

The Impact of Internal and External Monitoring Measures on Firm's Dividend Payout: Evidence From Selected Malaysian Public Listed Companies

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Abstract

This paper examines the impact on dividend payouts of internal and external monitoring measures instituted by companies to improve their corporate governance structures. The study involves 120 selected Malaysian listed companies over a four-year period from 1996 to 1999. This period encompassed the 1997/98 Asian financial crisis which affected most countries in the Southeast Asian region including Malaysia. Due to the combination of cross-sectional and time-series data, panel data regression techniques were used to analyse performance of the firms using both fixed effects and random effects models. Using dividend payout as the dependent variable, it was established that the size of firm, gearing ratio (borrowing) and the proportion of non-executive directors on a company board significantly influenced the dividend payout of firms. The impact of size on dividend payout of firms followed a quadratic fashion with payout increasing with the size of the firm up to the optimal size of around 11,321 million ringgit, in terms of turnover. Beyond that, firm's dividend payout declined with increasing size. The study also found that company borrowing had a negative effect on dividend payout. Finally, increasing the proportion of non-executive directors in a firm could lead to a decrease in dividend payout.

Keywords: Corporate governance, Board structure, Audit committee, CEO, Dividend payout, Panel data, Malaysian companies

1. Introduction and Problem Statement

Poor governance standards in both private and government firms were blamed in part for the East Asian financial crisis. In Asia, corporations tend to follow the 'insider' model with the dominant control held by owners and large shareholders (Sycip, 1998; Yamazawa, 1998, ADB, 2000; Chin and Jomo, 2001). The erosion of investor confidence was identified as one of the major factors that exacerbated the financial crisis in Malaysia and other Asian countries. Many commentators, for example, Noordin (1999a) argued that the erosion of investor confidence in Malaysia was brought about by the country's poor corporate governance standards and lack of transparency in the financial system. Therefore the restoration of full confidence in the economy by investors will rely on the improvement of corporate governance standards including the adoption of transparency as an important strategy in corporate management.

The 1997/98 East Asia financial crisis demonstrated the importance of effective corporate governance in developing countries (Krugman, 1994; Radelet and Sachs 1998; Rasiah, 1999; Jomo, 2001). Malaysia was adversely affected by this financial crisis which started in Thailand in early July 1997. The contraction of the Malaysian economy along with the instability in the exchange rate and the decline in share prices adversely affected the corporate sector. This resulted in considerable retrenchment and downsizing of operations and closure of many firms. The collapse of many companies was also thought to be partly due to mismanagement, fraud, poor corporate governance or lack of resources and potential to compete in the market (Noordin, 1999).

With the recovery of most East Asian countries from the financial crisis, attention has understandably been drawn to addressing and researching the underlying issues and factors that led to the crisis with a view to learning the proper lessons to prevent the recurrence of the crisis in the future. An important purpose of this study is to contribute to the current state of knowledge with regards to the identification of internal and external monitoring measures that affect positively or negatively on dividend payout of firms.

In the light of these observations, the objectives of this study are to establish corporate governance factors that significantly influence dividend payout of firms in Malaysia. A related objective of the study is also to indicate corporate monitoring measures which do not significantly influence dividend payout of companies in Malaysia. The rest of the paper is organised as follows: the next section deals with the literature review on the topic. This is followed by methods and procedures used for the study. The results, conclusions and references follow.

1.1 Corporate Governance in Malaysia – Key Institutional Features

There has been very little factual research published on Malaysia's current position on corporate governance (Thillainathan, 1998). The East Asian crisis, which began with the devaluation of the Thai Baht on 2 July 1997 has opened many debates concerning standards of corporate governance in East Asia (Jomo, 1998). There are certain fundamental weaknesses such as the under-developed capital market and the high concentration of corporate ownership in the hands of a few wealthy families (ADB, 2000). The corporate ownership structure in Malaysia, characterized by significant family control and interlocking shareholdings among affiliated firms, may have left insiders with excessive power to pursue their own interests at the expense of minority shareholders, creditors and other stakeholders. The high concentration of ownership reduces the effectiveness of some important mechanisms of shareholder protection, such as the system of the board of directors, shareholder participation through voting during shareholder meetings and issues of transparency and disclosures. It may also have been one of the major sources of resistance to any reform initiatives in these areas.

The economic 'Tigers' in East Asia, with the exception of Hong Kong, all pursued policies similar to those of Japan and much of continental Europe (Walters, 1998). Industry was subject to government guidance, credit to state allocation, and the spoils of success were evident in the wealth of politicians and their party cronies. These were all attributes of a third world country: what made them exceptional was the growth until 1997 (Yamazawa, 1998). The ongoing crisis has revealed the serious flaws in the structure of these economies – the fragility of the banking system, the need for transparency, the over-concentration of power in a few hands, the weakness of corporate financing, the reliance on loan or bond finance rather than equities, manipulation of markets, and the misdirection of investment by politicized decisions (Walters, 1998).

A system of implicit guarantees led to incentives to choose the highest return investment regardless of risk, and crony capitalism and supportive bad policies led to poor credit decisions in the banking system and misallocation of resources. The well established long-term relations between companies and banks turned debt into quasi-equity. This relationship suggests lax credit allocation processes, possibly supporting projects of politically connected individuals and organizations, without reference to project viability (Krugman, 1998). The key foundations that ensure the success of capital markets - transparency, corporate accountability and governance, and proper risk pricing via the transmission of market signals - were lacking and were therefore underlying deficiencies of the performance of corporations in Asia (Sycip, 1998; Jomo, 2001).

In Malaysia, dispersed shareholding and management-control are uncommon and ownership concentration is the order of the day (Thillainathan, 1998). The three largest shareholders in Malaysia owned some 54 per cent of the shares of the ten largest non-financial private firms and 46 per cent of the shares of the ten largest firms. This situation is not very different from that in the other Asian countries (La Porta, deSilanes, Shleifer and Vishny, 1996). Serious problems are generated by widespread practice of pyramiding and cross-holdings. In this situation, the incentive is for insiders to maximise their private benefits of control and not necessarily the shareholder value. There is a higher probability that minority shareholders will be expropriated or squandered. In locally controlled companies, the majority shareholders, through a pyramid shareholding structure, do make decisions that are sub-optimal (Thillainathan, 1998).

Banks in Malaysia play a dominant role in lending (Thillainathan, 1998). However, Malaysian banks do not play a role in governance because they do not control or vote significant block of shares or sit on boards of directors. As a rule, they vote the equity of other investors, namely of their clients, but only under their express instruction. Where the bank is a significant minority shareholder, and exercises control over a company by voting these shares and the shares of others for which it acts as a proxy, its main interest is in enhancing its own income from its lending and other related activities, and not in enhancing shareholder value (Thillainathan, 1999).

Another weakness in the current framework is the inavailability of timely, relevant and accurate data. So is corporate accountability by Malaysian companies. Corporate governance concerns are still cited as a pertinent factor in many investors' minds in making their investment decisions. Also, there is little active participation by major institutional investors (SC, 2001).

2. Literature Review and Hypothesis Formulation

This is divided into two parts: the first part is on internal monitoring measures and the second part deals with external monitoring measures.

2.1 Internal Monitoring Measures

2.1.1 The Governance Role of Independent Directors

Byrd and Hickman (1992) report that tenders offered to bidders with majority-independent boards earn roughly zero stock price returns on average. However bidders without such boards suffer statistically significant losses of 1.8%

on average. You, Caves, Smith and Henry (1986) also report a significant negative correlation between proportion of inside directors and bidder stock price returns. These results suggest that companies with relatively more independent directors tend to be more profitable than those with less independent directors. This may be due to independent directors acting to restrain the tendency of CEOs to build large unsustainable financial empires. Denis and Sarin (1997) report that firms that substantially increase the proportion of independent directors have above-average stock price returns in the previous year. In a study to assess investor reaction to the appointment of additional directors, Rosenstein and Wyatt (1990) found that stock prices increase by about 0.2% on average, when companies appoint additional outside directors. This increase was statistically significant, but economically small.

Conversely, several studies suggest that firms with more independent directors perform worse than those with relatively fewer independent directors. For example, Agrawal and Knoeber (1996) report a negative correlation between proportion of outside directors and Tobin's Q index (which is a measure of growth prospect of assets defined by the future profitability of the asset in relation to its replacement cost). This is consistent with evidence established by Bhagat and Black (1997) that a high proportion of independent directors is strongly correlated with slower past growth across a number of accounting variables, but not with future performance. Evidence found by Bhagat and Black (1997) and Klein (1997) show that a high proportion of independent directors correlates with lower past profitability.

Greater outside representation on the board is associated with greater firm profitability and the passage of the legislation reforming company and securities laws in 1994 was associated with increased representation of outside members on the board, implying improved corporate governance structures (Prevost, Rao and Hussain, 2000). In another study on the value relevance of board composition within corporate governance structures, Wright, Matolcsy and Stokes (2000) found evidence in Australia that suggests a higher proportion of outside directors on the board of high growth option firms is value increasing to those firms, while it is not value relevant for low growth option firms. Additionally, they also found that it is only those non-executive directors with no ties to the firm that are value increasing to the high growth option firms, rather than all non-executive directors. A study by Phan & Mak (1998) reveals evidence to support the argument that board independence is related to performance.

2.1.2 The CEO Duality Structure

A dual role exists if the CEO is both the Chief Executive Officer and the Chairman of the Board of Directors. Rechner and Dalton (1989) examine the effect of the dual role of a CEO on risk-adjusted shareholder returns using stock market data. They found that the dual role of CEO does not have any significant impact on returns. Rechner and Dalton (1991) examine the relationship between the dual role of CEO and organizational performance. Their results indicate that companies which have CEOs performing dual roles have lower shareholder returns. Donaldson and Davis (1991) also examine the effect of the dual role of a CEO on shareholder returns. Their results are in direct contrast to those found by Rechner and Dalton (1991). Boyd (1995) concludes that duality role of CEO can have a positive effect on performance under certain industry conditions (i.e. resource scarcity or high complexity), but a negative effect under other conditions. However, Baliga, Moyer and Rao (1996) find that the market is indifferent to changes in a firm's leadership structure; they reveal no evidence of operating performance changes surrounding changes in duality status of CEO. A study by Brickley, Coles and Jarrell (1997) finds no evidence that a unitary leadership structure is associated with inferior accounting and market-based performance. In addition, they find that changes in leadership structure have no systematic effects on stock prices, and that firms with separate leadership structures are associated with systematically lower cash flows and value, contrary to what has been suggested in recent corporate governance investigations in the UK and the USA (Cadbury Report, 1992; Bacon Report, 1992).

2.1.3 The Concentrated Ownership Structure

As regards the relationship between ownership concentration and firm performance, empirical results in the United States are inconclusive. Demsetz and Lehn (1985) found no significant correlation between ownership concentration and profit rates for 511 large corporations. Morck, Schleifer and Vishny (1988) report a piecewise linear relationship of Tobin's Q with board member ownership for 371 Fortune 500 firms, and also found evidence of an inverted "U"-shaped relationship between the degree of ownership concentration and profitability. Stulz (1988) demonstrates that higher managerial ownership can insulate managers from external takeovers, and by allowing managers to block takeover bids, can lower firm value. Morck *et al.* (1988), McConnell and Servaes (1990, 1995), Hermalin and Weisbach (1991), and Holderness, Kroszner and Sheehan (1999) all establish that the value of a firm rises from a base of low level of managerial ownership and to fall with higher level of managerial ownership. Some empirical research on the impact of large owners on managerial compensation has provided evidence to support the notion that managerial opportunism persists in the absence of owners large enough to enforce their own interests. For example, firms with large owners as compared with firms without large owners, restrict the residual loss of

companies arising from excessively high managerial compensation (Dyl, 1988), compensate their chief executives more for performance than for compensation scale based on years on the job (Gomez-Mejia, Tosi and Hinkin, 1987); engage in increased CEO compensation monitoring and incentive alignment activities (Dyl, 1988; Tosi and Gomez-Mejia, 1989), and following major acquisitions, reward CEOs more for performance than for years on the job (Kroll, Simmons and Wright, 1990). In a study of 127 Chinese companies listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange for the period 1993 to 1995, Xu and Wang (1999) found a positive correlation between ownership concentration and a firm's performance. They suggest that large legal person shareholders have the incentive and the power to monitor and control the behavior of the management and play significant role in corporate governance. Some studies suggest a partial market for control, and point to a little relation between ownership concentration by institutions and holding companies, and disciplining (Renneboog, 2000; Agrawal & Knoeber, 1996). Ruhani and Sanda (2001) found that ownership is significantly related with performance, tending to rise at early levels of insider ownership and to fall at levels of ownership beyond 36.7% of firm's equity. Their results are in agreement with those of Mat-Nor, Said and Redzuan (1999) and Wong and Yek (1991). Previous research has established this 5% figure as the conventional demarcation of large owner control, without which managerial opportunism continues unabated (e.g. Gomez-Mejia et al., 1987, O'Reilly, Main and Crystal, 1988; Tosi & Gomez-Mejia, 1989; Davis & Stout, 1992). Similarly, Faizah (2002), who investigates whether ownership structure has significant effects on the performance of plantation companies listed on the KLSE, reports a positive correlation between ownership concentration and firm performance as indicated by market-to-book value ratio. Coffee (1998), in his study of Investment Privatization Funds (IPF) in the Czech Republic, found evidence that an IPF that acquires 30% of a company, will have a greater incentive to monitor management. It is therefore hypothesized that concentrated ownership would positively contribute to firm performance.

2.1.4 The Governance Role of Audit Committees

Several empirical studies in accounting have focused on the voluntary formation of audit committees to identify factors affecting an entity's decision to create an audit committee directly responsible for overseeing the financial reporting process (Pincus, Rusbarsky and Wong, 1989). Collectively, these studies suggest that larger companies, which are audited by very large auditing companies and which have bigger boards with greater representation of outside directors, are among the companies more likely to voluntarily form an audit committee. Several studies document that the presence of an audit committee is associated with fewer incidences of financial reporting problems. For example, McMullen (1996) finds that entities with more reliable financial reporting, such as those with absence of material errors, irregularities and illegal acts, are significantly more likely to have audit committees. De Chow, Sloan and Sweeney (1996) show that firms subject to the enforcement actions of a government regulator are less likely to have standing audit committees. Carcello and Neal (1999) find that the likelihood a company in financial distress will receive a going concern modified auditor's report is lower when the percentage of inside or grey directors on the audit committee is higher. These findings suggest that the independence of the audit committee may affect the objectivity and independence of the external auditor.

A Malaysian study by Zulkarnain, Shamsher, Hamid and Nasir (2001) suggests that chairmans of the audit committee rated their own effectiveness attributes relatively higher than the internal auditors. This implies that chairmans perceive the audit committee as fairly competent in reviewing, analyzing and evaluating matters concerning audit, non-finance matters and the accounts of the company. Secondly, they also found that the audit committee has doubts concerning the committee members' technical skills. Thirdly, the internal auditors in these companies believe that the audit committee lacks the experience and technical skills to effectively perform internal accounting and control functions. Another Malaysian study by Mohamad, Shamsher and Annuar (1999) suggests that the internal audit profession is sceptical about the benefits that the audit committee can generate for the company due to their infancy stage of development and the need to prove their effectiveness to the business and financial community. Similarly, Shamsher and Zulkarnain (2001) while investigating the wealth effects of announcements of audit committee formation by main board firms, found that significant negative abnormal returns were recorded during the period surrounding the announcement, indicating that investors perceive the mandatory requirement of audit committee as negative news.

2.2 *External Monitoring Measures*

2.2.1 The Role of Lenders in Corporate Governance

The role of lenders as a force in corporate governance has not yet been extensively analyzed (Prigge, 1998). Lenders are interested in the repayment of a credit in accordance with the credit contract. Since management's actions are one of the factors determining repayment, lenders may be motivated to carry out monitoring. Billimoria (1997) found evidence to indicate that the Chief Executive Officer (CEO) of highly-leveraged firms were paid less long-term emoluments. Using three criteria (total voting power at the general meeting, chairmanship on the

supervisory board, and liabilities owed to banks (data from 1990-1992), Perlitz and Seger (1994) classify a sample of 110 listed industry companies into two groups: (1) those companies which banks exert great potential influence on (58 companies) and (2) those which banks only have a small potential influence (52 companies). They find that the former group of companies have significantly lower profitability and growth than the latter group of companies. Similarly, Cable (1985) and Nibler (1995) discover a positive relationship between apparent bank influence on companies and profitability and growth of companies. However, Chirinko and Elston (1996) do not find significant relationship between bank influence and company's earnings. However, there are some studies that have found a negative relationship between leverage and firm performance (Chee & Hooy, 2003; Demsetz & Villalonga, 2001; Taridi, 1999; Wiwattanakantang, 2001). In contrast, Johnson and Mitton (2003) and Fauziah, Chee and Ignatius (2004) found no significant relationship between leverage and firm performance for Malaysian firms. On the other hand, Mansor and Kam (2001) found that leverage has a positive impact on financial performance, especially on the profitability measures of the company, that is, they found evidence of some degree of bank influence in Malaysia.

It is expected that large external creditors would exert a significant influence on directors' ability to expropriate company assets or indulge in accumulating private benefits (Bilimoria, 1997). It is therefore hypothesized that debt ratio would have a positive impact on earnings.

2.2.2 The Governance Role Of Institutional Investors

Large outside (institutional) shareholders are regarded as an effective monitoring mechanism for a number of reasons. For example, they may have a vested interest in minimizing any asymmetric information, which may exist and will therefore vote in accordance with their own interests (Jarrell and Poulson, 1987). In addition to the monitoring role, Schleifer and Vishny (1986) also argue that large outside shareholders assist the market for corporate control simply by being willing to sell their shares should an appropriate bid be made. They, therefore have an incentive to monitor the behavior of managers which should solve the free-rider problem identified by Grossman and Hart (1980). The investments made by institutional shareholders are so large that they have less ability than individual shareholders to move quickly in and out of funds without affecting share price (Pound, 1988). As a result, these institutional investors have a strong interest not only in the financial performance of the firms in which they invest, but also in the strategies, activities, and other stakeholders of those firms (Fortune, 1993; Gilson and Kraakman, 1991; Holderness and Sheehan, 1988; Pound, 1992; Smith, 1996). In a research on a sample of 201 firms facing control contests, Brickley, Lease and Smith (1988) found that the average institutional investor was more likely to vote and get involved in firms' decisions than the average non-institutional shareholder because of the former's high equity in the firms. Patman Staff Report (1968) and Bhagat & Black (1998) reported evidence that outside blockholders play a monitoring role, and that 5% blockholders' ownership is significant. These studies seem to suggest that: (1) there is a positive correlation between shareholdings of large investors and a firm's performance, and (2) institutional investors appear to be more effective in monitoring a firm's performance than individual shareholders (Xu & Wang, 1999).

Therefore, it is hypothesized that institutional stockholdings could positively affect firm performance.

2.2.3 Firm Size as Control Variable Affecting Firm's Performance

This is defined as the total sales of the firm as stated in the KLSE handbook. It has been demonstrated that common size metrics (e.g. sales, number of employees) are highly associated and proportional – essentially interchangeable (Agarwal, 1979). Similarly, Dalton & Kesner (1987) rely on the amount of annual sales – the manner by which the Fortune 500 is derived - as the indicator of corporate size. Studies have shown a positive relationship between firm performance and size of company (Isa & Kam, 2001; Faizah, 2002; Taridi, 1999). On the contrary, Chee and Hooy (2003) found a negative relationship. Other studies found no significant relationship between performance and firm size (Boardman et al., 1997; Johnson & Mitton (2003) and Fauziah et al., 2004). It is therefore hypothesized that firm size could positively affect firm performance. This variable is included in the model as a control variable in order to improve model specification.

3. Methods and Procedures

3.1 Monitoring Measures

Six measures of monitoring were used in this study. These are divided into two types: internal and external monitoring measures. The first internal monitoring measure is the ratio of the number of outside (non-executive) directors to total directors (i.e. inside and outside directors), a measure commonly used by researchers to measure corporate control (e.g. Morck et al., 1988; Weisbach, 1988; Beatty & Zajac, 1994). The second internal monitoring measure is the dichotomous CEO/chairman variable, indicating whether the CEO position is separated from the chairman of the board. The third internal monitoring measure is the presence of an independent audit committee who can be expected to monitor firm performance and give advice. The fourth monitoring measure is the presence

of concentrated ownership who by virtue of their large shareholdings will increase their monitoring as their proportion of share capital increases.

The first external monitoring measure is the presence of large creditors, that is, bank debt. Banks are expected to use their influence as lenders to monitor management to ensure repayment of their principal and interest in the future. The second external monitoring measure is the presence of a shareholder with large equity holdings (greater than 5%) who is not on the board (that is, a blockholder or institutional investors).

3.2 Hypotheses

H1: *Ceteris paribus*, a firm's financial performance will be positively related to sound internal corporate governance structures, i.e. internal monitoring measures.

H2: *Ceteris paribus*, a firm's financial performance will be positively related to monitoring by external stakeholders, i.e. external monitoring measures.

The prediction for each measure will be described under the section on independent variables. The internal monitoring measures are non-executive directors (NED), the CEO who is also the chairman of the board (CEOCHAR), chairman of audit committee (CHAIRAC) and concentrated shareholdings (CONCEN) while the external monitoring measures are bank gearing (GEAR) and institutional investors (INST). The remaining independent variable (SIZE) is a control variable. The control variable is included as it is expected to affect firm performance. Without its inclusion, there is a possibility that the model to be formulated would not be complete and may lead to specification errors.

3.3 Data and Data Sources

Data were obtained from 120 randomly selected publicly listed companies in Malaysia over the period 1996 to 1999. The sample firms were public companies fully quoted either on the main board or the second board of the Kuala Lumpur Stock Exchange (KLSE). A large majority of the companies selected (87%) came from the main board. The sample firms covered all sectors of the economy. These firms were drawn from 20 volumes of KLSE Annual Companies handbook on a random basis. The optimal sample size of 120 was derived based on statistical theory (De Vaus, 1996). Nevertheless, 43 out of the 120 firms did not have complete information concerning the variables needed for the study and were deleted from the analysis. The sample size is not much different from those used in other studies. For example, Mat-Nor *et al* (1999) used 79 Malaysian firms; Ruhani and Sanda (2001) used 112 KLSE listed firms covering the period 1992-1997, and Yap (2001) studied 69 KLSE companies covering the period 1995-1999. Another comparable study by Phan and Mak (1998) studied a sample of 165 companies on the main and second board of the Singapore Stock Exchange for the period 1991 to 1995.

Corporate governance data were gathered from the annual editions of the KLSE handbook. The handbook provided information on board composition, names of executive and non-executive directors, directors' shareholdings, institutional and concentrated shareholdings, audit committee membership, returns on company's equity, dividend payout, gearing/borrowing ratios, existence of exports, size of firms and industry performance. The data were analysed based on regression analysis using Time Series Processor (TSP) software Version 4.5 (Hall and Cummins, 1999).

3.4 Method of Analysis of Data

Multiple linear regression analysis is extensively used in the literature to test the value of a firm and ownership (Weir, 1997). Multiple regression procedure was used to analyse the data in this study. The dependent variable used for the regression analysis was dividend payout. Dividend payout (DIVPAY) was the percentage of dividend declared and paid to shareholders for the year. The dividend payouts were also obtained from KLSE handbook.

3.5 Dividend Payout as Proxy for Performance

The dividend payout ratio is a reliable proxy to measure firm performance. This is because company management would take into consideration current and future profits before making a decision on the amount of payouts. Dividend payout is part of shareholders' returns which are received in addition to capital gains when stock prices rise. Stock prices are reflective of company performance, both current and future, and dividend payouts do affect stock prices (William and Scott, 2005). Accounting profits, as the other alternative to measure performance, are grossly manipulated and usually much exaggerated (Griffiths, 1986). Dividend payout does not suffer from such flaws as it depends on availability of cash flows. The firm will not pay dividends unnecessarily to boost its share price if there is no cash to give. Also, the law forbids dividends to be paid if there are no retained earnings available. To ensure a company's survival during periods of declining profits or sustained losses, dividends are cut to conserve cash flows. This gives an indication that firm performance is currently bad and that the company's future is expected

to be tough and challenging (Brealey & Myers, 2000).

3.6 The Independent Variables

These are factors that influenced firm performance as measured by dividend payout (DIVPAY). Seven independent variables were hypothesised to influence dividend payout. These are described below. -

(1)NED: This variable measures the proportion of non-executive directors on the board of directors, expressed as a percentage. It is defined as the number of non-executive directors divided by the total number of directors on the board of the company.

(2)CHAIRAC: This is a binary variable for the chairman of the audit committee. This variable takes a value of one if the chairman of the audit committee is a non-executive director. Otherwise the variable assumes a value of zero. This variable is used to test the degree of independence of the audit committee on financial returns.

(3) CEOCHAR: This is also a binary variable for the CEO acting also as the chairman of the board of directors. If the CEO performs this dual role, then the variable takes a value of 1; otherwise it takes a value of zero.

(4) INST: This variable measures proportion of large institutional investors owning shares in the company. The proportion of ownership of these investors determines their extent of monitoring in the companies invested and it is measured in terms of percentage ownership.

(5)GEAR: This variable is defined as the total amount of debts owed by the company divided by its total capital where total capital is equivalent to shareholders ordinary fund plus long-term debts.

(6) CONCEN: This variable measures the proportion of concentrated ownership of the shares of the firm owned by a single person or entity or a few entities. The higher the proportion, the greater is the monitoring role of large owners. In this study concentration is measured as the percentage of the total shares of a company owned by the largest shareholder.

(7)SIZE: This variable denotes the size of the company in terms of turnover (gross revenues). Size is expected to be a positive influence on dividend payout due to greater diversification, economies of large scale production and greater access to new technology and cheaper sources of funds.

An additional variable, sizesquare was added to test the possibility of a curvilinear relationship involving size of company and its impact on dividend payout. Adding such a variable is expected to improve the regression results by improving model specification. In addition, a dummy 1998 variable is added to control for the performance of firms over the four year period, 1996 – 1999. This variable was found to be significant when the two-way fixed effects model was employed in this study.

3.7 Specification of Empirical Models

Panel data regression technique, involving the combination of cross-sectional and time series data, is used in this study. The model is formulated based on dividend payouts (DIVPAY) as the dependent variable and regressed against the seven independent variables specified earlier. It is specified as follows:

$$\text{LDIVPAY}_{it} = a + b\text{NED}_{it} + c\text{CONCEN}_{it} + d\text{SIZE}_{it} + e\text{SIZESQ}_{it} + f\text{INST}_{it} + g\text{GEAR}_{it} + h\text{CHAIRAC}_{it} + i\text{CEOCHAR}_{it} + j\text{DUMMY98}_{it} + u_t$$

where LDIVPAY is the natural logarithm of DIVPAY. SIZESQ is the square of SIZE. The other terms have been defined earlier. The link between independent and dependent variable is that of a causal relationship since the independent variables (corporate governance measures) can influence the dependent variable (dividend payout).

Due to the combination of cross-sectional data and time-series data, OLS regression technique is unsuitable for the analysis (Leamer, 1978). The appropriate method of analysis involves panel data regression techniques. There are two frequently used estimation techniques for panel data regression. These are the fixed effects model (FEM) and the random effects model (REM) (Gujarati, 2003, Chapter 16). The FEM model assumes that the slope coefficients of the explanatory variables are all identical for all firms. The intercept in the regression model is allowed to differ among individual firms in recognition of the fact each individual, or cross-sectional unit may have some special characteristics of its own. To take into account the differing intercepts, dummy variables may be used. The FEM using dummy variables is known as the least-squares dummy variable (LSDV) model (Gujarati, 2003 p. 652). The REM model is sometimes known as the error component model (ECM). In ECM, it is assumed that the intercept of an individual unit is a random drawing from a much larger population with a constant mean value. The individual intercept is then expressed as a deviation from this constant mean value. The Hausman test, a model specification test, can be used to decide between FEM and REM (Hausman, 1978).

4. Results

Table 2 provides a summary of the results of the estimation of regressions based on the fixed effects model for the dependent variable, LDIVPAY. The Hausman specification test confirmed the superiority of the fixed effect model over the random effect model. Hence, for further interpretative discussion, only the results of the fixed effects model, is used.

The strength of the model reported in Table 2 is high as measured by R^2 and adjusted R^2 indicating the substantial impact of the independent variables on the dependent variables. Using the favoured model, the statistically significant variables influencing LDIVPAY are NED, SIZE, SIZESQ and GEAR. The statistically insignificant variables are CONCEN, CEOCHAR and CHAIRAC. The size of the firm is shown to impact dividend payout in a quadratic form. Dividend payout increases with increasing size (in terms of turnover) and then after a certain point negative returns are shown. This result shows that diminishing returns to size exist with excessive firm size pushing returns down. The optimal firm size derived from differentiating the estimated equation with respect to size is determined to be 11,321 million Malaysian ringgitt (RM). The negative statistically significant parameter estimate for NED indicates that increasing proportions of non-executive directors in companies lead to a decrease in dividend payout. This result rejects the hypothesis that the higher the proportion of non-executive directors, the greater the degree of independence of the board in making decisions, which then leads to higher probability of increased dividend payout due to better firm performance. The results on gearing ratio (GEAR) indicate that companies which are highly geared or have relatively high debts with respect to shareholder capital funds have statistically significant lower dividend payout. Finally, the dummy 1998 variable capture the time effects in the regression. This variable is highly significant and indicates that over the four-year period of analysis, only the year 1998 showed a marked drop in financial performance in the companies examined. The performance of companies for the remaining years does not differ significantly from one year to another.

4.1 Results of Data Analysis

Table 1 provides a summary of the statistical analysis of the companies examined.

Table 1. Summary of the results of the simple statistical analysis of the 120 companies.

	ROE	NED	CHAIRAC	MAJAC	CEOCHAR	INST	GEAR	CONCEN	SIZE
Mean	-0.057382	65.45636	0.812968	0.865337	0.376559	10.66491	0.20419	39.51122	739.8359
Median	0.06	67	1	1	0	7	0.13	39	225
Maximum	14.21	91	1	1	1	83	2.91	96	13294
Minimum	-79	14	0	0	0	0	-0.38	4	0.88
Observations	401	401	401	401	401	401	401	401	401

The mean return on equity (ROE) for the period under study was -0.057 or negative 5.7% of the shareholder's fund. The median value was 0.06 or 6%. The result was not surprising considering that this was a difficult period as a result of the currency and economic crisis that started with the devaluation of the Thai 'baht' on 2 July 1997 (Jomo, 2001). The mean percentage of non-executive directors (NED) on the board was 65%, showing that the majority of the board of directors (BOD) in these companies are non-executive, i.e. they did not hold managerial positions. The mean score of 0.81 of the chairman of the audit committee being a non-executive director (CHAIRAC) suggested that in 81% of the companies examined, the chairman was a non-executive director. About 87% of the companies had a majority of non-executive directors on their audit committees (MAJAC). On the existence of a dominant personality (CEOCHAR) in the company, the mean score was 0.37, indicating that 37% of the companies examined had a CEO who held a dual role as chairman of the board. The mean shareholding of institutional investors (INST) was 10.66%. According to the literature, these shareholders would play an important monitoring role in corporate governance in Malaysia (Schleifer & Vishny, 1986; Jarrell & Poulson, 1987). The mean gearing ratio (GEAR) of the companies examined was 0.20, indicating that 20% of their capital is in the form of long-term borrowings. It could be inferred that bank loans formed a sizeable portion of the companies' capital in Malaysia. The mean percentage of concentrated ownership (CONCEN) was 39.5%. The concentration of share ownership in these companies appears to be large enough to exert substantial control. The mean size of the companies examined (SIZE) in terms of turnover was RM739.8 million. The maximum turnover was RM13,294 million, while the minimum was 0.88 million.

Table 2. Results from the estimation of fixed effect regression model of natural logarithm of dividend payout (ldivpay; dependent variable) as a function of several independent variables using the generalized least squares method based on data from 1996 to 1999.

Independent Variable	Coefficient	T-statistic	P-value
NED	-0.095	-2.689	0.008***
CONCEN	-0.017	-0.315	0.753
SIZE	0.0074	3.357	0.001***
SIZESQUARED	-0.0000003	-2.703	0.007***
INST	0.039	0.512	0.609
GEAR	-2.338	-2.047	0.041**
CHAIRAC	2.092	1.039	0.299
CEOCHAR	2.487	1.548	0.122
DUMMY1998	-3.777	-5.077	0.000***

R^2	0.741***
Adjusted R^2	0.646***
Probability level of significance of the Langrange Multiplier (LM) heteroscedasticity test based on the null hypothesis of no significant heteroscedasticity	0.090
Probability level of significance that the fixed effect model is <i>not superior</i> to the corresponding random effect model based on the Hausman specification test (null hypothesis)	0.0001***
Schwarz B.I.C.	1922.20
Akaike Information Criterion	1652.99

Notes:

denotes statistically significant variables at 10% level.

denotes statistically significant variables at 5% level.

denotes statistically significant variables at 1% level.

The statistically significant variables are NED, SIZE, SIZESQUARED and GEAR. Assuming all other things constant, the optimum size of company at which returns to equity are maximised is RM11,321 million, based on turnover.

5. Conclusions and Implications of Study

This study attempted to establish significant corporate monitoring measures that affected the dividend payout for companies in Malaysia over the period, 1996 to 1999. The three variables which were found to be significant in influencing dividend payout are the proportion of non-executive directors in the company, gearing ratio or the level of debts and the size of the company. The result dealing with the proportion of non-executive directors in the company rejects the hypothesis and the reviewed literature. This is because of the unique situation in Malaysia where increasing proportion of non-executive directors appears to lead to a more confident board that may reduce dividends paid to shareholders. The results indicate that the board of directors of the companies took a conservative approach due to the tough economic environment when the Asian Financial Crisis started in July 1997. Independent directors may act to restraint CEOs tendency to favour paying more dividends to keep shareholders happy. This finding is similar to those found by You et al. (1986), Agrawal and Knoeber (1996) and Bhagat & Black (1997). Reducing dividends conserves cash in the company and ensures greater chances of company survival in a tough operating environment. The result relating to gearing (borrowing) shows that higher geared firms or firms with relatively higher levels of borrowings have lower dividend payout. The statistical significance of the gearing variable suggests that the higher level of debt limits the ability of the firm to take on more risky and profitable projects. This factor appears to carry more weight than the beneficial impact from monitoring by lending banks. It was hypothesized that high borrowing encouraged banks to monitor the company and therefore is expected to contribute to higher profits through investments in value-enhancing projects. The findings here suggest that in

Malaysia, banks do not perform such a value-enhancing role in the companies that borrowed money from them. This finding is similar to those found by Perlitz and Seger (1994), Chee and Hooy (2003) and Mansor and Kam (2001).

Finally, the size of the company is shown to be positively identified with dividend payout as initially hypothesised. However this study establishes a curvilinear function of size against dividend payout with the optimal size of companies derived as a turnover of about RM11, 321 million. The study thus proves that even though size matters when it comes to dividend payout, there is a limit, and a corporation which has become too large becomes more prone to financial performance weaknesses. This can be explained in terms of managers favoring empire building at the expense of the productivity of the company. It can also indicate the CEO's inability to exert control and lack the technical expertise to run large enterprises. The current corporate trend in the USA and Europe is for a firm to focus on its core business and get rid of unrelated businesses for which top managers know little. The study provides evidence that Malaysian companies may have to follow such an example. With regards to the 1997/98 East Asia financial crisis, this study suggests that firms that overextend themselves by growing too rapidly into excessively big companies simply suffer from declining rate of returns. During the 1997/98 East Asia financial crisis, many companies that downsized or went bankrupt were those that rapidly expanded in previous years before the crisis.

It was also determined that most monitoring variables did not have any significant impact on dividend payout of corporations. The first independent variable found to be not significant is the role of institutional investors. The reason why institutional investors do not play a value-enhancing role is that in Malaysia, most of these investors are known to be in the market for the short-term and will therefore not be involved in shareholder activism (Thillainathan, 1998). The short-term objectives of these investors could have been aggravated by concerns about corporate practices in these companies. It is also known that this group of investors do not actively seek board positions and do not try to influence company policies (Coffee, 1998).

The second independent variable which is not statistically significant is concentrated ownership. The results show that large block shareholders who are in control of the company do not significantly contribute to higher dividend payout. The results indicate either a lack of necessary expertise, an over-consumption of 'perks' or an expropriation of company assets by the controlling shareholders. The study provides evidence that minority interest in these companies is not well-protected. This finding is similar to those found by Ruhani and Sanda (2001), Mat-Nor et al. (1999) and Faizah (2002).

The third independent variable found to be not significant is the CEO duality structure. The existence of a powerful CEO who is also the chairman of the board has no bearing on the level of dividend payout, suggesting that these CEOs lacked the necessary skills to enhance company profits or are reluctant to declare more dividends due to greater on the job consumption. This finding is similar to those found by Rechner and Dalton (1989), Baliga et al. (1996) and Brickley et al. (1997).

The fourth independent variable found to be not significant is the role of chairman of audit committee. This can be explained in terms of the committee's lack of independence and skill required to perform a value-enhancing role. This finding is similar to those found by Zulkarnain et al. (2001), Shamsheer and Zulkarnain (2001) and Mohamad et al. (1999).

5.1 Limitations of the Study

The reliability of this study depends very much on the disclosures given on the company's audited accounts and information supplied by the company to the KLSE. If the company did not disclose fair and accurate information pertaining to the accounts of the company, and the auditors did not detect these inaccuracies, then the information used in this research will not be accurate as well. An exceptionally difficult task in this survey was to determine the beneficial shareholdings of nominees listed in the companies' handbook. This has made the task of determining the concentrated holdings or the institutional shareholdings of a company extremely difficult. The practice of using nominees in Malaysia was to circumvent the requirements of the affirmative New Economic Policy of the government, and this has created much confusion and poor standards of disclosure. Also, the widespread practice in Malaysia of cross shareholdings and indirect holdings through a pyramid structure further clouded the true share ownership in the affected companies.

The only sampling selection criterion used in this study is that a firm must have complete data and not all companies in the KLSE were selected. The non-inclusion of all companies means that the ability to generalize the findings may be affected by the selection criteria. Also, the implications from this study may be limited due to the possibility that relevant agency cost and other monitoring mechanism variables may have been omitted from the analysis. Like most prior studies, this research also adopts a single mechanism focus in that it investigates the efficiency of governance structures without considering other alternative means by which a firm can monitor management.

A number of assumptions that simplify actual practice are made in this study. Firstly, the analysis assumes that

institutional ownership is homogenous in terms of its ability to influence the performance of the firm they have invested in. The history and dynamics of any institutional investor would tell us that such an assumption is a simplification of practice. However, the present assumption is the only practical means of quantitative analysis. Secondly, the analysis also assumes that independent directors have the capacity and ability to influence the performance of the firm. Again, the dynamics of any corporate board would tell us that such an assumption is also a simplification of practice. Thirdly, the measure of board composition on which this study relied was the proportion of outside directors. This is a coarse measure that may only poorly capture the multiple aspects of board independence. Although there is a growing literature linking corporate governance to company performance there is, equally, a growing diversity of results. The diversity of results can be partly explained by differences in the theoretical perspectives applied, selected research methodologies, measurement of performance and conflicting views on board involvement in decision making and, in part, by the contextual nature of the individual firm (Korac-Kakabadse, Kakabadse and Kouznin, 2001). Even studies based on the integrative models of board involvement, incorporating different theoretical perspectives and various board attributes, provide inconclusive results, suggesting that corporate governance has, at least, an indirect effect on company performance (Zahra & Pearce, 1989; Jonnergard & Svensson, 1995; Maassen, 1999).

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Based on CVaR Measuring the Liquidity Risk of Open-end Funds

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Abstract

Elaborates one of the main reasons for the liquidity risk of Open-end funds that the amount of accrued payables will probably be so big and snap. In this paper, the financial risk measuring method CVaR is used in measuring the liquidity risk of Open-end funds. Based on the huge amount of accrued payments to redeem meeting Extreme value theory, CVaR set up a model about the relationship between the amount of accrued payments to redeem, VaR and CVaR, At some probability, VaR, CVaR brought by the amount of accrued payments to redeem can be computed through simulation. This paper supplies a method of keeping away the liquidity risk for managers of Open-end funds reasonably by way to protect the interests of themselves and the investors.

Keywords: CVaR, Extreme value theory, Huge amount of accrued payments Liquidity risk, Open-end funds, redemption, VaR

1. Introduction

The merit is that the scale of Open-end Fund is uncertain opposite to the Close-end Fund. The investors may apply to buy or redeem the fund according to the need at any time, which is easy to produce the liquidity risk. Compared to the closed-end funds, the open-end funds have more probability to generate liquidity risk. The difficulty of the Open-end Fund management is the liquidity risk question which the liquidity brings up. This is mainly because some investors pursue the current benefits - the huge amount of accrued payments. The higher the request for the liquidity of the assets which investors invest in funds is, the bigger the corresponding liquidity risk is. (Russ, 2000, p.1655-1703).

Accordingly, the proportion of the current assets in the capital combination which is in order to control the liquidity risk will be increased. The liquidity risk control of the Open-end Fund refers to that the fund-administers have to maintain the liquidity of the funds property just to cope with the request that the investor withdraw the funds assets suddenly, guaranteeing the funds is liquid and controllable. To the fund-administer, the key to control the liquidity risk is to choose to reserve the cash proportion appropriately. If the cash proportion reserved is oversize for evading the liquidity risk, the fund income rate will be difficult to ensure; if you want to obtain a higher achievement than the market average return rate. The fund-administer must expand the investment scope and the investment scale, thus he must reduce the cash reserved proportion. Consequently, it is difficult to evade the system risk and easy to produce the liquidity risk. (Daniel, 1997, p.1035-1058).

At the given risk level, the administer of the open-end funds impossibly make a limit to the investor's request for the accrued payments, what he can do is to consider the most possible amount of accrued payments the investors claim at different rate of return, making sure that the open-end funds in the investment combination have enough current assets to cope with the accrued payments requests of the investors. But to reserve the cash excessively which will affect the funds investment ability will influence funds increment. Otherwise, when too little cash is reserved, but too many accrued payments are claimed (on one of the opening day, if the application share for accrued payments of one certain fund is ten percent more than the day before, huge amount of accrued payments of the fund takes place), the fund-administer will have to loss cash or loss credit because of delayed payment, or even make the foundation face the risk of being drawn out.

In order to control the liquidity risk of the Open-end funds, the general countries stock market has the certain limit which is about the fund management company's lowest cash proportion, because this kind of limit is one kind of static state, it is not fit for the request of liquidity. (Liu Hailong, 2003, p.217-220). It is the most appropriate choice