is important for a firm to have more inside directors, others are of the view that it pays to have a dominated by outsiders.

The positions of the CEO and the board Chairman have also been subjects for intense debate. Hence, the literature reveals a board structure typology, the one-tier system and the two-tier

system. In the one-tier system the Chief Executive Officer (CEO) is also chairman of the board, whilst the two-tier system has a different person as the board chairman and is separate from the CEO. Fama & Jensen (1983) also argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management.. It has been noted though that the one-tier board structure type leads to leadership facing conflict of interest and agency problems (Berg & Smith 1978, Bickley & Coles 1997) thus giving preference for the two-tier. It is argued that agency problems tend to be higher when the same person holds both positions. Yermack (1996) argue that, firms are more valuable when the CEO and board chair positions are separate. Relating CEO duality more specifically to firm performance, researchers however find mixed evidence. Daily & Dalton (1992) find no relationship between CEO duality and performance in entrepreneurial firms. Brickley et al. (1997) show that CEO duality is not associated with inferior performance. Rechner & Dalton (1991), however, show using a sample of Fortune 500, that companies with CEO duality have stronger financial performance relative to other companies. Goyal & Park (2002) examine a sample of U.S. companies and find that the sensitivity of CEO turnover to firm performance is lower for companies without CEO duality. Sanda et al (2003) found a positive relationship between firm performance and separating the functions of the CEO and Chairman.

Considerable attention has been given to the role of boards in monitoring managers and in removing non-performing CEOs. Jensen (1993) voices a concern that a lack of independent leadership makes it difficult for boards to respond to failure in top management team. -tier system. Klapper and Love (2002) examine corporate governance and performance in a sample of firms in 14 countries, most of which are developing economies. They find that better corporate governance is associated with better performance in the form of Tobin's q and ROA and that good governance seems to matter more when the legal environment of a country provides investors with weaker protections. Thus, corporate governance is noted to have a significant impact on a firm's performance.

Though, corporate governance is considered to involve a set of complex indicators which face substantial measurement error due to the complex nature of the interaction between governance variables and performance indicators, the purpose of this paper is to examine the influence of selected corporate governance variables namely Board size (BDS), Board composition (BDC), and CEO duality (CEO) have on performance variables of Tobin's Q, (TOB), and Sales growth rate (SGR), giving due

recognition to some control variables such as the size of the firm (SZE), the asset structure (AST), and the Debt structure (DBT). The variables are carefully chosen because of data availability and measurement.

3. Data and Methodology

The study employs basically secondary data based on the financial statements of all the 16 listed non-financial firms on the Ghana Stock Exchange. The use of listed firms is due primarily to data availability and reliability because these are required by law to provide end of year financials. The banks and the other financial institutions are excluded because of their huge debt structure which is very much different from the other firms, consistent with studies by Faccio and Lasfer (2000). Data for the study covers the eleven year period from 1990 to 2001.

The governance data and variables were also obtained through the administration of questionnaire and personal interview. The methodological approach used in most previous work examining the impact of corporate governance on firm performance variables utilizes a multiple regression. Thus, the study employs a modified version of the econometric model of Miyajima et al (2003) which is given as follows:

$$Y_{it} = \beta_0 + \beta_1 G_{it} + \beta_2 C_{it} + e \quad (1)$$

Where Y_{it} represents firm performance variables; Tobin's Q (TOB), and Sales growth rate (SGR), for firm i in time t . G_{it} is a vector of corporate governance variables; Board Size (BDS), Board Composition (BDC=number of outside directors/total number of directors), and a dummy variable (CEO) to capture if the board chairman is the same as the CEO or otherwise and e , the error term. C_{it} is a vector of control variables; Size of Firm (SZE), the ratio of Fixed assets to total assets (AST), and the Debt structure (DBT).

3.1. Variables and description

The variables for the study were chosen based on data availability and computational purposes.

3.1.a Firm performance variables

TOB=Tobin's Q with measurement shown in the appendix. ROA=this is defined as return on assets and is computed by dividing profits before interest and tax payments by total assets; SGR=Sales growth rate is calculated by dividing the difference between

current sales and previous year's sales volumes by previous year's sales volume.

3.1.b Governance variables

BDS=this is the number of members serving on a firm's board; BDC=the board composition is the ratio of outside directors to the total number of directors (i.e. number of outside directors divided by total number of directors) CEO=this is a dummy variable which takes the value of 1, if the CEO combines as the board chairman and 0 if there are different people occupying the two positions of CEO and board chairman

3.1.c Control Variables

SZE= this is the size of the firm measured by the value of its asset base. For the regression analysis, we take the log of the assets because the values are widely spread; AST=this is the ratio of fixed assets to total assets in trying to measure how much of the assets base represent fixed and for that matter structures and equipment; DTB=this the debt structure of a firm measured by the total of debts (both short and long term) divided by the total assets. The essence of the control variables is to give recognition to the fact that the performance of a firm and for that matter listed firms may be influenced by several factors.

Both parametric and non-parametric methodology is employed. The regression is run in a panel manner; various options of panel data regression were run, fixed effects, random effects, OLS, GLS and a dynamic panel. The most robust of all was the GLS panel. Thus, we report results of the GLS panel regression in the subsequent tables.

4. Empirical findings

4.1. Descriptive statistics

Of the firms studied, the mean board size is about eight (8) suggesting that firms in Ghana have relatively moderate board sizes. With a maximum board size of thirteen (13) and deviation of 1.97, the implication is that firms in Ghana have relatively similar board sizes. The results also show that these boards are dominated by insiders indicated by 80.9% and 76% representing maximum and mean respectively being appointed from within. Again, of all the firms studied, 75% of them adopt the 2-tier board structure implying that about 25% of the firms have their CEOs and Board chairman positions combined in one personality. This suggests that avenue for agency problems emanating from conflict of interest are minimized.

Table 1. Descriptive statistics of dependent and independent variables

	Min	Mean	Median	Std. Dev.	Max.	Jarque-Bera	Kurtosis
BDS	5.0	8.22	8.0	1.79	13.0	35.72725	4.159571
BDC	0.091	0.239	0.231	0.1135	0.40	20.27343	1.571121
CEO	0.0	0.25	1.0	0.434	1.0	46.22222	2.333333
TOB	0.120	0.661	0.585	0.359	1.477	8.195276	2.410295
ROA	-0.70	0.201	0.197	0.195	0.69	23.66090	4.562505
SGR	-0.243	0.378	0.347	0.285	1.927	265.2342	8.077588
AST	0.015	0.268	0.514	24.575	0.867	285745.4	189.9821
SZE	10	13.33	12	4.12	32	1316.471	9.384385
DTB	0.096	1.134	0.772	5.048	70.187	268706.3	184.2857

With a mean performance ratio of 0.67, most of the firms appear not to be doing well with regards to Tobin's *q* as a performance variable. While the maximum performance is about 148%, the minimum performance is 12%. With regards to return on assets (ROA), there is wide deviation between firms. Showing a mean performance of 20%, the minimum reported performance over the period is -70% with a relatively high deviation of 0.195 between firms. Sales growth rate (SGR) appears relatively stronger with a minimum operating performance of -24%. While the maximum sales growth rate is about 193%, the mean rate is about 38%.

Firms in Ghana have most of their assets in fixed assets shown by the descriptive statistics. The interesting issue however is that with a standard deviation of about 24.57, it suggests that most of these firms are widely dispersed in terms of their of fixed assets composition. The situation is further buttressed by the minimum and maximum values of 0.015 and 0.867 respectively.

All the firms studied are relatively of similar sizes shown by the value of their asset base and that most of the firms are dependent on more debt in their capital structure in financing their assets with a mean value of 1.13.

While the board composition, CEO duality, and Tobin's *q* appear normally distributed shown by their Jarque-Bera and Kurtosis values, the rest of the variables are somewhat leptokurtic (peaked).

4.3. Regression results and discussion

Table 2 shows the regression results of the relationship between Tobin's *q* (TOB) and the governance variables. The results clearly indicate that there exist a mixed result between the governance variables and this performance variable. Contrary to studies by Jensen (1993), Lipton & Lorsch (1992), Yermack (1996), the study show that the larger the size of the board, the better the Tobin's *q*. This confirms studies that support the view that larger boards are better for corporate performance because members have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate.

Similar to the board size, the board composition has a negative relationship with Tobin's *q* implying that when there are more external board members, performance of the firm tends to be worse. This contradicts other empirical studies by Brickley & James (1987), Weisbach (1988), Byrd & Hickman (1992), and Brickley et al. (1994), Baysinger & Butler (1985) and Rosenstein & Wyatt (1990). However, the finding is consistent with that of Agrawal & Knoeber (1996) who suggest that boards expanded for political reasons often result in too many outsiders on the board, which does not help performance. It must rather be indicated that this variable is not significant.

Relating to CEO duality, the results of the study suggests that the one-tier board typology is negatively related to Tobin's *q*. This is consistent with studies which have found out that the one-tier board structure type leads to leadership facing conflict of interest and agency problems (Berg & Smith 1978, Bickley & Coles 1997) thus giving preference for the two-tier system. Again, it has been argued that problems tend to be higher when the same person holds both positions. Yermack (1996) equally argues that, firms are more valuable when the CEO and board chair positions are separate. In the context of developing country, Sanda et al (2003) in a Nigerian study found a positive relationship between firm performance and separating the functions of the CEO and Chairman.

Contrary to expectation, the study suggests that the size of the firm has a negative impact on Tobin's *q* though not significant. This could however be explained by the fact that the size of a firm measured by its asset base does not necessarily enhance performance if this is not put to efficient use. The implication therefore is that most firms in Ghana are not utilizing their size to enhance their performance. This is because; the study shows that, the more fixed assets there are, the better the performance of Tobin's *q*. Thus, the descriptive results indicating a relatively widely dispersed asset structure (with few having higher proportion of fixed assets) is being confirmed.

The study again shows that firms that mostly have huge proportions of debt in their asset portfolio

perform better than otherwise. The significantly positive regression coefficient for total debt implies that, an increase in the debt position is associated with increase in performance. The results confirm findings by Hadlock & James (2002), Petersen and

Rajan (1994) and Roden and Lewellen (1995), who posit that profitable firms use more debt. Again, this suggests that profitable firms depend more on debt as their main financing option. The result is presented in Table 2.

Table 2. Dependent Variable: TOBIN'S Q

White Heteroskedasticity-Consistent Standard Errors and Covariance.				
Variable	Coefficient	Std.Error	t-statistic	Prob.
BDS	0.099222	0.003828	25.91706	0.0000
BDC	-0.013756	0.110004	-0.125052	0.9006
CEO	-0.244850	0.044671	-5.481231	0.0000
LOG (SZE)	-0.003565	0.003337	-1.068437	0.2867
AST	0.000132	2.58E-05	5.112696	0.0000
DTB	0.008418	0.000745	11.29666	0.0000
C	0.064966	0.078067	0.832179	0.4064
Weighted Statistics.				
R-squared	0.864457	Mean dependent var	1.049009	
Adjusted R-squared	0.860061	S.D dependent var	0.834732	
S.E of regression	0.312260	Sum squared resid	18.03863	
F-statistics	196.6475	Durbin-Watson stat	0.732216	
Prob(F-statistic)			0.000000	

Table 3 is the regression results of the interaction between sales growth rate (SGR) and the governance variables. The board size on this occasion is negatively related to sales growth. Indeed, this is consistent with studies by others, for instance, Jensen (1993) and Lipton & Lorsch (1992) who argue that large boards are less effective and are easier for the CEO to control. When a board gets too big, it becomes difficult to co-ordinate and process problems. Further argument is that smaller boards also reduce the possibility of free riding by individual directors, and increase their decision taking processes. Other empirical research supports this e.g. Yermack (1996). On board composition, the rate of growth in sales is negatively related to board composition. This result contradicts earlier studies that show that the more outsiders there are on a board, the more independent is the board and the better the performance of the firm, John and Senbet's (1998). As already mentioned, Agrawal and Knoeber (1996) point out that boards expanded for political expediency often result in too many outsiders on the board, which does not help performance. Regarding CEO duality, the results point to a positive relationship between the performance of firms in terms of SGR and the 1-tier board structure in which case the same person doubles as the CEO and chairman of the board. This is consistent with other empirical studies such as Fama & Jensen (1983) arguing that the concentration of decision

management and decision control in one individual reduces boards' effectiveness in monitoring top management. It tends to increase agency costs, Yermack (1996), because it depicts a clear case of conflict of interest and agency problems, Berg and Smith (1978), Bickley and Coles (1997). Surprisingly, the results further indicate when a CEO doubles as the board chairman, performance improves. Though unexpected, this is not incongruous with studies that suggest that in the one-tier board typology, the CEO is afforded the opportunity to carry through projects deemed beneficial to a firm without undue bureaucracy. It must however be pointed out that all these governance variables are not statistically significant in explaining SGR, though the board size appears somewhat significant. Expectedly, the asset structure, the size of the firm and the debt structure are all positively related to SGR. By implication, the finding suggests that firms in Ghana that rely on debt, with a huge composition of fixed assets in their portfolio tend to perform better likewise firms that have more debts in their capital structure. These variables, unlike the governance variables, are significant in explaining SGR. Thus, firms in Ghana should lean towards having more debts, and increase in size to enjoy economies of scale. The results are presented in Table 3.

Table 3. Dependent Variable: Sales Growth Rate

White Heteroskedasticity-Consistent Standard Errors & Covariance.				
Variable	Coefficient	Std. Error	t-statistic	Prob.
BDS	-0.014693	0.007743	-1.897544	0.0593
BDC	-0.143465	0.169234	-0.847734	0.3977
CEO	0.038780	0.031253	1.240864	0.2162
LOG(SZE)	0.010347	0.004400	2.351302	0.0198
AST	0.001295	7.01000	18.47214	0.0000
DTB	0.009483	0.001021	9.286916	0.0000
C	0.331298	0.093626	3.538512	0.0005
Weighted Statistics				
R-squared	0.109657	Mean dependent var	0.420608	
Adjusted R-squared	0.080781	S.D. dependent var	0.282991	
S.E. of regression	0.280908	Sum squared resid	14.59820	
F-statistic	3.797519	Durbin-Watson stat	1.752804	
Prob(F-statistic)	0.001363			

5. Conclusion and new research agenda

The study examined the relationship between some measures of corporate governance such as board size, board composition, and CEO duality and firm performance of listed non-financial institutions in Ghana. The mean board size for the sample was found to be eight and the maximum thirteen with a moderate deviation of 1.79. With regards to board composition, the mean ratio of about 24% implies the use of more inside directors on the boards in the overall sample. Further implication of this is that boards in Ghana are not deemed independent consistent with argument by John and Senbet (1998). It is evident from the study that most firms in Ghana adopt the two-tier board structure where the positions of board chairman and CEO are occupied by different personalities thereby reducing agency cost. The firms are of similar sizes indicated by their asset base, fixed assets forms a major component of their total assets and that most of the firms depend largely on debt financing for their operations as against equity financing.

The regression results further show that board size is positively related to Tobin's q , but negatively related to sales growth rate as performance variables. This adds to the ongoing debate of how inconclusive the size of the board is on various performance measures. Though insignificant and surprisingly, the board composition conclusively have a negative impact on firms' performance in Ghana. Largely and like other studies, the findings of the study support the fact that a two-tier board structure enhances firm's performance, though it insignificantly has a positive impact on sales growth rate. The separation of board chairman and chief executive officer

positions minimizes the tension between managers and board members thus influencing positively the performance of firms in Ghana.

The control variables show the expected signs. The study also show significantly that the more fixed assets there are in a firm's asset portfolio, the better the performance whiles firms that largely resort to debt financing as against equity financing perform better. The size of a firm showed an inconclusive impact on the firms' performance. It is obvious therefore that corporate governance structures have an impact on the performance of firms in Ghana. Indeed within the governance structures the two-tier board structure is seen to be more effective compared to the one-tier system.

In the light of the foregoing analysis, it is obvious that there is relatively mixed results regarding corporate governance and various performance measures among listed firms in Ghana. It must stated that this is consistent with other studies. However, for efficient performance of firms, the adoption of the two-tier board structure and maintaining smaller board sizes that hovers around eight members is critical.

Obviously the study buttresses the fact that corporate governance indeed embraces a broader set of variables such as economic and legal environment, progressive practices, existence of internal control measures, ownership and compensation structures within an institution, the nature and quality of information flow and the level of involvement of low level staff in the day to day decisions of a corporate entity. Thus, subsequent to this work, a look at the development of a corporate governance index for Ghana would be our focus.

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Appendix:

Tobin's Q is probably the most frequently used valuation measure in empirical corporate finance. Being named after the Nobel Price laureate James Tobin from Yale University, it is defined as the ratio of market value to replacement value of a firm's assets. As an approximation for measurement, the market value of assets is normally computed as market value of equity plus book value of assets, minus book value of equity. This is then divided by the book value of assets to obtain the Tobin's Q. this ratio is basically expected to be greater than unity as an indication that management has done well in its investment decisions.

CORPORATE GOVERNANCE AND FIRM PERFORMANCE: EVIDENCE FROM GHANAIAN LISTED COMPANIES

Anthony Kyereboah-Coleman*, Charles K.D. Adjasi*, Joshua Abor*

Abstract

Well governed firms have been noted to have higher firm performance. The main characteristic of corporate governance identified include board size, board composition, and whether the CEO is also the board chairman. This study examines the role corporate governance structures play in firm performance amongst listed firms on the Ghana Stock Exchange. Results reveal a likely optimal board size range where mean ROA levels associated with board size 8 to 11 are higher than overall mean ROA for the sample. Significantly, firm performance is found to be better in firms with the two-tier board structure. Results show further that having more outside board members is positively related to firm performance. It is clear that corporate governance structures influence firm performance in Ghana, indeed within the governance structures the two-tier board structure in Ghana is seen to be more effective in view of the higher firm level mean values obtained compared to the one-tier system.

Keywords: Corporate Governance, Performance, Ghana, board composition, CEO, ROA

**The authors are all lecturers in the Finance Department of the University of Ghana Business School, Ghana*

Correspondence to acoleman@usb.sun.ac.za or acoleman@ug.edu.gh

1. Introduction

Corporate governance has received much attention especially among very large firms in developed markets. It is believed that, good governance generates investor goodwill and confidence. A number of recent studies show that good corporate governance increases valuations and boosts the bottom line. For instance, a study by Gompers Ishii & Metrick (2003) concluded that companies with strong shareholder rights yielded annual returns that were 8.5 percent greater than those with weak rights. Well governed firms also enjoy higher valuations, higher profits, higher sales growth, and lower capital expenditures. Claessens Djankov, Fan & Lang (2002) also maintain that better corporate frameworks benefit firms through greater access to financing, lower cost of capital, better performance and more favourable treatment of all stakeholders. They argue that, weak corporate governance does not only lead to poor firm performance and risky financing patterns, but are also conducive to macroeconomic crises like the 1997 East Asia crisis. Becht, Bolton & Rosell (2002) identify a number of reasons for the growing importance of corporate governance. These include the world-wide wave of privatization of the past two decades, the pension fund reform and the growth of private savings, the takeover wave of the 1980s, the deregulation and integration of capital markets, the 1997 East Asia

Crisis, and the series of recent corporate scandals in the U.S. and elsewhere. Corporate governance has dominated policy agenda in developed market economies for more than a decade, and it is gradually warming itself to the top of the policy agenda in the African continent. The Asian crisis and the relative poor performance of the corporate sector in Sub-Saharan Africa have made corporate governance a catchphrase in the development debate (Berglof and von Thadden, 1999).

Developing countries are now increasingly embracing the concept of good corporate governance, knowing it leads to sustainable growth and Ghana is no exception. However, in the context of Sub-Saharan Africa, corporate governance influence on firms remains a largely unexplored empirical issue. This study provides empirical evidence on corporate governance and firm performance from the context of a developing economy. The paper specifically investigates the relationship between various variables of corporate governance and performance of companies listed on the GSE during the most recent six year period (1998 – 2003). The rest of the paper is organized as follows. Section two provides an overview of empirical literature on the subject matter and concludes with a look at corporate governance practices in Ghana. Section three discusses the methodology and the results. Finally the conclusion is discussed in section four.

2. Literature Review

Theoretical underpinnings for the extant research in corporate governance come from the classic thesis, *"The Modern Corporation and Private Property"* by Berle & Means (1932). The thesis describes a fundamental agency problem in modern firms where there is a separation of ownership and control. It has long been recognised that modern firms suffer from a separation of ownership and control. These companies are run by professional managers (agents), who are unaccountable to dispersed shareholders (principals). This view fits into the principal-agent paradigm. For the agents, the question is how to ensure that managers follow the interests of shareholders. The principals also have to solve two problems. First, they face an adverse selection problem: select the most capable managers. They are also confronted with a moral hazard problem: give the managers the right incentives to put forth the appropriate effort and make decisions aligned with shareholders interests (e.g., take the right amount of risk and do not engage in empire building).

Jensen & Meckling (1976) further define agency relationship and identify agency costs. Agency relationship is a contract under which *"one or more persons (principal) engage another person (agent) to perform some service on their behalf, which involves delegating some decision-making authority to the agent"*. Conflict of interests between managers or controlling shareholder, and outside or minority shareholders refer to the tendency that the former may extract *"perquisites"* (or perks) out of a firm's resources and less interested to pursue new profitable ventures. Agency costs include monitoring expenditures by the principal such as auditing, budgeting, control and compensation systems, bonding expenditures by the agent and residual loss due to divergence of interests between the principal and the agent. The share price that shareholders (principal) pay reflects such agency costs. To increase firm value, one must therefore reduce agency costs. This is one way to view the linkage between corporate governance and corporate performance. Fama (1980) concludes that the separation of ownership and control can be explained as a result of *"efficient form of economic organization"*.

A number of definitions have been given to corporate governance. According to Mayer (1997), corporate governance is concerned with ways of bringing the interests of (investors and managers) into line and ensuring that firms are run for the benefit of investors. Corporate governance is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Deakin and Hughes, 1997). It has

also been defined by Keasey, Thompson & Wright (1997) to include 'the structures, processes, cultures and systems that engender the successful operation of the organisations.' Corporate governance is also seen as the whole set of measures taken within an enterprise to favour the economic agents to take part in the productive process, in order to generate some organizational surplus, and to set up a fair distribution between the partners, taking into consideration what they have brought to the organization (Maati, 1999).

From these definitions it may be stated more generally that different systems of corporate governance will embody what are considered to be legitimate lines of accountability by defining the nature of the relationship between the company and key corporate constituencies.

Corporate governance systems may be therefore thought of as mechanisms for establishing the nature of ownership and control of organisations within an economy. In this context, 'corporate governance mechanisms are economic and legal institutions that can be altered through the political process - sometimes for the better' (Shleifer and Vishny, 1997). Company law, along with other forms of regulation (including stock exchange listing rules, and accounting standards), both shape and is shaped by prevailing systems of corporate governance. The impact of regulation on corporate governance occurs through its effect on 'the way in which companies are owned, the form in which they are controlled and the process by which changes in ownership and control take place (Jenkinson and Mayer, 1992). Ownership is established by company law, which defines property rights and income streams of those with interests in or against the business enterprise (Deakin and Slinger, 1997). The Cadbury Committee, 1992 thus observes that corporate governance describes how companies ought to be run, directed and controlled. It is about supervising and holding to account those who direct and control the management.

Shleifer and Vishny (1997), also describe corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return to their investment". Previous empirical studies have provided the link between corporate governance and firm performance (see Yermack (1996, Claessens, Djankov, Fan & Lang, 1999; Klapper and Love, 2002; Gompers, Ishii & Metrick, 2003; Black, Jang & Kim, 2003 and Sanda, Mukaila & Garba (2003) with inconclusive results. Others, Bebchuk & Cohen (2004), Bebchuk, Cohen & Ferrell (2004) have shown that well governed firms have higher firm performance. The main characteristic of corporate governance identified in these studies include board size, board composition, and whether the CEO is also the board chairman.

There is a view that larger boards are better for corporate performance because they have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate. However, some authors have advocated for smaller boards. Jensen (1993) and Lipton & Lorsch (1992) argue that large boards are less effective and are easier for the CEO to control. When a board gets too big, it becomes difficult to co-ordinate, encourages free-riding and poses problems. Smaller boards however reduce the possibility of free riding, and increase the accountability of, individual directors. For example, Yermack (1996) documents that for large U.S. industrial corporations, the market values firms with smaller boards. Eisenberg, Sundgren & Wells (1998) also find a negative correlation between board size and profitability when using a sample of small and midsize Finnish firms. Mak and Yuanto (2003) also find similar results amongst listed firms in Singapore and Malaysia. In a Nigerian study, Sanda, Mukaila & Garba (2003) also observe that, firm performance is positively related with small, as opposed to large boards.

Though the issue of whether directors should be employees of or affiliated with the firm (inside directors) or outsiders has been well researched, no clear conclusion is reached. On the one hand, inside directors are more familiar with the firm's activities and they can act as monitors to top management if they perceive the opportunity to advance into positions held by incompetent executives. On the other hand, outside directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization (Fama, 1980). Thus John and Senbet (1998), argue that boards of directors are more independent as the proportion of their outside directors increases. Though it has been argued (Fama & Jensen 1983, Baysinger and Butler 1985, Baysinger & Hoskinsson, 1990, Baums 1994) that the effectiveness of a board depends on the optimal mix of inside and outside directors, there is very little theory on the determinants of an optimal board composition (Hermalin & Weisbach 2002).

A number of empirical studies on outside directors support the beneficial monitoring and advisory functions to firm shareholders (see Brickley & James 1987; Weisbach 1988; Byrd & Hickman 1992; Brickley & James, 1994). Baysinger & Butler (1985) and Rosenstein & Wyatt (1990) have also shown that the market rewards firms for appointing outside directors. However, Forsberg (1989) finds no relation between the proportion of outside directors and various performance measures. Hermalin & Weisbach (1991) and Bhagat & Black 2002 also find no significant relationship between board composition and performance. Yermack (1996) also showed that, the percentage of outside directors does not significantly affect firm performance. Agrawal &

Knoeber (1996) suggest that boards expanded for political reasons often result in too many outsiders on the board, which does not help performance.

Considerable attention has also been given to the role of boards in monitoring managers and in removing non-performing CEOs. Jensen (1993) observes that a lack of independent leadership makes it difficult for boards to respond to failure in top management team. Fama & Jensen (1983) also argue that concentration of decision management and decision control in one individual reduces board's effectiveness in monitoring top management. The literature also reveals a board structure typology, the one-tier system and the two-tier system. In the one-tier system the Chief Executive Officer (CEO) is also chairman of the board, whilst the two-tier system has a different person as the board chairman is different from CEO. It has been noted though that the one-tier board structure type leads to leadership facing conflict of interest and agency problems (Berg & Smith 1978, Bickley & Coles 1997) thus giving preference for the two-tier system.

Agency problems tend to be higher when the same person holds both positions. Yermack (1996) argue that, firms are more valuable when the CEO and board chair positions are separate. Relating CEO duality more specifically to firm performance, researchers however find mixed evidence. Daily & Dalton (1992) find no relationship between CEO duality and performance in entrepreneurial firms. Brickley et al. (1997) show that CEO duality is not associated with inferior performance. Rechner & Dalton (1991), however, report that a sample of Fortune 500 companies with CEO duality have stronger financial performance relative to other companies. Goyal & Park (2002) examine a sample of U.S. companies and find that the sensitivity of CEO turnover to firm performance is lower for companies without CEO duality. Sanda, Mukaila & Garba (2003) find a positive relationship between firm performance and separating the functions of the CEO and Chairman.

There is a growing body of literature on a seemingly related around the importance of stakeholders in firm operations and corporate governance. This literature on stakeholder theory has argued about the importance of a firm paying special attention to the various stakeholder groups in addition to the traditional attention given to investors Freeman (1984), Gibson (2000). These various groups of stakeholders which include customers, suppliers, employees, the local community and shareholders are deemed to also have a stake in the business of a firm. Proponents of stakeholder theory thus argue for representation of all stakeholder groups on boards for effective corporate governance. Indeed potentially cogent arguments have been made regarding merits of including stakeholders in governance mechanisms of corporate bodies, a class

of firms which includes SMEs. The possible pros and cons of such advancements are issues beyond the discussion and focus of this paper.

2.1. Corporate governance in Ghana

The issue of corporate governance has been gaining grounds in Ghana in recent times following initiatives by the Ghana Institute of Directors (IoD-Ghana), in collaboration with the Commonwealth Association of Corporate Governance, to address corporate governance in Ghana. There have also been numerous initiatives to address issues of corporate governance. A survey, conducted and launched by IoD-Ghana in 2001, revealed that there is increasing acceptance of good corporate governance practices by businesses in Ghana. More formal corporate governance structures and institutions are relatively not widespread though a number of laws provide for governance structures for companies in Ghana. These include:

- The Companies Code 1963 (Act 179), which provides for governance of all companies incorporated in Ghana;
- The Securities Industry Law, 1993 (PNDCL 333) as amended by the Securities Industry (Amendment) Act 2000, (Act 590), which provides among other things for governance of all stock exchanges, investment advisors, securities dealers, and collective investment schemes licensed under by the Securities & Exchange Commission (SEC);

The Companies' Code stipulates a minimum of two directors for each company with no ceiling on the maximum number, whilst the Ghana Stock Exchange (GSE) Listing Regulations are silent on board size. In terms of board composition, there is no requirement under the Companies Code for the appointment of independent directors neither is there a provision for the balance of executive and non-executive directors. However there is allowance for the interests of different stakeholders to be represented on the board. This is however a requirement under The Securities and Exchange Commission's Code of Best Practices on Corporate Governance (SEC Code) for the GSE. The Companies Code makes provision for the appointment of executive directors by allowing directors to hold concurrently with the office of director, any other office or place of profit in the company, except the office of auditor. In terms of board structure based on duality or otherwise of CEO role on the board and in the company itself the Companies Code, does not prevent the appointment

of the same person to the two offices. The SEC Code on the other hand advocates for but does not insist on the two-tier board structure where the CEO is different from the board chairman. On the whole corporate governance structure development in Ghana have been somewhat modest, there is need for more advancements in corporate governance issues given the effect these have on firm performance.

3. Methodology

The study employs cross tabulations to determine associations between corporate governance structures and firm level variables as well as correlations to determine the level of association between corporate governance and firm performance. In addition tests between means of performance variables based on a classification of firms into different corporate structure typologies is carried out to see the significance in differences attributable to specific corporate governance types. Finally a regression analysis is carried out to determine the effect that corporate governance structures have on firm performance. The econometric model follows Miyajima et al (2003) and is given as:

$$y_{it} = \alpha X_{it} + \beta G_{it} + \lambda_t + \eta_i + v_{it} \quad (1)$$

where y_{it} represents firm performance (Return on Assets for firm i in time t) X_{it} is a vector of firm level variables debt ratio and size (number of employees) which following standard finance literature have a positive influence on firm performance (ROA) G_{it} is a vector of corporate governance variables; board size, board composition (number of outside directors/total number of directors) and a dummy variable to capture if the board chairman is the same as the CEO or otherwise v_{it} is the residual term η_i are individual specific effects and λ_t time specific effects. The regression is run in a panel manner, various options of panel data regression were run, Fixed Effects, Random Effects, OLS and a dynamic panel. The most robust of all was the OLS panel thus we report results of the OLS panel regression in table 12.

A look at the descriptive statistics show that the overall mean debt ratio is 58.5%, with minimal variations across time. The mean board size for the sample is eight, however there are wide variations in this between the cross-sections (2.0519) and substantial variation over time (0.5841).

For board composition the mean ratio is 73% implying the use of more outside directors on the board in the overall sample, however there is some amount of variation in this ratio across the cross-section of firms as seen in the standard deviation between the cross-sections. The mean profit levels represented by the return on assets ROA, is 0.11118.

From the table 2 above, majority of the firms (72.7%) have a board structure that follows the two-tier structure. Firm performance (using ROA or Size) is better in firms with the two-tier board structure. Overall, the mean values for all the variables are greater in firms where the two-tier board system operates. Board size and composition is larger for firms with the two-tier structure compared to the one-tier structure for obvious reasons.

Table 3 which looks at board size variation and ROA as a measure of firm performance reveal some interesting results. Mean ROA levels ranging from board size 8 to 11 are higher (0.13987, 0.14123, 0.12623, 0.13033) than overall mean ROA (0.11189) for the sample. This signals a range of optimum board size (8-11) that is feasible for good firm performance. Approximately 52% of the sample observations have their board size ranging between this optimum range. Indeed firms with board sizes below 8 and those above 11 are associated with rather low levels of ROA. There is a clear indication here that in line with theoretical constructs an effective board should neither be too small nor too large.

The study next conducts correlation tests between the variables; the table (4) shows that there is a positive correlation between board size and debt ratio, as well as size (an alternate measure of firm

performance). There is no significant correlation between ROA and board size. The correlation between board size and size of the firm is very strong at 76.9%. Clearly the importance of a board cannot be overemphasized

The second correlation test is done only for firms with the two-tier board structure and this shows a positive correlation again between the board size and debt ratio. More significantly the correlation between board size and the firm size is even stronger (81.54%) than that for the whole sample. In fact for firms with the one-tier board structure (table 6) there is no significant correlation between board size and firm performance, the only significant relationship being that between the board size and debt ratio.

Thus far the significance of a board is clear in the analysis; the positive correlation with debt ratio shows the ability of firms to attract debt with corporate governance structures. Whilst the positive association with size shows the ability to expand production lines and employ more with corporate governance structures in place

Further analyses are carried out to test for difference in mean values (using a t-test) based on a division of the sample into the two types of board structure identified in the sample. Table (7) above shows one of such tests, here we test for the difference in mean return on asset (ROA) between the two types of board structure. The results of the alternate hypothesis are not statistical significant (as shown by the t probability values). We can therefore not reject the null hypothesis thus showing that there is no statistically significant difference in mean ROA between one-tier and two-tier board structures.

Table 1. Descriptive Summary Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
Debt ratio	overall	0.5854	0.2079	0.0005	1.1017	N = 110
	between		0.1891	0.3210	0.9780	n = 22
	within		0.0938	0.0609	0.9276	T = 5
Size	overall	18.3256	1.8985	14.5760	22.6549	N = 110
	between		1.8976	15.0551	22.2899	n = 22
	within		0.3682	17.5406	19.0772	T = 5
Board size	overall	8.7727	2.0970	5	14	N = 110
	between		2.0519	5	13.2	n = 22
	within		0.5841	5.9727	9.9727	T = 5
Board comp	overall	0.7331	0.1305	3	1	N = 110
	between		0.1223	0.4955	0.9118	n = 22
	within		0.0512	0.5376	0.9042	T = 5
	within		0	0.2727	0.2727	T = 5
ROA	overall	0.1118	0.1065	-0.1408	0.3683	N = 110
	between		0.0838	-0.0203	0.2785	n = 22
	within		0.0677	-0.1020	0.3149	T = 5

N refers to overall panel observations ($n \times T$), n is the cross sectional observations (firms), T is the time frame.

Table 2. Variation between board structure and variables

CEO	VARIABLE	Obs	Mean	Std dev	Min	Max
(two-tier)	Debt Ratio	80	0.5944929	0.2053003	0.0005308	0.9392173
(one-tier)	Debt Ratio	30	0.5612382	0.2166945	0.3326476	1.101777
(two-tier)	Size	80	18.67109	1.901618	15.37466	22.65491
(one-tier)	Size	30	17.40459	1.57827	14.57604	14.57604
(two-tier)	Board Size	80	9.3625	1.988853	6	14
(one-tier)	Board Size	30	7.2	1.494819	5	10
(two-tier)	Board Composition	80	0.7700336	0.1148942	0.5	1
(one-tier)	Board Composition	30	0.6348148	0.1198643	0.3	0.75
(two-tier)	ROA	80	0.1133164	0.1047265	-0.1025314	0.3683579
(one-tier)	ROA	30	0.1081182	0.1131767	-0.1408372	0.3384824

Table 3. Board size variations and mean ROA

Board size	Obs	Mean ROA	Std dev	Min	Max
5	6	0.0995683	0.0930302	0.0298311	0.2282182
6	7	0.0402885	0.0823261	-0.0774109	0.1357137
7	22	0.0947317	0.1005266	-0.1408372	0.318319
8	17	0.1398783	0.1240815	-0.0376466	0.3437524
9	21	0.1412368	0.1177517	-0.1025314	0.3683579
10	12	0.1262361	0.109639	0.0043662	0.3002661
11	12	0.1303338	0.1260831	-0.0252291	0.3500171
12	8	0.0615611	0.0229035	0.028711	0.0850091
13	4	0.0963949	0.0175887	0.0720054	0.1105709
14	1	0.0445176		0.0445176	0.0445176

Table 4. Correlation Table between variables

Variable	Debt Ratio	Size	Board Size	Board Composition	ROA
Debt Ratio	1.0000				
Size	0.3534*** {0.0023}	1.0000			
Board Size	0.3480*** {0.0029}	0.7693*** {0.0000}	1.0000		
Board Composition				1.0000	
ROA					1.0000

Only significant relationships are reported, figures in curly brackets are probability values for level of significance. *** implies 1% level of significance

Table 5. Correlation table between variables for firms with two-tier board structure

Variable	Debt Ratio	Size	Board Size	Board Composition	CEO	ROA
Debt Ratio	1.0000					
Size	0.5476*** {0.000}	1.0000				
Board Size	0.4031*** {0.0031}	0.8154*** {0.0000}	1.0000			
Board Composition				1.0000		
CEO					1.0000	
ROA						1.0000

Only significant relationships are reported, figures in curly brackets are probability values for level of significance. *** implies 1% level of significance

Table 6. Correlation Table for firms with one-tier board structure

Variable	Debt Ratio	Size	Board Size	Board Composition	CEO	ROA
Debt Ratio	1.0000					
Size		1.0000				
Board Size			1.0000			
Board Composition	0.5326** {0.0367}			1.0000		
CEO					1.0000	
ROA						1.0000

Only significant relationships are reported, figures in curly brackets are probability values for level of significance. *** implies 1% level of significance

Table 7. Difference in mean ROA by board structure

Group	Obs.	Mean	Std. Err.	Std. Dev.	[90% Conf. Interval]	
Two-tier	80	0.1133164	0.0117088	0.1047265	0.0938286	0.1328041
One-tier	30	0.1081182	0.0206631	0.1131767	0.0730089	0.1432275
combined	110	0.1118987	0.0101634	0.1065942	0.0950382	0.1287592
diff		0.0051981	0.02375		-0.0346038	0.0450001

Welch's degrees of freedom: 50.0501

Ho: mean ROA (One-tier) - mean ROA (Two-tier) = diff = 0
 Ha: diff < 0 Ha: diff ≠ 0 Ha: diff > 0
 t = 0.2189 t = 0.2189 t = 0.2189
 P < t = 0.5862 P > |t| = 0.8276 P > t = 0.4138
 P = probability

Table 8. Difference in mean size by board structure

Group	Obs	Mean	Std. Err.	Std. Dev.	[90% Conf. Interval]
Two-tier	80	18.67109	0.2126074	1.901618	18.31723 19.02495
One-tier	30	17.40459	0.2881513	1.57827	16.91498 17.89419
combined	110	18.32568	0.1810243	1.898599	18.02537 18.62599
diff		1.266502	0.3580965		0.6688896 1.864114

Welch's degrees of freedom: 64.4077

Ho: mean Size (One-tier) - mean Size (Two-tier) = diff = 0
 Ha: diff < 0 Ha: diff ≠ 0 Ha: diff > 0
 t = 3.5368 t = 3.5368 t = 3.5368
 P < t = 0.9996 P > |t| = 0.0008 P > t = 0.0004
 P = probability

Table 9. Difference in mean board size by board structure

Group	Obs	Mean	Std. Err.	Std. Dev.	[90% Conf. Interval]
Two-tier	80	9.3625	0.2223606	1.988853	8.992409 9.732591
One-tier	30	7.2	0.2729153	1.494819	6.736282 7.663718
combined	110	8.772727	0.1999412	2.097001	8.441034 9.10442
diff		2.1625	0.3520326		1.57585 2.74915

Welch's degrees of freedom: 71.4338

Ho: mean board size (One-tier) - mean board size (Two-tier) = diff = 0
 Ha: diff < 0 Ha: diff ≠ 0 Ha: diff > 0
 t = 6.1429 t = 6.1429 t = 6.1429
 P < t = 1.0000 P > |t| = 0.0000 P > t = 0.0000
 P = probability

Table 10. Difference in mean board composition by board structure

Group	Obs	Mean	Std. Err.	Std. Dev.	[90% Conf. Interval]
Two-tier	80	0.7700336	0.0128456	0.1148942	0.7486538 0.7914134
One-tier	30	0.6348148	0.0218841	0.1198643	0.5976309 0.6719987
combined	110	0.7331557	0.0124499	0.1305752	0.712502 0.7538095
diff		0.1352188	0.0253756		0.0927166 0.177721

Welch's degrees of freedom: 51.6065

Ho: mean board composition (One-tier) - mean board composition (Two-tier) = diff = 0
 Ha: diff < 0 Ha: diff ≠ 0 Ha: diff > 0
 t = 5.3287 t = 5.3287 t = 5.3287
 P < t = 1.0000 P > |t| = 0.0000 P > t = 0.0000
 P = probability

Table 11. Difference in mean debt ratio by board structure

Group	Obs	Mean	Std. Err.	Std. Dev.	[90% Conf. Interval]
Two-tier	80	0.5944929	0.0229533	0.2053003	0.5562901 0.6326956
One-tier	30	0.5612382	0.0395628	0.2166945	0.494016 0.6284605
combined	110	0.5854234	0.0198316	0.2079956	0.5525237 0.6183231
diff		0.0332546	0.0457391		-0.0433692 0.1098785

Welch's degrees of freedom: 51.0799

Ho: mean debt ratio (One-tier) - mean debt ratio (Two-tier) = diff = 0
 Ha: diff < 0 Ha: diff ≠ 0 Ha: diff > 0
 t = 0.7270 t = 0.7270 t = 0.7270
 P < t = 0.7647 P > |t| = 0.4705 P > t = 0.2353
 P = probability

In terms of the difference in mean sizes the results from the test statistics (table 8) show a significant difference in mean sizes between the two board structures.

This further confirms the significant correlation realized between board structure and size. There is also a significant difference in board size (table 9) between the one-tier and two-tier system. The test statistics shows that we can reject the null of no difference hence the conclusion that the difference is statistically significant.

Thus within the board structures it is clear that there is a considerable difference in size and board size.

With respect to the difference in mean board composition (table 10) the two-tier structure has a higher number of insiders as directors as compared to the one-tier system. This difference in mean values is also statistically significant as is shown by the alternate hypothesis test statistics. Clearly there is significant difference in the governance structures within the board structures themselves. Table 11 shows the difference in mean levels of the debt ratios of one-tier and two-tier board structures. In terms of significance the alternate hypothesis test statistics reveals that we cannot reject the null of no difference hence there is not statistical difference in mean debt ratios.

Table 12. Regression Model Results

Variable	Coefficient	Std. Err	t-value	t-prob
LSIZE	0.01531	0.01045	1.47	0.146
Debt Ratio	-0.29974	0.07036	-4.26	0.000
Board Composition	0.26635	0.1474	1.81	0.074
Board Size	-0.00617	0.01218	-0.507	0.613
CEO	0.00782	0.04665	0.168	0.867
Constant	-0.14821	0.2070	-0.716	0.476
T1999	0.00123	0.01761	0.0698	0.944
T2000	0.00092	0.02756	0.0334	0.973
T2001	0.03814	0.02737	1.39	0.166
T2002	0.01852	0.03025	0.613	0.542
Standard Error	0.01139			
R-Squared	0.08025			
No. of obs	110			
Time dummies	4			
No of individuals	22			
Longest time series	5 [1998 - 2002]			
Shortest time series	5 (balanced panel)			
Wald (joint): Chi ² (5)	36.45 [0.000] **			
Wald (dummy): Chi ² (5)	7.647 [0.177]			

The study further estimates the panel regression model. The most significant variables in the regression model are debt ratio (DR) and board composition (BC). Debt ratio has a negative relationship with firm performance measured by return on assets (ROA), whilst board composition has a positive relationship with firm performance. In this regard the importance of outside directors in terms of independence and external experience regarding sound financial and legal basis is revealed in the positive relationship the variable has with firm performance, thus as the ratio of board composition (number of outside board members/total board members) rises firms perform better. Clearly corporate governance (board composition) has a significant impact on firm performance and affirms earlier results.

4. Conclusion

The study examined the role of corporate governance in firm performance of listed companies on the Ghana Stock Exchange. The mean board size for the sample was found to be eight; however there are wide variations in this between the cross-sections and substantial variation over time. For board composition the mean ratio is 73% implying the use of more outside directors on the board in the overall sample. The study also revealed a likely optimal board size range where mean ROA levels ranging from board size 8 to 11 are higher than overall mean ROA for the sample. This signals a range of optimum board size (8-11) that is feasible for good firm performance. Majority of the firms also have a board structure that follows the two-tier structure. Significantly, firm performance (using ROA or Size) is found to be better in firms with the two-tier board structure. The correlation between board size and size of the firm is very strong at 76.9% but even stronger (81.54%) for two-tier board structure firms. In fact for firms with the one-tier board structure there is no significant correlation between board size

and firm performance. A test between mean variables based on one-tier and two-tier board structures show that apart from mean ROA and debt ratios there is significant difference between the mean values of board size, board composition and size. The regression results show further that board composition has a positive relationship with firm performance. It is clear that corporate governance structures influence firm performance in Ghana, indeed within the governance structures the two-tier board structure in Ghana is seen to be more effective in view of the higher firm level mean values obtained compared to the one-tier system. The separation of board chairman and chief executive officer minimizes the tension between managers and board members thus influencing firm performance in Ghana.

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CORPORATE GOVERNANCE AND BANK PERFORMANCE: DOES OWNERSHIP MATTER? EVIDENCE FROM THE KENYAN BANKING SECTOR*

Dulacha G. Barako , Greg Tower*****

Abstract

This paper provides an empirical analysis of banks performance in Kenya. The primary purpose of this study is to investigate the association between ownership structure characteristics and bank performance. Data utilised in the study is collected from the Financial Institutions Department of the Central Bank of Kenya, both on-site inspection reports and off-site surveillance records. Empirical results indicate that ownership structure of banks significantly influence their financial performance. In particular, board and government ownership are significantly and negatively associated with bank performance, whereas foreign ownership is strongly positively associated with bank performance, and institutional shareholders have no impact on the performance of financial institutions in Kenya. The study makes a significant contribution to financial research by extending examination of banks performance to a developing country context beyond the usual confines of the developed western economies, and adds to the small number of similar studies in the African context. The results are consistent with prior research findings, and more importantly, presents statistical justification for pursuing further corporate governance reforms with respect to banks' ownership structure to enhance the financial stability of the sector.

Keywords: corporate governance, ownership structure, Central Bank of Kenya

**The views expressed in this paper are those of the authors and do not necessarily reflect those of the Central Bank of Kenya (CBK).*

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****Curtin Business School, School of Accounting, Curtin University of Technology, GPO Box U1987, Perth Western Australia 6845*

Corresponding author: Dulacha.Barako@cbs.curtin.edu.au.

1. Introduction and motivation

Financial institutions as intermediaries between savers and borrowers plays pivotal role in the economic development of a country. As cited in Nada (2004), a growing body of research literature emphasis the crucial importance of the financial sector to economic growth, and analogous to the empirical evidence, The Vice President of Asian Development Bank, presenting a paper on *financial sector development and economic growth* in the wake of the Asian financial crisis states, "the better the financial sector can perform... the better the economy will perform in the long run" (Myoung-Ho, 2002, p 1).

Kenyan banking sector experienced a number of corporate failures in the late 1980s and early 1990, mainly attributed to corporate governance weakness

(Central Bank of Kenya, Bank Supervision Annual Report 2001). Affirming these governance concerns, the former Governor of the Central Bank of Kenya noted, "...bad corporate governance has led to the failure of 33 banks in Kenya in 1985." (Banki Kuu News, October-December 2000, p. 4). In the absence of a vibrant market for corporate controls and relatively underdeveloped capital market, with limited number of bank listed on the stock market, it is argued that the banks' internal governance structure may impact on their performance.

This paper examines the relationship between bank performance and an important governance variable: ownership structure. Ownership is an important aspect of the internal corporate governance mechanism in that owners (shareholders) have direct influence on the board composition, a vital corporate governance mechanism.

Several reasons support the focus on Kenya. First, the banking sector plays an invaluable part in the Kenyan economy through provision of credit to key sectors of the economy, such as agriculture and manufacturing.

However, in spite of its significance, the sector has experienced a number of corporate failures, and this presents an excellent opportunity to understand the determinants of this recurring phenomenon, with particular reference to the banks' ownership structure.

Second, the Central Bank of Kenya has been continually reviewing and proposing amendments to the Banking Act principally aimed at enhancing corporate governance practices in the banking sector, especially at shareholder and board levels. However, there is no known empirical validation of the reforms pursued. In addition, given the fact that

Kenyan banking sector is characterised by various types of ownership attributes, for example, foreigners, board-dominated ownership, domestic and the government owned financial institutions, it is likely that performance will be influenced by ownership structure. Thus, the study will evaluate some of the reforms undertaken and provide an empirical justification for further reforms to strengthen corporate governance practices in the Kenyan banking sector.

Despite the banking sector's growing prominence as engine of economic development and growth, especially in the developing economies, financial researchers have paid little attention to the banking performance in the developing countries. Currently, the bulk of research on bank performance is concentrated on the developed western economies (De 2003).

Thus, this study bridges this gap, and contributes to the limited number of studies that have focused on the developing nations.

Similarly, reviewing corporate governance literature in the African context, Okeahalam and Akinboade (2003 as cited in Barako, 2004) concludes that: "there has been limited published research on corporate governance in Africa and even less rigorous academic or empirical research.

There is an urgent need to embark on a meaningful analysis of corporate governance [research] in Africa" (p.28).

These points to the general dearth of corporate governance research in the African context. Concomitant with Okeahalam and Akinboade (2003) concerns, this study empirically examines the influence of corporate governance attributes, and in particular, ownership structure on bank performance. Thus, from an African perspective, this study will add to a handful of research initiatives that have investigated relationship between corporate governance and corporate performances, by specifically focusing on an African country, Kenya.

The remainder of the paper is organised as follows. The next section overviews the Kenyan banking sector. Section 3 presents the literature review and testable hypotheses, while section 4 outlines research design and methodology.

The last section summarises findings, drawing conclusions, and policy recommendations as well as highlighting areas for future research.

2. Kenyan Banking Environment¹

As at April 2005, the Kenyan Banking system comprise of 49 financial institutions. These include 43 commercial banks, two non-banks financial institutions, two mortgage finance companies and two building societies (Central Bank of Kenya Monthly Economic Review 2005).

Only seven (14%) of these institutions are listed on the Nairobi Stock Exchange. The Kenyan banking system is characterised by a variety of ownership structure: government, foreign, local and privately owned financial institutions.

Economic performance of the financial institutions in Kenya can aptly be described as lacklustre, with a number of corporate failures experienced in between 1984 to 2005.

Several factors are cited as causes of bank failures: ineffective board and management malpractices, high non-performing loans, unsecured insider lending, under capitalisation and violations of Banking Act and Prudential Regulations. A cursory review of these factors depicts eminent governance failures, both at board and ownership levels.

To enhance the stability and soundness of the banking sector through improved corporate performance, the Central Bank of Kenya (CBK) initiated a number of corporate governance reforms. These reforms include: establishment of audit committees, emphasis on majority non-executive directors on bank boards, trilateral meetings between CBK, external auditors and financial institutions among others. In addition, there are proposed changes to the Banking Act with a view to defining, vetting and certifying banks significant shareholders. This is particularly essential as owners are the core of the internal governance mechanisms of any institution including those in the financial sector.

Mergers and acquisitions has been a predominant feature of the Kenyan financial sector, particularly the small and medium sized banks as way of improving efficiency, profitability and

¹ More information on Kenyan Banking sector is contained in the Annual Reports prepared by the Financial Institutions Supervision Department of the Central Bank of Kenya covering details on the Kenyan Banking Environment, for example sector's performance, amendments to legislations, and developments in the Kenyan regulatory environment. These reports are available on the internet: site <http://www.centralbank.go.ke>

stability (Central Bank of Kenya, Bank Supervision Annual Report 2000).

The Kenyan Government plans to divest from certain institutions, and privatise others, while other private financial institutions have been merging as basis for enhancing capitalisation and improving earnings.

3. Literature Review and Hypotheses Development

As stated earlier, there has been paucity of research on the relationship between bank ownership and performance, especially in the developing economies. In addition, the few research studies undertaken in some developing countries depict vexing results.

Nada (2004) examines relationship between ownership structure and bank performance focussing on the Middle East and North Africa (MENA) countries. Using ownership data of 249 banks in 20 MENA countries, comprising a total of 567 observations, findings suggest that foreign banks are significantly better performers than all sample groups, while government banks performed poorly among the sampled banks.

De (2003), using panel data, investigates relationship between ownership attributes and bank performance of Indian Banks. Performance indicators utilised in the study were: return on assets, net interest margin and operating cost ratio. Results of the study suggest that there was no significant association between return on assets and ownership variables. However, when state banks are excluded from the sample, there is a significant positive relationship between return on assets and private ownership. Public sector banks are associated with higher net margins and higher operating costs.

Bonin, Hasan and Watchel (2003) study the association between bank performance and ownership structure in the context of transitional economies. Results indicate that foreign owned banks, especially those with a strategic foreign owner, are more efficient than domestic private banks. Interestingly, their findings suggest that there was no statistically significant evidence of adverse effect of government ownership to private domestic ownership.

As stated earlier, to date, empirical research on bank performance and ownership is neither consistent nor conclusive. However, agency theorists suggest that ownership structure influence corporate performance (Jensen and Meckling 1976; Fama and Jensen 1983). They argue that corporate performance is a function of the relationship between owners (principal) and managers (agents). According to Berle and Means (1932), in the context of a firm, managers as insiders have information advantage over the owners, and therefore, owners are faced

with moral hazard dilemmas, and that agents (managers) may not act in the best interest of owners. This argument explains situations within an ordinary private corporation. Banks are however, unique. Other than the owner-manager conflict of interests, in the case of a bank, there are conflict of interests between the owners (shareholders) and depositors. In line with this contention, Rafael, Miguel and vicente (2004) comments:

...there is a clear conflict inside the banks between the interests of the shareholders and the interests of the depositors, with the former being disposed to take high-risk projects that increase share value at the expense of the value of the deposits (p. 1).

Similarly, Arun and Turner (2003) drawing on the work of Macey and O'Hara (2001) who advocate for the broader concept of corporate governance, suggest that because of unique nature of banking business the corporate governance mechanisms for banks should encapsulate depositors as well as shareholders. Moreover, Browbridge (1998), reviewing causes of financial distress of local African banks noted that the moral hazard issue between depositors and owners become even more serious when a bank lend to companies associated with its directors and senior management. To specify these arguments, in the following subsections, hypotheses are advanced.

Board ownership

In the past studies observed that association between board ownership and corporate performance has been mixed. It is generally perceived that owner-managers have similar motivation as the shareholders, thus where the board members own substantial stake in an organisation, their interests are more aligned with those of the shareholders. This is consistent with the preposition of agency theorists (Jensen & Meckling, 1976), that there is positive association between managerial ownership and financial performance, because of convergence of owners and managers interests. On the contrary, Morck, Shleifer and Vishny (1998) suggest that increased managerial ownership leads to entrenchment, and engagement in non-value maximising activities.

Drawing on corporate finance and productivity literature, Palia and Lichtenberg (1999) investigate the relationship between managerial ownership and firm performance. Using a sample of 255 manufacturing firms in the period 1982 to 1993, they provide evidence of a positive relationship between managerial ownership and productivity. Similarly, Kim (2002), employing Japanese data for 1993 and 1996, generate empirical evidence of managerial ownership as a viable substitute for the traditional *keiretsu* and bank shareholding. In fact, he argues

that manager-owned firms display better controls than other firms in which *keiretsu* and banks are major shareholders.

However, banks are different from other organisations, and with increase in board ownership stake there may be greater conflict of interests with the depositors. In this regard, Pinteris (2002) document a negative relationship between bank ownership concentration and bank performance in the Argentinean banking industry. He reports that banks with a more concentrated ownership structure exhibit higher loan-portfolio risk. He explains the finding as an illustration of ownership concentration exacerbating agency conflicts, specifically between bank owners and bank depositors. Similarly, Fogelberg and Griffith (2000) examine the relationship between managerial ownership and firm performance for a sample of commercial bank holding companies, and found that managerial entrenchment influence bank performance. In addition, Hirschey (1999) reports an inverse relationship between managerial stock ownership and commercial banks performance; measured as accounting profits and market values. In line with the above discussion, the following hypothesis is examined:

ROA ratio - Hypothesis 1a: The higher the level of a firm's board ownership, the lower the profit.

NPL ratio - Hypothesis 1b: The higher the level of a firm's board ownership, the higher the level of Non-Performing Loan.

Foreign Ownership

Evidence of foreign ownership on bank performance is inconsistent. A number of studies cited by Nada 2004 (for example, DeYoung & Nolle, 1996; Hasan & Hunter 1996; Mahajan et al., 1996; Chang et al., 1998) indicate that foreign owned banks are less efficient than the domestic banks. However, these studies have solely focused on developed economies. In contrast, studies that examined bank performance in the developing countries context (for example, Claessens, et al., 2000; Demircuc-Kunt & Huizinga, 1999) suggest that foreign owned banks report significantly higher net interest margins and higher net profitability than domestic banks.

There may be various reasons for better performance of foreign owned banks. These include, but not limited to, prudent management of risks as influenced by the policies of the parent company, and strict focus on profitability to maximise shareholders wealth creation capacity. In contrast, domestic banks may suffer from inefficiencies, external interference and possibly not always focused on maximising returns, thus affecting their earnings and capacity to grow. According to Demircuc-Kunt and Detragiache (1998) the benefits of foreign banks into a country's financial system

include improved efficiency and enhanced competition. Hence, the local financial institutions are forced to upgrade their banking practices and operations to match industry benchmarks heavily influenced by the foreign banks. Allen, Clarke, Cull, Klapper and Udell (2004), suggest that foreign banks have superior ability to diversify risks and may provide certain services to multinational clients that domestic banks may not easily offer.

In view of the foregoing discussion, the following hypothesis is examined: *ROA ratio - Hypothesis 2a: The higher the proportion of a firm's foreign ownership, the higher the profit.*

NPL ratio - Hypothesis 2b: The higher the proportion of a firm's foreign ownership, the lower the level of Non-Performing Loan.

Institutional Ownership

In finance literature, it is generally perceived and argued that institutional shareholders have greater incentives to monitor corporate performance, than diffused smaller shareholders. Institutional shareholders help resolve 'free-ride' problem commonly associated with corporations where shares are widely held. However, the empirical results present mixed findings.

Agrawal and Mandelker (1990) investigate the role of large shareholders in monitoring managers when they propose anti-takeover-charter amendments. They used a sample of 372 firms that proposed anti-takeover amendments during 1979 to 1985. They find that there is a statistically significant positive relationship between institutional ownership and the shareholder-wealth effect of various types of amendments. This result is consistent with institutional shareholders' oversight of managerial decision-making, especially when shareholders' wealth is affected.

Using data for 51 firms targeted by the California Public Employees' Retirement System (CalPRES) from 1987 to 1993, Smith (1996) investigate the monitoring role of institutional shareholders and its effect on firms' governance structure, shareholder wealth and operating profit. The overall results indicate that institutional-shareholder activism causes changes in governance structure, which also results in a significant increase in shareholders' wealth.

On the contrary, and from an empirical perspective, Faccio and Lasfer (2000) refute the governance role of an institutional shareholder when they analysed the monitoring role of occupational pension funds in the UK, by comparing firms in which these funds hold a large stake and a control group with similar size and industry attributes. Their results suggest that pension funds do not add value to firms in which they hold a higher stake. The findings cast serious doubts on the monitoring role of pension

funds, leading to their conclusion that pension funds are ineffective monitors. Probably, it matters the policies (active or passive) of the institutional owners. Thus based on the above, the following hypothesis is examined: *ROA ratio - Hypothesis 3a: The presence of a firm's institutional ownership is positively associated with profit.*

NPL ratio - Hypothesis 3b: The presence of a firm's institutional ownership is negatively associated with the level of Non-Performing Loan.

Government Ownership

La Porta, Lopez-de-Silanes and Shleifer (2002) documents two theoretical perspectives for government ownership of banks: *development and political*. The development theorists argue that government ownership of banks facilitates allocation of credit to strategic and long-term socially desirable project that otherwise may not get private funding. The political theorists suggests that government own banks to fund inefficient but politically desirable projects.

While these arguments may have some merits, recent research study by Barth, Caprio and Levine (2000) indicates that government ownership of banks strongly correlates with banks inefficiency and lower productivity. Similarly, Cornett, Guo, Khaksari and Tehranian (2000) conduct a cross-country analysis, involving five Asian countries, namely, Thailand, Indonesia, Philippines, South Korea and Malaysia. Their findings suggest that government ownership is associated with poor performance. Similarly, Allen et al., (2004), using 1990s data from Argentina examine association between corporate governance and bank performance, and conclude: "...our strongest and most robust results concern state ownership. State-owned banks have poor long-term performance..." In addition, as cited in Nada (2004) private ownership of banks is strongly associated with superior financial performance (Lang & So, 2002 Cornett et al., 2000). Moreover, government ownership of banks creates an avenue for promoting and propagating political patronage that adversely affect performance of these institutions. Based on the above discussion the following hypotheses are advanced.

ROA ratio - Hypothesis 4a: There is negative relationship between a firm's government ownership and bank profitability performance.

NPL ratio - Hypothesis 4b: There is positive relationship between a firm's government ownership and bank performance measured as non-performing loans.

Control Variable

Yoshikawa (2003) examine the relationship between ownership and performance of Japanese corporation,

and control for firm size, suggesting that size accounts for scale and scope of an institutional operation. Corporate size may confound relationships between ownership structure and bank performance (Chen and Metcalf, 1980). Size may portray the ability to provide a range of banking services, and therefore, a large client base that boost institutional financial performance. Larger firms may also have better expertise in terms of human resource (intellectual capital), hence capacity to manage risks better than smaller financial institutions.

Based on the foregoing discussion, bank size as measured by percentage of a firm's deposit to sector's total deposit is included in the empirical model as a control variable.

4. Research design and Methodology

4.1. Sample

The sample of this study comprise all financial institutions operating in Kenya as contained in the Directory of banks and non-bank financial institutions of the Financial Institutions Department of the Central Bank of Kenya. The main criteria used for inclusion of a financial institution are: (i) Bank must be in operation for the entire study period, year 2000 to year 2004. Banks that collapsed or exit the industry during this period are excluded from the sample. (ii) All relevant information on ownership and performance must be available. Table 2 presents a list of financial institutions included in the study [See appendices Table 2].

4.2. Variables Measurement

Below is a discussion of the main categories of variables examined in the study and details on their measurement. Table 1 presents a summary of the variables definitions and measurements.

4.2.1. Dependent variable (ROA and NPL - Performance indicators)

The performance measures utilised in this study are: ratio of non-performing loans (NPL) to total advances and Return on Assets (ROA). The reasons for using these performance parameters are that return on asset is the most common performance indicator used in prior research studies (Claessens et al., 2000; and Mahajan et al. 1996), and the level non-performing loans remains one of the most fundamental issue affecting the stability of the Kenyan financial system (Central Bank of Kenya, Bank Supervision Annual Report 2001). The quality of this measure is further affirmed by the fact that non-performing loan assessment and monitoring is core to both on-site examination and off-site surveillance by the Financial Institutions Supervision

Department of the Central Bank of Kenya in ensuring soundness and stability of financial institutions. Moreover, the NPL ratio used in this study is the adjusted value after taking into account additional provisions recommended by the central bank examiners.

4.2.2. Independent variables

The overarching independent variable in this study is the corporate governance mechanism being investigated: ownership structure. The main categories of ownership variables studied are: level (concentration) of board ownership, proportion of foreign ownership, institutional ownership and percentage of government ownership.

The board ownership variable is measured as the proportion of board shareholding to total value of shares of a financial institution. This information is extracted from appendices in the inspection reports and other institutional records available in the Financial Institutions Supervision Department.

Foreign owned banks are defined as financial institutions in which foreigners (non-Kenyans), whether, corporation or individuals own majority shareholdings. These include multinational subsidiaries of foreign banks and banks owned by other foreign organisations.

A financial institution is defined as owned by an institutional shareholder when a clearly identifiable corporate body owns more than 30% of the shareholding of its total share value, while government-owned financial institutions refer to those institutions in which the Kenya government has shares. This is identified as, where the government interest is specified in shareholding in the institution and or when government representatives, for example, permanent secretary sits on the board of the financial institution.

4.3. Multivariate Model

An Ordinary Least Square (OLS) model was applied as a multivariate test to assess the influence of each of the independent variable on performance. The test is based on the following statistical model:

$$PERF_{it} = \beta_0 + \beta_1 BODOWN + \beta_2 FOROWN + \beta_3 GOVOWN + \beta_4 INSOWN + \beta_5 SIZE + e_i$$

Where:

$PERF_{it}$ = Performance (measured as ratio of Return on Assets and ratio of Non-Performing Loan) of bank i at time t .

BODOWN = Proportion of board ownership to total shareholding.

FOROWN = Ratio of foreign ownership stake to total shareholding.

GOVOWN = Dummy variable, coded 1, for a financial institution in which Kenya government hold ownership, and 0 for institutions in which the Kenya government has no ownership.

INSOWN = Dummy variable, coded 1, for a financial institution in which there is (are) identifiable institutional shareholders other

than the Kenya Government 1, and 0 for financial institutions with no institutional shareholders.

SIZE = Proportion of an institution's deposit to the total of banking sector deposit.

e_i = Residual term.

5. Results

5.1. Descriptive statistics

Table 2 (Panel A and B) presents summary of the two performance indicators, (dependent variables) in the regression model. Overall, there appears to be improvement in the level of performance in the recent years based on the mean of the two performance parameters, especially the mean of non-performing loan dropped from a high of 32% in year 2000 to 20% in year 2004. However, the standard deviation suggests that there are great disparities in the performance of the financial institutions in Kenya.

Table 3 shows bivariate correlation between the dependent variable, independent variables and control variable. The Pearson correlation shows a significant association between bank performances, measured as Return on asset and board ownership and foreign ownership variables. These results provide initial support *Hypothesis 1* and *Hypothesis 2* respectively. Similarly, there is a significant correlation between ratio of non-performing loan as performance indicator and foreign and government ownership of financial institutions.

Table 3 results also indicate significant correlation between the independent variables and the control variable. The highest value is between board ownership and foreign ownership (Pearson correlation = -0.49). Gujarati (1988) and Hair, Anderson, Tatham and Black (1995) suggest that correlation between the independent variables is considered undesirable for multivariate analysis if the value exceeds 0.8. A more rigorous and diagnostic method widely used is the *Variance Inflation Factor* (VIF)² for each of the independent variable. VIF values are contained in the last column of Table 4 and Table 5. The VIF values for all the independent variables are below 2 far less than 10 considered harmful for a regression analysis (Netter, Wsserman & Kutner, 1989). Thus, the correlation matrix and VIF values suggest that multicollinearity is not a serious issue.

² Madalla (1992) explained VIF as follows: $VIF(\beta_i) = 1/[1-R_i^2]$ where: R_i^2 is the squared multiple correlation coefficient between x_i and other explanatory variables and $VIF(\beta_i)$ is the ratio of the actual variance of (β_i) to what the variance of (β_i) would have been if x_i were to be uncorrelated with the remaining x 's.

5.2. Empirical Results

The results of multivariate tests of the hypotheses developed are documented in Table 4 and 5. In conducting the test, both pooled cross-section and time series data is used. To accommodate the panel data, year dummies are included in each of the regression equations. As stated earlier, the dependent variables in the regression model are performance parameters measured as Return on Assets (ROA) and proportion of Non-performing loans to total loans.

5.2. Dependent variable: Return on Assets (ROA)

Using the overall performance parameter of ROA, the proportion of board ownership is strongly and negatively associated with bank performance. It is the most important predictor of an institution's financial performance, with highest standardised coefficient of -0.282 significant at less than the 0.01 level. The finding is consistent with the hypothesised negative relationship between board ownership and bank performance.

Consistent with the hypothesised relationship, government ownership of banks is significantly negatively associated with banks' financial performance. This result is consistent with findings by Barth et al. (2000) and Cornett et al. (2000), all of who associate government ownership of banks with poor financial performance.

Although it had the expected positive sign, the foreign ownership variable is not significantly associated with bank performance. Surprisingly, contrary to hypothesised positive relationship, though not significant, the coefficient of the institutional owner variable has negative sign, suggesting that institutional shareholders have negative influence on bank performance. Therefore, Hypotheses H1a and H4a are accepted and H2a and H3a are rejected.

5.3. Dependent variable: Non-Performing Loans

Three hypotheses: H2b, H3b and H4b are significant predictors of the level of NPL. Proportion of foreign ownership is strongly and negatively associated with bank performance measured as ratio of non-performing loan to total loan. Foreign ownership variable is the most significant predictor of an institution's level of non-performing loans. The result indicates that foreign ownership of banks have significant influence on bank performance, possibly through better management of credit risks, thus lowering the level of non-performing loans and improving earnings and profitability. This result supports hypothesis 2, and is consistent with prior

research findings by Claessens, et al., 2000; Demirguc-Kunt & Huizinga, 1999.

Government ownership of banks is significantly positively associated with higher level of non-performing loans as a proportion of bank loans. The finding therefore, suggests that unlike foreign ownership, state-ownership of banks impact negatively on bank performance due to high levels of non-performing loans associated with this type of ownership structure. This result is consistent with findings of Cornett et al. (2000) and Allen et al. (2004) who report that state-owned financial institutions perform poorly for the sample of five Asian countries and Argentina banks examined.

Surprisingly, like government owned financial institutions, institutional ownership of financial institutions are positively related to the level of non-performing loans as proportion of the total loan. Thus, institutional ownership of banks impacts negatively on their financial performance. The finding is inconsistent with the hypothesised negative relationship with the proportion of non-performing loans.

Board ownership has the expected positive sign however the variable has no significant influence on the level of non-performing loans. Therefore, H1b is rejected. This implies that with respect to bank financial performance; measure as ratio of non-performing loan to total loan, other ownership structure such as, the level of foreign ownership, government or institutional owners are better predictors.

5.4. Robustness Check

To ensure robustness of the results, multiple approaches are helpful and recommended (Cooke, 1998). As a robustness measure, a rank regression analysis was performed. As cited in Ho and Mathews (2002), Wales, Naser and Mora (1994) and Hopwood and McKeown suggest that rank transformation provides additional confidence in statistical results because it: (i) yields a distribution free data; (ii) provides results similar to those that can be derived from ordinal transformation and (iii) mitigates the impact of measurement error, outliers and residual heteroscedasticity on the regression results.

Although not reported here, rank regression analysis also support the findings based on the regression model specified above, the proposition that banks ownership characteristics influence financial institutions performance. As discussed in the preceding section, rank regression analysis, indicates that board and government ownership a significantly negatively associated with bank performance

6. Conclusions and Policy Recommendations

The purpose of this research is to empirically examine relationship between ownership structure and bank performance in the Kenyan context. Ownership structures investigated include: proportion of board ownership, level of foreign ownership, institutional and government ownership. Performance parameters utilised in the study are Return on Assets and proportion of non-performing loans to total loans.

The results of the OLS regression provide strong support for the proposition that ownership structure influence bank performance. Level of board ownership, proportion of foreign ownership and government ownership are associated with performance of financial institutions in Kenya. While the findings provide credence to prior research findings, they are of particular relevance for policy makers and regulators in Kenya. In this regard, irrespective of the performance measures used: Return on Assets or ratio of non-performing loan, this study present a compelling and strong evidence of negative relationship between state ownership and bank performance.

For the past few years, the Kenyan government has been in the process of restructuring and privatising state owned financial institutions. In light of the empirical finding, this is a right initiative. To further augment this measure and to enhance stability of the financial sector, the government should speed up restructuring and privatisation of these institutions. The advantages of speedy finalisation of these restructuring processes are; a substantial reduction in the level of non-performing loan of the Banking Sector. In this respect, the Central Bank reports:

While the banking sector is characterised by high levels of non-performing loans at Kshs. 71.3 billion, a high proportion of these NPLs at Ksh 43 billion or 59.8% of total NPLs are concentrated in five public sector institutions. The ongoing restructuring of these institutions will address the problem of high non-performing loans in the banking sector (Monthly Economic Review, April 2005, p.32).

Thus, the government divestiture program would enhance stability of the banking sector by impacting positively on the sector's level of non-performing loans, and save the Kenya government costs associated with subsidising operations of some of these institutions, such as capital requirements to be compliant with the Banking Act and Prudential Regulations.

The proportion of board ownership of a financial institution is significantly and negatively associated with an institution's performance, measured as return on assets. This implies that board

ownership of a bank impacts negatively on financial performance of an institution. The finding of the study is consistent with the entrenchment hypothesis, that board ownership of financial of institutions exacerbates the conflicts of interests between owners and depositors. Specifically, board ownership depicts a clear picture of conflicts of interests between owners and depositors, and probably the risk-taking tendencies of such institutions. This empirical finding lends credence to the theoretical assertions by Brownbridge (1998), which states:

"In many of the failed banks, majority of the shares were held by one man or one family, while managers lacked sufficient independence from interferences by owners in operational decisions." (p. 180).

As a regulator, this is of particular concern to the Central Bank of Kenya. Given the strong negative correlation between level of board ownership of a bank and bank performance, the Central Bank of Kenya should: (i) Review the relevant part of the Banking Act to decisively address such ownership structure that may pose a significant risk to the financial stability of the Banking sector in Kenya, and (ii) From a supervisory perspective also, consider ownership as integral to risks assessment, both to an institution's performance and stability of the sector. Thus, as part of the supervisory process, institutions should be classified into various risk categories based on ownership structure. In particular financial institutions in which board members and government hold ownership stake pose major regulatory challenges and risks.

In line with this finding, it is important to note that proposed amendment to the Banking Act in 2004, with respect to vetting and certification of significant shareholder of a financial institution is a step in the right direction. However, given this ubiquitous culture of circumventing the law, with the hindsight of the regulatory knowledge, it may be prudent for the Central Bank to vet and certify all shareholders for specific financial institutions. This is important because it is likely that a purportedly 'minority shareholder' may impact significantly on the operations of a financial institution. The minority share ownership may just be a deliberately orchestrated attempt at circumventing the law.

In addition, given the fact that the board ownership variable is the most significant predictor of a bank performance measured as return on asset, subject to corroboration of this finding through similar qualitative and quantitative studies, the Central Bank, may have to consider having nominees on the board of certain financial institutions. The nominee is expected to engage board discussions and deliberations with the sole responsibility of preserving public interests: depositors.

Surprisingly, using both parameters of performance indicators, results consistently indicate that institutional shareholders have no significant influence on financial performance of banks. This implies that unlike western economies where institutional shareholders have been agents of change, especially promoting sound corporate governance practices, in Kenya, institutional shareholders are inactive. This requires a comprehensive sensitisation program for this type of bank owners to actively participate in strategic direction of their respective institutions. Through their shareholding, the institutional shareholders may influence board composition, thus impacting on a banks performance by co-opting competent personalities to the board. Certainly, active participation of institutional shareholders in bank affairs in the long run will improve corporate governance in the banking sector, and minimise the 'free-rider' problem associated with individual shareholder.

The OLS regression results also, provide a strong evidence of a significant positive relationship between the proportion of foreign ownership and bank performance. This is consistent with the hypothesis and previous research findings, for example Claessens et al. (2000) and Demircuc-Kunt and Huizinga (1999). It is likely that foreign owned banks are influenced by policies and procedures by the parent company, which may provide a better basis for evaluating and mitigating risks. However, the more important implication of this particular finding is that local banks can do just as well with improved corporate governance and better assessment and management of business risks. The finding only portends challenge to the local bank owners to manage banking business risks prudently to be profitable and competitive.

Finally, given the overall significant influence of ownership attributes on financial performance of financial institutions, it may be time to consider issuing comprehensive guidelines on ownership and corporate governance in the banking sector. The guidelines should among other issues, specify the minimum corporate governance practices required of a financial institution, and emphasise diversification of ownership, as well as disclosure of the ultimate beneficiaries of the shareholding of the financial institutions in view of the public interest at stake. In particular, the corporate governance guideline should clearly distinguish between ownership and management to ameliorate the imminent conflict of interests.

The finding of this study presents a number of avenues for future research. For instance, replicating this study in other regulatory regimes, for example within the eastern Africa, may enhance the understanding of the relationship between corporate governance and bank performances within the

region, thus formulating corporate governance policies based on empirical findings. Similarly, applying this approach to other regulated industries may enhance generalisability of the findings across sectors. Another potential area for research is the interrelationship between various governance mechanisms, for example ownership structure and board characteristics, as argued and empirically examined by Belkhir (2005).

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Appendices

Table 1. Operational definitions of variables

<i>Variables</i>	<i>Definition</i>	<i>Source of information</i>
Performance (ROA)	Return on Assets measured as profit before tax to total assets.	Bank Supervision Annual Reports
Performance (NPL)	Ratio of non-performing loans to total assets	Bank Supervision Annual Reports
<i>Independent Variables</i>		
Board Ownership	Ratio of board share to total value of shares of an institution.	Off-site surveillance data
Foreign ownership	Financial institution in which foreigners have more than 50% of ownership stake.	Off-site surveillance data
Institutional owners	Institutional in which a corporate body has more than 30% of total share value.	Off-site surveillance data
Government ownership	Financial institutions in which government have interest directly or through Stated Owned Corporations.	Off-site surveillance data
<i>Control variable</i>		
Bank Size	Market share of deposit defined as ratio of an institutions deposit as 31 st December of a given year to total deposits of the Banking sector for the same period.	Bank Supervision Annual Reports

Table 2. Performance descriptive statistics: Return on Assets* and Non-Performing Loan Ratio

	Maximum	Minimum		Mean		Std. Dev.
Panel A:						
Overall RoA	36.54	-16.70		1.25		4.03
By Year						
2000	5.21	-13.94		0.52		3.81
2001	8.00	-13.91		1.07		3.35
2002	5.00	-6.60		1.24		2.23
2003	6.41	-16.70		1.48		3.70
2004		-16.55		1.25		4.03
By ownership						
Board		-16.70		1.06		4.83
Foreign	5.98	-4.04		2.34		1.85
Institutional	6.05	-7.62		1.41		2.58
Government	4.78	-4.84		0.43		2.32
Panel B						
Overall NPL ratio	91.60	0.00		24.66		18.78
By Year						
2000	70.40	0.80		32.25		18.60
2001	76.00	0.00		24.72		18.35
2002	91.6	0.10		23.84		18.99
2003	76.80	0.20		22.73		18.57
2004	83.20	1.40		19.75		17.87
By ownership						
Board	91.60	0.00		23.90		18.78
Foreign	5.98	-4.04		2.34		1.85
Institutional	70.10	1.40		26.22		20.07
Government	75.55	7.80		39.01		19.13

* For purpose of computing descriptive statistics, all ownership variables are binary coded, that is, 1 for a particular ownership type, and 0 otherwise.

Table 3. Pearson Correlation

VARIABLES	1	2	3	4	5	6	7
(1) ROA	1.000						
(2) NPLratio	-0.446**	1.000					
(3) BOWN	-0.229**	0.079	1.000				
(4) FOROWN	0.148*	-0.281**	-0.49**	1.000			
(5) INSTOWN	0.049	-0.043	-0.247**	0.207**	1.000		
(6) GOVOWN	-0.081	0.226**	-0.328**	0.014	0.197**	1.000	
(7) MSHARE	0.100	-0.049	-0.320**	0.237**	0.249**	0.186**	1.000

Table 4. Pooled regression estimates: 2000-2004
(Dependent variable: Ratio - Return on Assets)

Independent Variables	Predicted sign	Standardised Coefficient	t- statistics	P-value	VIF Values
Test Variables					
Board ownership	-	-0.282	-3.311	0.001*	1.689
Foreign Ownership	+	0.006	0.075	0.941	1.386
Institutional Ownership	+	-0.039	-0.564	0.574	1.089
Government Ownership	-	-0.182	-2.547	0.012*	1.186
Control Variable					
Size – market share	+	0.038	0.532	0.595	1.169
2001		0.054	0.654	0.514	1.600
2002		0.076	0.914	0.362	1.601
2003		0.099	1.198	0.232	1.601
2004		0.141	1.697	0.091	1.600
R-square	9.7%				
Adjusted R-square	5.8%				
F-value	2.49				
Sig. F	0.010				

* Significant at less than 1% confidence level.

Table 5. Pooled regression estimates: 2000-2004
(Dependent variable: Ratio – Non-Performing Loans)

Independent Variables	Predicted sign	Standardised Coefficient	t- statistics	P-value	VIF values
Test Variables					
Board ownership	-	0.111	1.437	0.152	1.689
Foreign Ownership	+	-0.263	-3.782	0.000*	1.386
Institutional Ownership	+	0.301	4.883	0.000*	1.089
Government Ownership	-	0.274	4.254	0.000*	1.186
Control Variable					
Size – market share	+	0.028	0.442	0.659	1.169
2001		-0.162	-2.159	0.032	1.600
2002		-0.182	-2.431	0.016	1.601
2003		-0.206	-2.750	0.006*	1.601
2004		-0.268	-3.583	0.000*	1.600
R-square	26.7%				
Adjusted R-square	23.4%				
F-value	8.418				
Sig. F	0.000				

* Significant at less than 1% confidence level.

РАЗДЕЛ 4 УГОЛОК ПРАКТИКА

SECTION 4 PRACTITIONER'S CORNER



THE PREMIUM PAID FOR M&A: THE NASDAQ CASE

*Mpasinas Antonios**

Abstract

Our study is focused on the premium paid for an acquisition of a target company, especially on the Nasdaq market. We find that the relative size of the companies, the strategy of international diversification and the mean of payment influence the premium. There is no effect of market timing on the premium paid and the ownership structure of the group of directors doesn't seem to be significant.

Keywords: corporate governance, ownership structure, premium paid

**Assistant de recherche (PAI), Service d'Economie et Gestion de l'Entreprise, 17, Place Warocqué, 7000 Mons, Faculté Warocqué des Sciences Economiques, Université de Mons-Hainaut, Toni.Mpasinas@umh.ac.be ou mpasinas@hotmail.com*

1. Introduction

The companies evolving in the sectors of high technology play a considerable role in the current economic development. For example, we can see the spectacular evolution of index NASDAQ, being raised of more than 200% between 1998 to 2000. During the last decade, such companies were placed massively on the stock market throughout the world (Ginglinger, 2001). The NASDAQ accommodated these companies in the United States. The European stock exchange authorities, as for them, created new compartments of market allowing this multitude young companies to enter the stock exchange market, and this in particular in a preoccupation with a transparency and easier access to the capital market (for example, the New Market in France, Neuer Markt in Germany or Nuovo Mercato in Italy). Parallel to the introductions, many companies evolving in sectors of high technology were implied in operations of mergers and acquisitions during this same period (Kohers and Kohers, 2000), in a concern

of reaching a critical size. It should be known that mergers and acquisitions are the roots of multiples studies since a lot of years. It is however since the Sixties that they are the object of thorough research. The principal object of this research was to collect the effect of the creation of value in the short run initially, and more recently in the long run. In substance, the principal conclusion of these two types of studies (in the short and long term) is that the shareholders of the target companies are the winners and that the combined companies create, in the facts, little value. Insofar as the launching of such operations requires a complex work of evaluation of the profits anticipated by the purchaser, we seek to check if the amplitude of the premium paid depends on the strategy pursued by the purchaser. This study, which is focused primarily on the premium paid by the purchasers, seems to us original for the two following reasons. On the one hand, work in finance relating to acquisitions of companies is interested mainly in the reaction of the market to the advertisement of these operations, like with financial

performances in the long run (Datta and Al, 1992; Mitchell and Stafford, 2000). In other words, the researchers primarily were concerned with the incidence of these acquisitions on the value of the target and acquiror companies. The point of view of the leaders of the acquiror companies, which determine the amount of the premium to pay the shareholders of the target, to encourage them to yield their actions, did not make, to date, the object of thorough studies. In addition, this study is focused on the companies evolving in sectors of high technology, which prove very specific compared to the companies evolving in more traditional branches of industry, and for which the evaluation of the profits resulting from acquisition significantly appear more complex to evaluate. This work is registered thus, at least partially, in the current debate on the difficulties of evaluation of these companies, which gained in intensity since the bursting of bubble Internet in March 2000.

Our research thus will relate as well to the creation of value following mergers and acquisitions as on the amount of the premium which the directors will decide to pay to acquire a target company. We thus go further in the research of creation of value since we will try to understand if the premium influences the creation of value. The attitude of the leader compared to the choice of the premium to be paid is thus a key variable which was not yet treated to our knowledge. On this subject, a lot of variables can influence the directors in her choice to evaluate the amount of the premium. Our research thus will take into account a set of variables which will include:

- variables specific to the target company;
- variables specific to the acquiror company;
- variables which will be more specific to the transaction.

2. The framework

When a acquiror company wishes to take the control of a target company, it is necessary to pay a premium to encourage the shareholders of the target company to sell their shares.

If the leaders of the acquiror company manage their company in accordance with the interests of their shareholders, then we should note that this premium grows with the hoped profits. On the other hand, the paid premium is not a function of the profits anticipated by the acquiror company in the two following cases. Firstly, if there are conflicts of interests between the shareholders and the leaders of the acquiror company, then the paid premium can reflect the profits hoped by the leaders (evolution of their remuneration, if this one is related to the size of the company, etc), but it can be disconnected from

the value created for the shareholders. Secondly, if the consequences of the operation are particularly complex to evaluate, then the paid premium paid can also be disconnected from the hoped profits. Although the literature on merger and acquisition is abundant, very few work tried to check the existence of a positive relation between the premium paid and the profits anticipated by the leaders of the acquiror company. The empirical studies have tried to explain the short-term and long-term evolution of the value of the acquiror companies and targets. This work in particular made it possible to highlight which the value of the target companies increases with the advertisement of such operation, but the impact on the value of the acquiror companies is generally almost zero (Jensen and Ruback, 1983, Husson, 1990; Datta and Al, 1992; Pécherot, 2000, 2002). By admitting that the investors are confronted with an informational problem - they are less informed on the characteristics and the profitability of the projects of investment that the leaders of the acquiror company -, it is completely conceivable that the profits hoped by the investors translate only very imperfectly those hoped by the leaders. For this reason, the thorough study of the paid premium proves to be relevant. We focus our research on the variables which will influence the directors to undertake a merger and acquisition and, consequently, to pay a premium of acquisition that will allow the shareholders of the target company to sell their shares. The fact of being interested only on the Nasdaq will make it possible to characterize this market in term of merging companies. It is indeed easier for a company to repurchase another company situated on the same market because the rules are identical. Moreover, it should be known that the Nasdaq market allows the introduction out of purse of rather young companies and in growth and allows easier conditions of entry compared to the traditional market (for example the NYSE). It is thus relevant to focus our study on mergers and acquisitions "inter market" and especially in the case of Nasdaq which was the subject of a lot attention by the investors these last years.

Parallel to the premium paid, we also will study the creation of value following a merger and acquisition. Indeed, the premium of acquisition and the creation of value are connected by the following way: the more important creation of anticipated value are, the more the leaders will be ready to pay a more important premium to acquire the target. In our work, we will thus study, initially, the creation of value and, in the second time, the premium. The creation of value was very largely studied since many years and the conclusions of this research are rather unanimous on the subject: the shareholders of the target are the winners of this strategies merger and acquisition and the shareholders of the acquiror companies gain only very little value. Thanks to the

study on the creation of value, we will be able to analyze the market of Nasdaq and compare it with other markets.

As we higher presented in the introduction, we focus our study on the point of view of the directors of the acquiror company which will decide to undertake a strategy of merger and acquisition. In our study, we will differentiate fusions and acquisitions which took place in the same sector of those which take place in different sectors (sectoral diversification). In the same state of mind, we will also study the geographical strategy of diversification, i.e. the fact of buying a company which is in a different country. Indeed, according to the periods and the environment of the market, the effects of a strategy of diversification, sectoral as well as geographical, can be different and by consequent interesting to study.

We will also approach an aspect of valorization of the market ("market timing") which seems relatively important to us since the literature seems to advance that the waves of mergers and acquisitions occur for periods of high valorization of the market. We will thus divide our sample into two periods: before and after the bursting of the speculative bubble of March 2000 on the market of Nasdaq. The fact of dividing our sample into two periods having different characteristics in term of valorization will enable us to analyze wich mergers and acquisitions can be influenced by a variable of valorization of the markets. These three variables are specific to the transaction. Like statement in the introduction, our study will taking into account three types of specific variables, namely the variables specific to the transaction, the variables specific to the acquiror company and to the target company. Characteristics of the transaction, like sectoral or geographical diversification, the valorization of the market, the method of payment, the offers simple versus multiple offers, the friendly offers versus aggressive offers will allow us to make tests of comparison in order to determine which types of transactions are most powerful. This kind of test was largely used in the past but the originality of the studies of difference in our study rests on the fact that w can differentiate the transactions within the same market. For example, we will be able to compare the rate of debt, the sales, and, in a more general way, the performance, to be able to show if there are possible correlations between the respective ratios.

The ownership structure is the last important variable in our work. We found interesting to integrate a variable of ownership structure of the directors of the acquiror company. Indeed, as they will determine the amount of the premium at the time of a merger, the fact of having a part of the capital of the company will influence the amount of

the premium. Indeed, we can think that since the interests of the directors are directly influenced, the premium should be less important. We position our reasoning in the optics of the agency theory.

Our objective is to show if the strategies developed by the leader, and in particular the strategies of diversification, help to explain the premiums of acquisitions. Several articles were interested in the motivations of acquisition. Among those, we find mainly three of them : synergies; the weakness of the directors of the target company; hubris (Roll, 1986).

According to that, we will try to show that the strategies of diversification (which generally destroy value and thus do not consolidate the synergy) are in general worse than the strategies of concentration of the activities. We bring more to our study by dividing at the same time sectoral diversification and geographical diversification. We also take into account a variable of ownership structure of the directors in order to be able to differentiate the strategies from diversification and concentration. Indeed, more the directors will be in shareholding of the company, less there will be problems of agency. That thus leads us to say that the premium should be lower.

The other variables (specific to the transaction, with the target and acquiror company) of controls will make it possible to give more explanation on the amount of the premium.

In a general way, we can say that two possibilities are offered to us to answer the choices of the directorsto launch an operation of merger and acquisition.

The leader makes a decision which is good for the shareholder. In this case, that result in an increase of the shareholder value.

The decision of the leader is not good and is thus not create value.

If the decision does not maximize the shareholder value , we can think that there is a cognitive skew on behalf of the leaders or whereas the leaders act in an opportunist way. The aspect of valorization of the market will enable us to understand if the premium and the creation of value are different according to whether the market is bull or bear (during a bull period, i.e. the price of the actions is higher). The literature shows us that the strategies of industrial merger are not advantageous to the shareholders of the acquiror company (at least with regard to the studies of short-term performance). We can thus wonder why the leaders still decide to undertake this kind of strategy whereas they are destroying of shareholder value.

Our empirical study relates to 388 companies situated in Nasdaq, having been the target of an acquisition between 1997 and 2003 by a company being itself on the Nasdaq market.

3. Characteristics of the NASDAQ

The market of Nasdaq is characterized by a market of growth companies. Indeed, the fact to give the possibility to young companies to enter on a stock exchange where the constraints are less than traditional markets such NYSE. These last years, this tendency was marked by the entry of companies of high technologies (Internet, biotechnology, etc...). This agitation around this new phenomenon made climb the index of security prices, and put the Nasdaq on incredibly high levels.

Since half of the Nineties, the market of Nasdaq did not stop to being appreciated. Indeed, from January 1998 to March 2000, the composite index of

Nasdaq climbed of 212%. However, this rise was brutally stopped in March 2000 because of the bursting of the bubble present on the markets of the new economy (falls of 68% from March 2000 to April 2002). The wave of mergers and acquisitions was nevertheless present on Nasdaq, with one relatively prosperous period until the beginning of the year 2000. We wondered whether the characteristics of mergers and acquisitions were different according to valorization from the market. For information the index of Nasdaq reached in March the 2000 5.048 points whereas it was only 1.114 point in 1997.



Figure 1. Evolution of the Nasdaq index

This unusual increase and this fall of the price of the technological shares carried out many academic and experts to describe this event like a speculative bubble of the share price (Thaler (1999); Shiller (2000); Ofek et Richardson (2002 et 2003); Ritter et Warr (2002); Ritter et Welch (2002); Abreu et Brunnermeier (2003); Brunnermeier et Nagel (2003); Ljungqvist et Wilhem (2003) et Stein (2004)).

This label seems suitable if the term of bubble is interpreted as a description ex post of a raising of prices of the shares followed by a drastic fall (Kindleberger, 1978). However, a more current interpretation is that the price of the technological shares exceeds their fundamental values at the end of the Nineties.

4. Hypothesis

4.1. Variables

4.1.1. The explained variable: the premium.

We retained two measurements of the premium of acquisition. First (PRIME4) compares the price paid by the purchaser with the price of the target four weeks before the date of advertisement. PRIME4 is calculated as follows: $(\text{price paid} - \text{price of the target four weeks before the date of annonce}) / (\text{price of the target four weeks before the date of advertisement})$. We also retained the second measurement (PRIME1), which is calculated with shorter interval.

The price of reference is the price of the share of the targets company one week before the date of advertisement. PRIME1 is equal to: (price paid - price of the target one week before the date of annonce)/(price of the target one week before the date of advertisement). The difference noted between two variables PRIME1 and PRIME4 highlights that the price of the actions of the target company increased between the fourth and the last week preceding the advertisement by acquisition. It is probable that this raising of prices of the actions is the result of rumours on the money market during weeks preceding acquisition

4.1.2. Determinants of the premium

A. Strategy of diversification

The strategy of diversification (activities and/or international), supposed to have a negative effect on the premium paid because of less synergies and a less increase in capacity market the purchaser, is apprehended using two variables. DIVSECT makes it possible to appreciate the diversification of the activities of the purchaser. It acts of a dichotomic variable equal to 1 if the purchaser diversifies, i.e. if its code SIC differ from that of the target, and equal to zero in the contrary case. The second variable of diversification (DIVINT) makes it possible to take into account the international diversification of the purchasers. It's also a dichotomic variable, equal to 1 if the purchaser diversifies internationally, i.e. if the nationality of the target is different from that of the purchaser, and equal to zero in the contrary case.

Table 1. Distribution of the operations according to the strategy of the purchaser

	Total (388)
Internationalization	22
No Diversification	366
Internationalization of the activities	101
No diversification of the activities	287

B. The means of payment

Many work was focus on means of payment to explain the creation of value following acquisitions. The empirical results are the following: the market react more strongly when the companies are acquired with cash. On the other hand in the case of payment by, cumulated abnormal returns are negative for the acquiror companies and the companies target are less strong. From a theoretical point of view, these results are explained in particular by an information effect (Eckbo and Al, 1990). The companies which pay in cash, announce to the investors that the project is profitable. On the other hand, the payment by share does not convey positive information on the quality

of the project. If one is interested in the amount of the premium paid by the purchaser, and not in the reaction of the market, the incidence of the means of payment on the premium is ambiguous. On the one hand, the cash payment of the target share involves the payment (immediate) of a capital gains tax, which is not the case if the payment is carried out by shares. We can thus anticipate that the premium paid by the purchasers is higher for a cash payment. In addition, one can also advance that the share payment of the target makes it possible to carry out operations with "good deal", in particular when the titles of the purchaser are overestimated, as the highlight recent behavioral analysis of Shleifer and Vishny (2003). Thus, the purchasers can agree to pay a higher premium with share payment, to encourage the shareholders of the target to sell their shares. To check if the means of payment is related to the premium of acquisition, we distinguish three types of payment: the cash payment, the payment by exchange share and the mixed payment (simultaneously share and cash). Taking into account these results, we retain a dichotomic variable STOCK equalizes to 1, if the payment is carried out by share, is equal to zero in the contrary case.

C. The performance of the target

The profit hoped by a purchaser can also depend on the past performance of the target. Indeed, if these performance are not very powerful, the acquiror company has the possibility of carrying out various reorganizations, likely to generate "a strong" short-term profitability. Thus, we anticipate that the premium paid by the purchaser decrease with the preliminary performance of the target. This relation can be also explained by the fact that a purchaser is not encouraged to pay a very high premium for a very powerful company, because its marginal profit would be (relatively) weaker. We use a measurement of ratio of sale and EPS, to measure the performance of the target.

D. Market timing

The variable introduced into the analysis is called MARKET Timing. It acts of a dichotomic variable, equal to 1 if the market is bull, and equal to zero in the contrary case. For the period of study selected, we consider that it is possible to distinguish two periods. The first begins in March 1997 and finishes in March 2000. The second under period begins in March 2000, which corresponds to the date of bursting of Internet bubble, and stop in March 2003.

E. Ownership structure

In this part, we primarily will treat ownership structure of the directors of the acquiror company.

By ownership structure, we understand the percentage of share held by the group of leader took as a whole. The data on the ownership structure were obtained manually on the Internet site EDGAR (<http://www.sec.gov/edgar.html>) which takes all the SEC files (Securities and Exchange Commission). The ultimate goal of this part is to understand if the amount of the premium and the creation of value will be influenced by the ownership structure. We can think that if the directors has a significant part in the ownership of the company, they will make decisions in conformity with the shareholder value. By knowing that, we can wonder how will behave the

directors in a situation of merger and acquisition when they has a significant part of the ownership. According to the agency theory, there is a division between the interests of the shareholders and the leaders when the ownership structure of the leader in the company is small.

5. Results

5.1. Regression: variable specific to the transaction + variable specific to the purchaser and the target

Summary of the model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,423	,179	,088	70,863

a Predictors: (Constant), acquisitions multiples (=1 si multiple), market timing (=0 if after), SIC 2 (=1 si 2ch=), offre mult (=1 si 1offre), CrossB (=1 si same country), % ofCash, OWN_DIR, Log size Rel(T/A)

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127393,9	13	9799,533	1,961	,030
	Residual	5844539,0	117	4996,060		
	Total	711932,1	130			

a Predictors: (Constant), acquisitions multiples (=1 si multiple), market timing (=0 si apres), SIC 2 (=1 si 2ch=), offre mult (=1 si 1offre), CrossB (=1 si same country), % ofCash, OWN_DIR, Log size Rel(T/A); net sales/AT (target); debt/AT (target); net sales/AT (acq); debt/AT (acq); EPS (target); EPS (acq); premium.

b Dependent Variable: rang -1;+1

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-59,962	72,470		-,827	,411
	offre mult (=1 si 1offre)	65,600	73,614	,097	,891	,376
	SIC 2 (=1 si 2ch=)	-24,102	20,360	-,145	-1,184	,240
	CrossB (=1 si same country)	53,273	26,534	,095	1,952	,056*
	% ofStock	82,190	26,656	-,330	-3,083	,003*
	market timing (=0 si apres)	-21,558	15,897	-,143	-1,356	,179
	acquisitions multiples (=1 si multiple)	-15,355	19,369	-,103	-,793	,431
	OWN_DIR	-,159	,490	-,037	-,324	,747
	Log size Rel(T/A)	-9,581	16,129	-,073	-2,178	,031*
	net sales/AT (target)	13,128	7,021	,130	1,870	,063*
	debt CT/AT (target)	-14,985	10,156	-,102	-1,475	,142
	net sales/AT (acq)	33,089	18,134	,122	1,825	,069*
	debt CT/AT (acq)	-3,891	28,056	-,009	-,139	,890*
	EPS (target)	6,138	2,765	,654	2,220	,034*
	EPS (acq)	15,335	165,317	,024	,093	,927
	Prime	-3,02E-02	,262	-,013	-,115	,909

a Dependent Variable: rang 0;+1

5.2. Interpretation of the results

In this regression, we added variables relating to the acquiror and the target,: Net sales/Active Total of the target, EPS of the purchaser and the target, debt of the target, the ownership structure the purchaser and the premium paid by the purchaser. With regard to the variable of debt, we notice that the ratio of the target is characterized by a negative and statistically significant sign. The more the debt of the target is raised, the less there will be creation of value for the purchasers.

The debt of the target influences negatively the creation of value and makes it possible to consolidate our assumption. The higher the EPS of the target and the better creation of value will be. This relation is

also in conformity with our assumption, i.e. target companies with good performances will make it possible to create more value. On the other hand, of the companies with a high degree of EPS do not manage to undertake creative merger and acquisition.

The variable net sale/ total asset does not arise in a significant way as well for the target as the purchaser. We cannot thus establish any result. We obtain nevertheless a positive sign (statistically significant) which enables us to advance that the higher the net sales of the target are, the larger creation of value is. The two last variables which are tested, the ownership structure of the directors and the premium, do not arise significantly.

Regression Summary of the model

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,283(a)	,080	,043	42,42121

a Valeurs prédites : (constantes), offre mult (=1 si 1offreur), market timing (=0 si apres), % of Cash, CrossB (=1 si same country), Net Sales/AT (acq), own dir, SIC 2 (=1 si 2ch=), size relative T/A, debt /AT (target), debt /AT (Acq), net sales/AT (target)

ANOVA(b)

Modèle		Somme des carrés	ddl	Carré moyen	F	Signification
1	Régression	12856,465	11	1168,770	2,159	,059(a)
	Résidu	147563,838	82	1799,559		
	Total	160420,302	93			

a Valeurs prédites : (constantes), offre mult (=1 si 1offreur), market timing (=0 si apres), % of Cash, CrossB (=1 si same country), Net Sales/AT (acq), own dir, SIC 2 (=1 si 2ch=), size relative T/A, debt tot/AT (target), debt CT/AT (Acq), net sales/AT (target)

b Variable dépendante : Premium 1 week prior to announcement date

Coefficients(a)

Modèle		Coefficients non standardisés	Coefficients standardisés	t	Signification
	B	Std. Error	Beta		
(constante)	9,977	59,925		0,166	0,868
Net Sales/AT (acq)	-1,48	11,164	-0,019	-0,133	0,895
own dir	-0,022	0,26	-0,01	-0,086	0,932
size relative T/A	-7,45	13,287	-0,065	-2,077	-0,042
net sales/AT (target)	-4,855	10,994	-0,07	-0,442	0,66
SIC 2 (=1 si 2ch=)	9,951	11,533	0,1	0,863	0,391
CrossB (=1 si same country)	22,777	43,866	0,057	1,752	0,084
% of Cash	-14,206	15,732	-0,242	-1,952	0,032
market timing (=0 si apres)	10,334	9,209	0,125	1,122	0,265
offre mult (=1 si 1offer)	14,906	32,877	0,052	0,453	0,651

a Variable dépendante : Premium 1 week prior to, announcement date

5.3. Comments

First of all, the stability of the model is relatively good since the F stat is higher than 2. The significativity is equal to 0,059 and can be regarded as relatively correct. R^2 is equal to 0,08 and adjusted R^2 equal to 0,043. These figures represent the degree of explanation of the various variables for the premium of acquisition. This degree of explanation can be regarded as acceptable if we refers to others studies in finance. The variables of the regression are dissociated in three types of variables: variables relating to the transaction, variables relating to the target company and variables relating to the acquiror company.

Variables relating to the transaction

For the five variables relating to the transaction, we notice that two of them are statistically significant: geographical strategy of diversification and method of payment. The fact of acquiring a company which is in a different country seems to have a positive effect (statistically significant) on the premium of acquisition. That results from an increase of the premium of acquisition when the purchaser buy a target company which is located in a different country. The strategy of diversification of the purchaser influences the premium positively, but this contrary result compared with our anticipations is not statistically significant. Thus, the companies which diversify internationally do not pay a weaker premium because of a less increase in market capacity or less synergies. Our assumption is thus not checked. In the case of payment by share, the premium is significantly higher, which does not enable us to confirm the idea according to which the leaders pay a weaker premium for tax reasons. In fact, it is possible that the leaders agree to pay a higher premium, (for share payment), because of the impact on the default risk of their company is relatively weaker and because these operations are "good deal", in particular when the companies are overestimated (Shleifer and Vishny, 2003). Besides this relation between the premium and the mode of payment, it makes possible to explain, at least partially, why the market reacts more negatively to the advertisement of acquisition financed by exchange of shares.

To check our predictions, and to highlight sectoral specificities discussed previously, we carry out a linear regression.

That leads us to conclude that the bond between the profits anticipated by the leaders of the acquiror companies and the premium paid to the shareholders of the target company seems to be important. The absence of a positive relation can result, either of the existence of conflicts of interests between the shareholders and the leaders of the acquiror

company, or real difficulties encountered by the leaders at the time of the evaluation of the target companies (cognitive problems). For reasons of access to governance data of the companies implied in these operations (characteristic of the structure, boards of directors of property of the companies, etc), it is unfortunately not possible for us to conclude on the reason from this absence of relation. The description of one long-term under-performance by Kohers and Kohers (2001) encourages us to advance that there are probably conflicts of interests between shareholders and leaders on the Nasdaq market (exchange their "overestimated" shares against target shares). In this case, acquisition is carried out "at a cheap rate", even if the premium is not directly related to the hoped profits of the operation. This approach makes it possible to explain, on the one hand, why a significant number of leaders prefers a payment by shares (71,6 % of the companies of our sample), in addition, why the leaders agree to pay a higher premium when they pay by shares. With regard to the valorization of the market, we do not observe any significant result. We can interpret this result as being surprising because the valorization of the market does not seem to have any influence on the amount of the premium of acquisition. That lead us to not support our assumption. However, we notice in our sample that the valorization of the stock exchange market is higher for the period "before crash" than for the period "after crash ". Moreover, it should be known that the number of the merger and acquisition is more important for the period characterized by the bull market.

Although, the shares are probably over valued, the premium does not seem not to be affected. That can be explained by the fact that the price of the share is higher and imply a higher amount of premium in term of liquidity. For the variable "simple offers versus multiple offers", i.e. if it there has several acquiror companies competing for the target company (and involves the price of the acquisition upwards), we realize that there is no significant effect. That carries out us to saying that there is not significant difference between the acquisition premium of the companies acquired by simple offer or multiple offer. According to this result, the number of competitor for the same target company does not seem to make increase acquisition premium of significantly. The hypothesis is not checked. The variable which relates to sectoral diversification does not arise significantly according to our results. It does not seem to have significant difference concerning sectoral diversification i.e. the premium does not vary significantly between the fact of acquiring a target company in the same sector than in a different sector. Our assumption is not checked.

5.4. Variables relating to the target and acquiror companies

First of all, it should be announced that we have to remove from our regression the variables relative to the debt because they were correlated with the premium of acquisition. For these variables specific to the companies, we notice that the variable "size relative" is the only one which arises significantly. I.e. the more the size of the target compared to the size of the purchaser increases, the more the premium decreases. According to these significant results, we can say that the more the size of target increases, the more the premium of acquisition paid by the shareholders of the purchaser will decrease. However, the review of the literature did not enable us to pose assumption for the relative size because the conclusions of the former studies were not univocal. According to Kuehn (1975), a larger target company requires more effort in the merger of two companies and will create a financial constraint for the purchaser. The probability of having detectable effects on the return of the purchaser share is larger when the target company is larger relative to the acquiror company. The other variables relating to the performance of the acquiror companies and targets do not seem to have of significant effect on the premium of acquisition. In short, we can say that according to our results, the variables which influence the amount of the premium of acquisition are: relative size, means of payment, strategy of geographical diversification. The other variables of our model do not seem to have an influence on the premium of acquisition.

6. Conclusion

The acquisition of company gave place to an abundant literature during 20 last years. The majority of work focuses itself on the reaction of the market to the advertisement of such operations. Very few studies tried to understand the amplitude of the premiums of acquisition paid by the managers. This question however seems to be relevant. If we replaces it in more general context of governance, it makes it possible to include/understand if the strategic choices of the leaders are in conformity with the interests of their shareholders. For this reason, our empirical study, which relates to 388 acquisitions of companies carried out between 1997 and 2003, implying target and acquiror companies traded on the NASDAQ, provides interesting information. Firstly, we note that the strategy of the purchaser does not influence the payment of the premium. This result leads us to think that the leaders, who are engaged in such operations, do not take systematically protect the interests of their shareholders. Taking into account the weak profits associated with the strategies of diversification,

(highlighted in the financial literature) it is extremely surprising to note that the companies who diversify pour a premium as high as that paid by the companies who do not diversify. This result can be explained by the opportunist behavior of the leaders, analyzed in particular with the agency theory (Jensen and Meckling, 1976). It is possible that the leaders have a preference for diversification, in particular because these strategies make it possible to smooth the results and flows of liquidities of the company. Consequently, it can reduce the risk and the job loss of the leaders (Amihud et Lev, 1981).

We obtain significant results for the strategy of international diversification. The premiums are weaker for acquisitions which are carried out in the same country. That is not in assumed by our anticipations according to which the premium should decrease when the operation of merger is carried out in the same country. However, these results are to be taken with precaution because the number of "international" acquisition is weak in our sample and does not allow us to conclude in strong results. Secondly, the fact that the leaders prefer to pay a lot of operations by shares announce that the leaders of the acquiror company have a "limited" confidence in the quality of their projects. Another solution can be found in the overestimated shares. Thorough work would be carried out, in particular in the way of the original modeling suggested by Shleifer and Vishny (2003) to explain the choice of the means of payment. The other variables do not seem to have significant effects on the premium of acquisition. Indeed, the performance variables and debt do not seem to have of significant effect on the premium of acquisition. In a surprising way, the valorization of the market does not have impact on the premium. But as we said, that can be explained by the fact that the shareprice was too high.

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