UNIVERSITI PUTRA MALAYSIA

INTERRELATIONSHIPS AMONG MANAGERIAL INCENTIVES, LEVERAGE, DIVIDEND AND PERFORMANCE OF PUBLIC LISTED COMPANIES IN MALAYSIA

MAZIAR GHASEMI

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By

MAZIAR GHASEMI

Thesis Submitted to the Putra Business School in Fulfillment of the Requirements for the Degree of Doctor of Philosophy

June 2016
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DEDICATION

This thesis is dedicated

To

My parents and sister.

For their endless love, support and encouragement.
INTERRELATIONSHIPS AMONG MANAGERIAL INCENTIVES, LEVERAGE, DIVIDEND AND PERFORMANCE OF PUBLIC LISTED COMPANIES IN MALAYSIA

By

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June 2016

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Little work has been undertaken with regard to how the Agency Theory could be used to explain the simultaneous interrelation among internal solutions for agency problems. In addition, no general consensus has emerged after many years of investigation, only inconsistent findings from empirical evidence are gained. In the case of Malaysia, capital structure is formed by the highest belonging of family businesses government properties, and managerial ownership. Moreover, it is also argued that capital structure is very much dependent on the dominant nature of the ownership structure in the Malaysian context, and also personal tax exemption causes Malaysian shareholders to pressure managers into receiving more dividends. In addition, managerial ownership shows uncertainty in regard to managers' remuneration in Malaysian firms.

This study tries to shed the research gap through investigating the interrelation of managerial incentives with dividend, leverage, firm profitability in the light of agency problems within a firm. Three models are designed to fulfill these objectives by studying the simultaneous interrelation between (i) managerial incentives and leverage ;(ii) managerial incentives and dividend; and also (iii) investigating the synchronized interrelation between managerial incentives and firm profitability. This study examines 267 companies listed in the Main market of Bursa Malaysia during a nine-year period from 2005 to 2013. To solve these three models, some different econometrics methods are used, namely, 2SLS, 3SLS, 3SLS-CMP, and OLS.

The empirical outcomes of all three models show positive two-way causal relationships between managerial ownership and managerial remuneration, indicating that not only managerial ownership has a positive effect on managerial remuneration, but also managerial remuneration has a positive impact on managerial ownership as well. Moreover, Model one also reveals a negative one-way causal effect of managerial ownership on leverage, and also a positive effect of managerial
remuneration on leverage. However, leverage has no significant effect on managerial incentives.

In addition, the findings of the second model indicate that higher ownership levels by executives, simultaneously, lead to higher amounts paid in dividend by Malaysian listed firms, although the payout policy that follow higher dividend leads to a decrease in the level of ownership by managers. In addition, managers who paid more dividends are encouraged with more compensation by shareholders; however, the change in managerial remuneration has no immediate impact on dividend decision. Furthermore, Model three reveals the reverse interrelation between managerial ownership and performance. It means, when the firm generates a higher level of profit compared to the past performance, the level of managerial ownership will increase. However, the increase of the shares by managers, generally, leads to a decline in the firm profitability. The findings also show that there is no simultaneous interrelation between managerial remuneration and firm profitability in the main market of Bursa Malaysia.

This study has used empirical findings to show that the current corporate governance policies are not making the anticipated impacts on connecting performance and managerial incentives, and also not considering the full linkages between managerial incentives and financial internal controlling instruments. The theoretical arguments for this justification suggest the need for policy reviews which will enable shareholders and managers to mitigate the agency conflicts.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

HUBUNGAN TIMBAL-INSENTIF PENGURUSAN DENGAN HUTANG, DIVIDEN DAN PRESTASI BUKTI DARI MALAYSIA

Oleh

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Jun 2016

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Terdapat kurangnya kajian telah dilaksanakan dengan mengambil kira bagaimana teori agensi itu boleh digunakan untuk menjelaskan hubungan timbal serentak antara penyelesaian dalaman untuk masalah agensi. Di samping itu, ada konsensus umum telah muncul selepas bertahun-tahun penyelidikan, dan keputusan yang tidak konsisten dari bukti-bukti empirikal. Dalam kes Malaysia, struktur modal yang dibentuk oleh perniagaan dimiliki oleh keluarga dan bersifat kerajaan adalah yang tertinggi. Dengan menambah sebahagian besar daripada pemilikan pengurusan, isu ini menjadi lebih rumit. Selain itu, ia juga dinyatakan bahawa struktur modal amat bergantung pada sifat dominan struktur pemilikan dalam konteks Malaysia, dan juga pengecualian cukai peribadi menyebabkan pengurus ditekan oleh pemegang saham Malaysia agar diberi dividen yang lebih tinggi. Disamping itu, pemilikan pengurusan menunjukkan ketidakpastian berkenaan dengan ganjaram pengurusan di firma-firma Malaysia.


Hasil empirikal ketiga-tiga model menunjukkan bahawa hubungan dua hala penyebab yang positif antara pemilikan pengurusan dan imbuhan pengurusan, dimana menunjukkan bahawa bukan sahaja pemilikan pengurusan mempunyai kesan positif ke atas saranan pengurusan, juga ganjaran pengurusan mempunyai kesan...
positif ke atas pemilikan pengurusan juga. Selain itu, Model satu juga mendedahkan satu hala kesan sebab dan akibat negatif daripada pemilikan pengurusan ke atas hutang, dan juga kesan positif imbuhan pengurusan pada hutang. Walau bagaimanapun, hutang tidak mempunyai kesan yang besar ke atas insentif pengurusan.

Di samping itu, hasil dari model kedua menunjukkan bahawa tahap pemilikan yang lebih tinggi oleh eksekutif, pada masa yang sama, membawa kepada jumlah yang lebih tinggi dibayar dividen oleh syarikat-syarikat tersenarai di Malaysia, walaupun dasar pembayaran yang mengikuti petunjuk dividen yang lebih tinggi untuk mengurangkan paras pemilik oleh pengurus. Di samping itu, pengurus yang digalakan membayar lebih dividen akibat ganjaran yang ditinggi dibayar oleh pemegang saham; Walau bagaimanapun perubahan dalam pengurusan ganjaran mempunyai kesan tidak langsung kepada keputusan dividen. Tambahan pula, Model tiga mendedahkan hubungkait terbalik di antara pemilikan pengurusan dan prestasi. Ini bermakna, apabila firma itu menjana tahap keuntungan yang lebih besar berbanding dengan prestasi masa lalu, tahap pemilikan pengurusan akan meningkat. Walau bagaimanapun peningkatan saham oleh pengurus, secara amnya, membawa kepada penurunan dalam keuntungan firma. Penemuan kajian juga menunjukkan bahawa tidak ada hubungan timbal serentak antara imbuhan pengurusan dan keuntungan firma dalam pasar utama Bursa Malaysia.

Kajian ini telah menggunakan penemuan empirical menunjukkan bahawa polisi-polisi dasar tadbir urus korporat semasa tidak membuat impak jangkaan untuk mengaitkan prestasi dan pengurusan insentif, dan juga tidak mengambil kira hubungan penuh antara insentif pengurusan dan instrumen kawalan dalaman kewangan. Hujah-hujah teori untuk penjelasan ini mencadangkan kajian semula dasar yang akan membolehkan pemegang saham dan pengurus mengurangkan konflik agensi.
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I certify that a Thesis Examination Committee has met on 3 June 2016 to conduct the final examination of Maziar Ghasemi on his thesis entitled "Interrelationships among Managerial Incentives, Leverage, Dividend and Performance of Public Listed Companies in Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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Declaration by graduate student

I hereby confirm that:

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<tr>
<td>BOD</td>
<td>Board of Directors</td>
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<td>BPCW</td>
<td>Breusch-Pagan/Cook-Weisberg</td>
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<td>BPLM</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CG</td>
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<td>CMP</td>
<td>Conditional Mixed Process</td>
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<td>COI</td>
<td>Convergence-Of-Interest</td>
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<td>DWH</td>
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<td>EPS</td>
<td>Earnings Per Share</td>
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<td>ESOS</td>
<td>Employees’ Share Option Scheme</td>
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<td>FCF</td>
<td>Free Cash Flow</td>
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<td>GLC</td>
<td>Government Linked Company</td>
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<td>HS</td>
<td>Hausman Specification</td>
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<td>KLCI</td>
<td>Kuala Lumpur Composite Index</td>
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<td>KLSE</td>
<td>Kuala Lumpur Stock Exchange</td>
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<td>LC</td>
<td>Life Cycle Theory</td>
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<td>MANOWN</td>
<td>Managerial ownership</td>
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<td>MCCCG</td>
<td>Malaysian Code On Corporate Governance</td>
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<td>MLE</td>
<td>Maximum-Likelihood Estimator</td>
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<td>NDTTS</td>
<td>Non-Debt Tax Shield</td>
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<td>OLS</td>
<td>Ordinary Least Squares</td>
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<td>PE</td>
<td>Price Earnings Ratio</td>
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<td>REIT</td>
<td>Real Estate Investment Trust</td>
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<td>ROA</td>
<td>Return on Assets</td>
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<td>ROE</td>
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<td>SEM</td>
<td>Simultaneous Equations Model</td>
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<td>SPAC</td>
<td>Special Purpose Acquisition Company</td>
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<td>SUR</td>
<td>Seemingly Unrelated Regression</td>
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CHAPTER 1

INTRODUCTION

1.1 Background of the Research

Separation of corporate ownership may provide several benefits such as hierarchical decision making policy, firm size and developing investment strategies. However, it may bring harm in the sense that the managers have a lack of incentives to run the company efficiently and make it more profitable (Donaldson and Davis, 1991; Hill and Jones, 1992). Several mechanisms may serve to limit the conflicts of interest between managers and shareholders by aligning the interests of both groups. Based on the Agency Theory, managerial incentives that include ownership and remuneration align the interest between managers and shareholders. On the other hand, Jensen (1986) states that limiting action freedom of managers has a vital role to play in decreasing the agency costs, and presents the decline of free cash flow (FCF) as a solution. He indicates that some controlling approaches can resolve this dilemma, with leverage and dividends as two important financial solutions for this particular problem.

Managerial ownership (MANOWN) is a well-known solution to the principal-agent problem (McKnight and Weir, 2009; Singh and Davidson 2003). However, researchers have also found that high level of MANOWN can reduce the company value based on managerial entrenchment, thus external shareholders find it hard to monitor and control the actions of this kind of managers (DeAngelo and DeAngelo, 1985; Stulz, 1988), and managers could divert the outside investors' benefits to themselves (Benson and Davidson, 2010; Jeelinek and Stuerke, 2009). The Agency theory argues that managers are self-serving and governance mechanisms, including the executive compensation structure, help to align the incentives of top managers with the interests of shareholders (Jensen and Meckling, 1976). Thus, executive compensation is an important tool in both motivating and retaining firm executives.

Studies in developed countries have shown that ownership structure is one of the determinants of executive remuneration. Intuitively, it is stated that managers can determine their own remuneration packages if they have some ownership in the firm. Some studies showed positive relations (Allen, 1981; Holderness and Sheehan, 1988; Werner et al., 2005) and some of them indicated negative relations (Attaway, 2000; McConaughy, 2000). Both MANOWN and managerial remuneration (MANREMU) are internal solutions to the agency problem, but their interrelation has been ambiguous (Attaway, 2000; McConaughy, 2000); the factors such as tax, regulation, culture and financial factors of the firm (e.g., leverage, dividends, and performance) may influence this interrelationship.

However, two different opinions exist about the agency dilemma between MANOWN and managerial remuneration. The Convergence-Of-Interest Hypothesis (COI) posits
that increasing share ownership by managers will increase their interest aligned with the shareholders (Ang et al., 2000; Fleming et al., 2005), hence there is no need to pay more compensation (Conyon et al., 2010; Fernandes et al., 2013). Although entrenchment hypothesis (ENT) argues that owner-managers have more influence on deriving more remuneration from firms without considering their performance (Allen, 1981; Holderness and Sheehan, 1988; Werner et al., 2005). Thus, when managerial incentives are studied, MANOWN and MANREMU should be investigated as endogenous variables (Lee and Chen, 2011). However, scholars are not totally engaged in the study of managerial incentives based on a mechanism that considers the MANOWN and MANREMU as endogenous variables and investigates simultaneous interrelation between them (O’Callaghan et al., 2014).

However, managers are the ones who ultimately make decisions about dividends and leverage. To be precise, these internal controlling instruments are methods that are impressed by managers. Conversely, dividends and leverage may affect the feasibility and attractiveness of managerial incentives. Therefore, agency solutions should be considered as mechanisms that other internal controlling instruments have interrelationships with managerial incentives.

The agency cost of the equity hypothesis suggests that debt mitigates shareholder-manager agency problems (Ahmed, 2008) by inducing lenders to monitor reducing FCF available to managers and forcing managers to focus on value maximization when facing the threat of bankruptcy (Grossman and Hart, 1982; Zwiebel, 1996). The leverage choice itself is subject to the agency problem between shareholders and managers (Zwiebel, 1996). It means raises in debt are directly associated to rises in risk, particularly the bankruptcy risk (Leland, 1998).

Remarkably debt not only declines FCF, but also raises bankruptcy probability. Leverage and remuneration are two policies for reducing the conflicts between shareholders and managers, but applying each one will lead to distress the other one (Agha, 2013). Managers also try to avoid the risk of leverage, because they want to protect their career. Thus, shareholders have to compensate this by giving higher remuneration to managers. Firms with high debt, however, will likely have less FCF, and thus less likely to be able to pay high remuneration. According to the risk–averse hypothesis, managers will be less motivated to have higher ownership at the presence of debt (Ahmed, 2008); therefore, debt is utilized as a monitoring substitute for MANOWN. In other words, if MANOWN and leverage are used as substitute instruments in controlling the agency cost of FCF, a negative effect of leverage on MANOWN could therefore be expected.

On the other hand, the entrenchment hypothesis postulates that owner-managers are liable to involve in actions that are detrimental to the benefits of debt issuers (Jensen and Meckling, 1976) and attempt to restructure the capital based on their own benefits (Jensen, 1986). However, during the recent decade, studying the endogeneity between; MANOWN and leverage (Ghosh, 2007; Moussa and Chichti, 2014) and MANREMU and leverage (Ortiz-Molina, 2007; Zhang, 2009) has not been widely
considered. In addition, investigation of the simultaneous interrelationship between managerial incentives (both ownership and compensation) and debt policy is a weak point of the literature (Shiyyab et al., 2013).

Dividends policy is one of the utmost controversial issues and researched areas of the corporate finance (Brealey, 2012). According to Pecking Order (PO) Theory, firms will prefer to rely more on internal funds or retained earnings; as a result, firms will have a tendency to pay less dividend and hence have higher retained earnings (Tong and Green, 2005). On the other hand, based on the Signaling Theory, shareholders expect managers of highly profitable firms to pay higher dividends in order to reduce agency costs and signal future profitability.

In addition, Lintner hypothesis (Lintner, 1956) indicate that dividend payout is rigid and sticky and managers prefer to pay it out in a steady trend. According to the COI hypothesis, MANOWN and dividends are served as monitoring instrument substitutes (Chen and Steiner, 1999) in controlling the agency matter of FCF; therefore a negative causal relationship between MANOWN and dividend could be expected. In contrast, with respect to the ENT hypothesis, owner-managers will be more motivated to distribute higher dividends to themselves as shareholders. In addition, the relation between MANREMU and other controlling instruments (dividends) is indistinctive.

According to the COI hypothesis, MANREMU and dividends are substitute methods due to reducing the agency problem. On the other hand, managers have high incentives to avoid paying dividends primarily because dividends decrease the amount of discretionary funds available inside the firm (White, 1996). Hence, shareholders have to pay more compensation to encourage them for high level of payout. To be precise, amendments in compensation schemes have caused changes in the firms’ payout policies (Kahle and Kathleen, 2002). Moreover, managers who are entrenched and receive a larger part of compensation through salary and bonus rather than long-term rewards linked to the firm performance are less sensitive to shareholder values, and pay higher dividends (Ghosh and Sirmans, 2006). The importance of the study based on the causal relationship between MANOWN and dividend is mentioned by some scholars (Hardjopranoto, 2006; Persson, 2014). Moreover, the causal relationship between MANREMU and payout policy has been investigated in some developed markets (Ghosh and Sirmans, 2006; Shiyyab et al., 2013).

According to Conventional wisdom, the main aim of a company is to maximize its stock market value. Managers of the company are responsible for achieving that aim (Jerzemowska, 2006). But it becomes more apparent, when managers intend to maximize their own benefits. Therefore, vital issues for a firm’s shareholders are how to control and induce managers to make decisions that minimize the agency costs while maximizing shareholders’ wealth.

Therefore, managerial incentives not only are used to control the agency cost, but also encourage managers to show the best effort due to maximizing the firm value.
Subsequently, in order to provide a comprehensive perspective on managerial incentives, both roles of controlling and motivating should be investigated. The controlling role is associated with interrelation of managerial incentives with dividend and leverage, and the motivate role is associated with the interrelation of managerial incentives with firm profitability.

Moreover, firms undergo severe and fast changes in their ownership structure in response to the firm profitability (Demsetz and Lehn, 1985). Indeed, many researchers emphasize the endogenous relationship between executive compensation, executive ownership, and firm profitability (Chung and Pruitt, 1996; Core et al., 1999a; Demsetz and Lehn, 1985; Kapopoulous and Lazaretou, 2007; Mehran, 1995). The COI hypothesis explains that increasing MANOWN will increase managers’ interest, aligned with the interest of shareholders. Hence, the manager-owner tends to engage in the company value maximizing activities and is less expected to pursue non-value maximizing aims (Fama, 1980). There is also evidence that higher MANOWN cause a positive effect on the company’s Performance (Isik and Soykan, 2013; Kapopoulous and Lazaretou, 2007). Nevertheless, several studies indicated that MANOWN does not always have a positive impact on corporate profitability.

Morck et al. (1988) states that when a manager owns only a small proportion of company's shares, he/she may still pursue share value maximization because of the discipline of corporate control markets and managerial labor. Though, as the managers become large investors and have the power to control the company, they can divert the outside investors' wealth to themselves.

There is also evidence that higher MANOWN have a negative effect on the performance of the company (Abdullah et al., 2012b; Mokhtar et al., 2014). Executive pay is a topic of great significance to practitioners, stakeholders and academics (Bruce et al., 2007). Based on the Agency Theory, it is reasoned that the interests of managers and shareholders can be aligned by linking manager's compensation to the firm performance (Murphy, 1999). But in practice, remuneration is not only a solution to the agency problem, but is also an agency problem itself if the remuneration systems are not designed properly (Bebchuk, 2009).

Thus, differences in corporate governance (CG) systems may influence the effectiveness of this potential alignment compensation mechanism (Unite et al., 2008). However, the entrenchment hypothesis claims that powerful managers, without paying attention to the firm's performance or benefits of shareholders, just pursue personal interest. Hence, based on the Agency Theory, shareholders implement two parallel strategies to reduce the agency cost and also to increase the firm profitability in order to maximize the firm value. Using debts, dividends, and managerial incentives are the most important internal methods for reducing the agency cost. In addition, managerial incentives are applied by shareholders to motivate managers to improve firm profitability.
However, Agency theory does not consider the level of managers' power when offering the methods for reducing agency conflict. Therefore COI and ENT hypotheses have tried to solve this problem. However, neither the Agency Theory, nor its related hypotheses theoretically mention the endogeneity between the agency solutions. Therefore, the mechanism of minimization of agency cost and maximization of firm profitability consist of different instruments and theoretically their interrelations cannot be explained from the beginning.

Consequently, the Agency Theory has been widely used across a variety of corporate finance concepts for the past three decades; little work has been undertaken with regard to how the Agency Theory could be used to explain endogeneity and simultaneous interrelation among internal solutions for Agency problem. In addition, no general consensus has emerged after many years of investigation, and scholars often disagree about the same empirical evidence.

1.2 Internal Agency Instruments in the Malaysian Context

Malaysia is one of the fast growing economies that has successfully developed from a commodity-based economy to one that focuses on manufacturing from the early 1980s through the mid-1990s. The origin of the 1997 financial crisis in Malaysia lies in the structural weaknesses in its domestic financial institutions which were supported by inaccurate macroeconomic policies and moral hazard (Corsetti et al., 1999). Hence, there should be some instruments that align the interests of agents and principals (Judge et al., 2003). The recommended mechanism is good CG by which this interest conflict can be resolved to some extent (Carter et al., 2003; Shleifer and Vishny, 1997).

Thereafter, policymakers reformed CG in Malaysia several times by codifying Malaysian Code on Corporate Governance (MCCG), Capital Market Master Plan and Financial Sector Master Plan. Studying the contents of the CG code reveals that most of the instructions are founded on the idea of the Agency Theory. However, various reform of CG has been undertaking since the year 2000, the outputs are not consistent with the theoretical expectations in the Malaysian market (Haniffa and Hudaib, 2006; Htay et al., 2013; Liew, 2006; Yusoff and Alhaji, 2012). The main reasons for this problem are due to the nature of the ownership structure (Htay et al., 2013; Rahman and Ali, 2006; Vethanayagam et al., 2006), political (Htay et al., 2013) and cultural (Abdul Wahab et al., 2015; Lai, 2004) background of Malaysian market and the adoption of inappropriate foreign CG template (Rahman and Ali, 2006).

The owner managed companies are widespread among Malaysian firms (Mat Nor and Sulong, 2007; Vethanayagam et al., 2006) and the proportion of MANOWN is so high compare to the developed countries. Considering entrenched managers, based on the

1 (23.8% mentioned by Kamardin (2014), 42.5% by Aminiandehkordi et al. (2014), 43% as mentioned by Sulong et al. (2013), 27 by Mustapha and Ahmad (2011),
high compare to the developed countries. Considering entrenched managers, based on the high level of ownership, managerial activities may not be consistent with the interest of minority shareholders (Lai, 2004; Lefort and Urzúa, 2008), hence this concentrated MANOWN results in weak corporate governance system in Malaysia (Zulkarnain, 2007), and also MANOWN is an important aspect in influencing the firms’ monitoring costs in the Malaysian market (Mustapha and Ahmad, 2011; Niemi, 2005). Moreover, the dividends received by executive through their share ownership represented another major source of their income in Bursa Malaysia (Cheah et al., 2012). Therefore the relationship between MANOWN and dividend has also been complicated. However, the Malaysian ownership structure is changed as the national economy grows and business organizations flourish (Hassan et al., 2014b).

Executive compensation are vigorously debated in Malaysia (Wooi and Ming, 2009). Since, executives have the power to control most decisions in their listed firms under Bursa Malaysia (Mohd Saleh et al., 2009), executive remuneration has sharply increased during these decades in Malaysia (23% from 2001 to 2006 mentioned by Kaur and Rahim (2007) and 22% only in 2009 by Hamsawi (2011)) and this suggests that rent extraction through overcompensation is likely to be in tandem with the managerial power theory (Salim and Wan-Hussin, 2009).

However, the Executive remuneration of Government Linked Companies (GLCs) shows less growth compared to other companies (12% less mentioned by Minhat and Abdullah (2014)). Although, family-managed companies show uncertainty in executive remuneration (Dogan and Smyth, 2002; Vicknes, 2003), but owners-managed companies moved toward intense payout to the executives (Vicknes, 2003). Consequently, there are different remuneration policies among firms in Malaysia that cause difficulty to use executive remuneration as an instrument for the agency problem.

Corporate governance compliance commonly has not been reflected in management compensation methods among listed firm in Bursa Malaysia (Dogan and Smyth, 2002; Wooi and Ming, 2009). Moreover, the relationship between MANREMU and the other instrument of agency solutions seems so different in the Malaysian market, such as no relationship between debt and MANREMU (Amin et al., 2014; Yatim, 2013) or MANREMU and dividend (Cheah et al., 2012). As a developing country, Malaysia still lacks studies that look into the most important determinants of the dividend policy for the listed firms (Appannan and Sim, 2011). One of the conflicts of the dividend policy in Malaysian public listed companies is because of the personal tax exemption, in which managers are reluctant to cut or avoid omitting

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1 (23.8% mentioned by Kamardin (2014), 42.5% by Aminiandehkordi et al. (2014), 43% as mentioned by Sulong et al. (2013), 27 by Mustapha and Ahmad (2011), 21.42% by Anum Mohd Ghazali (2010), 21% by Zunaidah and Fauzias (2008), 34.5% by Haniffa and Hudaib (2006), 29 % by Kanapathy (2005)).
dividend, even when the performance of the companies is deteriorating due to shareholders’ pressure (Ling et al., 2008).

In addition, dividends received by directors through their shares ownership represented another main source of their earnings among Malaysian firms (Cheah et al., 2012). However, Malaysian firms used dividend policy to reduce the agency problem (Ahmed, 2008) and dividend decisions are considered in CG mechanism which is influenced by other instruments (Esfahani Zahiri and Jaffar, 2012). In addition, capital structure is very much dependent on ownership structure (Ebel Ezeoha and Okafor, 2010), and also debt structure is influenced by managers’ shareholdings in Malaysia (Joher et al., 2006; Mustapha et al., 2011). However, GLCs were continuously more heavily leveraged compared to the level of debt in other companies (Bliss and Gul, 2012; Ting and Lean, 2011).

To summarize, in Malaysia, the mentioned agency instruments have some differences compared to developed markets; first, the concentrated management ownership may lead to interest conflict between minor shareholders and managers, second, assessment of management compensation methods in Malaysia leads to vague results. Third, debt policy is influenced by MANOWN and because of the weak bond market; it is the main resource for financing in Malaysia. Forth, there are some different regulations about individual dividend tax and cultural values that call for doing a specific research on the issue in Malaysia as a developing country.

1.3 Problem Statement

Since Traditional Agency Theory has not considered the power of managers, then Convergence-of-Interest & Entrenchment hypotheses try to explain the relationships between managerial incentives and other agency instruments based on the power of managers. However, it seems that these hypotheses show that agency instruments can be substituted, complemented, or may have no relationship with each other.

As mentioned in the background of this study, not only managerial incentives affect leverage and dividend, but also leverage and dividend are making an impact on managerial incentives. Theoretically, Traditional Agency Theory and also the above-mentioned hypotheses do not consider the endogeneity between instruments directly; hence the interrelationships among agency solutions are not clear. Therefore, not only scholars cannot completely explain the mechanism of interrelations between agency instruments, this issue is also a black box in CG for both shareholders and managers.

The motivations of doing the research about mechanism agency instruments in the Malaysian context come from some specific characters of aforementioned instruments in this market that are extracted from section 1.2. The high level of MANOWN in the Malaysian market leads to increased likelihood of entrenched managers, therefore managers have to choose different policies to mitigate agency
problems compared to the developed market with diffused ownership. Additionally, there is no regulation which provides the requirement of the approval of executive remuneration by shareholders in Malaysia. The payment of managerial compensation has sharply increased during the recent 10 years in the Main Market of Bursa Malaysia. However, the level of compensation in GLCs is lesser than other companies, and companies do not follow certain MANREMU strategies when family controlled firms or managers have high level of shares in the firms. In addition, the main method of compensation among the Malaysian listed firms is salary.

Moreover, some traits of dividends can cause different usage and function of dividends in a mechanism agency such as: the individual tax exempt dividends, pressure of shareholders to receive dividends, and the role of dividends as the second main source of executives’ earnings in Malaysian listed companies. In addition, the weakness of Malaysian bond market makes bank loans become the main source for external firm finance (Fraser et al., 2006; Tang and Yan, 2010; Trezzini and Gomez, 2000). However, the banking industry is relevantly controlled by the Malaysian government. On the other hand, the debt structure is strictly influenced by the owner-managers in Bursa Malaysia. Therefore, choosing the debt in the capital structure and also using it as an instrument to mitigate agency problems has created a complex relationship with ownership structure in Malaysian market.

Shareholders try to motivate managers by connecting managerial interest to firm profitability; therefore, if managerial interest is aligned with shareholders’ interests, then CG would reach some of the most important objectives. Hence, understanding the interrelation between managerial incentives and performance is the lost ring of the chain in the comprehensive perception about managers’ decision when facing the agency conflict. However, based on previous findings, the linkages between MANOWN and performance as well as MANREMU and performance are uncertain and different among Malaysian firms.

By now, the CG studies in Malaysia has not yet investigated managerial incentives and controlling internal instruments (dividend and leverage) as endogeneity variables in mechanisms based on the interrelation between them. Therefore, ignoring their interrelations leads to the incomprehensive interpretation of their empirical results. To understand the concurrent interrelations among these instruments, their interrelationships need to be investigated as a model and at the same time as well. In other words, based on a simultaneous equations model, studying the synchronous effects among these instruments can be possible.

Otherwise, if the relationships among these instruments are studied only equation by equation (i.e., not using the equations system), finding out their interrelation would not be possible. Moreover, by considering the fact that firms apply some of these methods at the same time, studying the simultaneous interrelations among these variables causes better perceptions of corporate governance decisions which are chosen by the managers and shareholders.
The simultaneous interrelation studies between the managerial incentives and financial controlling instrument as well as managerial incentives and performance in Malaysian context have not been performed until now. Taking all these conditions into consideration, the interrelations of agency solution mechanisms are still ambiguous in the Malaysian market.

1.4 Research Questions

Based on background of the research and the problem statement, this research will be designed to investigate the interrelation between managerial incentives (MANOWN and MANREMU) and each of the controlling instruments (i.e., leverage and dividends) according to a mechanism of agency solutions to reduce the agency cost. In addition, the interrelationship between managerial incentives and performance will be investigated to understand the interrelation between the interest of managers and firm profitability to maximize the firm performance. Regarding this objective, there are three main questions:

Q1: With regard to the Agency theory, convergence of interest and Entrenchment Hypotheses, how and to what extent do managerial incentives and dividends policy have an influence on each other to control the agency conflict as a simultaneous mechanism?

Q2: In line with the Agency theory, convergence of interest and Entrenchment Hypotheses, how and to what extent do managerial incentives and debt policy have an influence on each other to control the agency conflict as a simultaneous mechanism?

Q3: In agreement with the Agency theory, convergence of interest and Entrenchment Hypotheses, how and to what extent do managerial incentives and performance have an influence on each other to maximize firm profitability as a simultaneous mechanism?

1.5 Research Objectives

The general objective of this study is to examine the interrelation between managerial incentives, leverage and dividends, some of the internal solutions of the agency problems, and performance which reveal the role of managerial incentives in firm value maximization in the Malaysian Market based on the Agency theory, Entrenchment and convergence of Interest Hypothesis. The three sub-objectives are as follows:

1- To investigate whether there is any interrelationship between managerial incentives and dividend policy of the selected companies listed in the Main Market of Bursa Malaysia and if so, determine to what extent such an interrelation(s) is/are significant in the influence of each internal controlling instrument on other instruments at the same time.
2- To examine whether there is any interrelationship between managerial incentives and debt policy of the selected companies listed in the Main Market of Bursa Malaysia and if so, determine to what extent such an interrelation(s) is/are significant in the influence of each internal controlling instrument on other instruments at the same time.

3- To investigate whether there is any interrelationship between managerial incentives and firm profitability of the selected companies listed in the Main Market of Bursa Malaysia and if so, determine to what extent such an interrelation(s) is/are significant in the influence of each managerial incentive instrument on firm profitability and also firm profitability on each managerial incentive instrument at the same time.

1.6 Scope of Research

Based on the concentrated ownership, the high level of MANOWN, individual dividend tax exception, the importance of debt in comparison with the weak bond market in the Malaysian market, and the effect of managerial ownership on the capital structure, different mechanisms may be performed by listed Malaysian companies to solve the agency issues. In the meantime, the limited knowledge of interrelation of the internal agency solutions in the Malaysian market is the other reason for choosing Bursa Malaysia for this study.

Bursa Malaysia includes two Markets, namely; Main Market and ACE Market. The Main market consists of the companies with stable conditions and also available information for many years; hence the CG policies and the agency issues for these listed companies can be explained by the Agency Theory. However, the ACE market consists of the companies with high potential for growth which may need more resources for financing new projects and they also demand more risks. In addition, the information about the ACE listed firms is limited. Therefore listed firms in the ACE market implement different strategies and policy for solving the agency problems and also pursuing good CG.

Considering different natures between these two markets and also the importance of the Main market, only this market (i.e., the Main market) is selected for this study. However, future studies that focus on ACE market and scholars would be able to compare the results of the ACE and the main board.

In addition, each firm included in this study should have continuously used all mentioned instruments, meaning that paying out dividends, using debt in the capital structure, and its managers should have some shares of the firm. If the chosen firms did not have one or two of the above-mentioned criteria, the results would be bias. Therefore using all instruments by the firms was the main assumption of this study.
Besides, financial sectors, Real Estate Investment Trust sector that had different natures and followed some different rules or regulations are excluded from the sample. The final sample includes firms from industrial products, properties industry, consumer products, trading and services, plantation, construction, and technology sectors under the Main market.

Firms that is selected in this study are enlisted during the period of the study because the aim of this study is to examine the agency mechanisms in the regular firms (don’t investigated delisted firms or the new listed firms). The limitations of the current research are the measurements of MANOWN and MANREMU.

Since the indirect MANOWN data which was disclosed in the annual reports of the firms were unclear, then calculating and computing the accurate indirect ownership comprehensively was not possible. Thus direct ownership was the only feature investigated in this study. Furthermore, based on the complexity and limitations of calculating the value of equity-based compensations, MANREMU was evaluated according to bonus, salary, benefits of kin, allowance, and fees. Another reason that equity-based compensation had not been chosen for this study is related to the nature of equity-based compensation, which is used more as a long-term instrument for aligning the interest of managers with benefits of the shareholders. Moreover, according to previous studies, salary is the main method of managerial remuneration in the Malaysian market.

In order to choose the period of study, two factors were considered 1- the period of study including relevant and updated data 2- the period of study covering the requirements of econometrics methods to reach acceptable and reliable results. The newest annual reports of the listed firms in Bursa Malaysia, that were released when

2 However, Act 1983 (Section 99B) indicates that the chief executives and also the directors of the listed firms must reveal their interests in the firm to the related securities commission. But this article (section 99B) does not mention how firms should prepare the information about the indirect ownership and therefore the ultimate ownership of each executive cannot be calculated because of the vague indirect ownership. For instance, company A has 60% of the shares of company B. Executive X is a director of company B and also has some shares in company A. Moreover, executive X has 10% of the shares in the company B. The spouse of executive A also is the executive of company B. Based on the common method of annual report in Malaysia. Company B reports 60% of the indirect ownership of executive X in company B and also 70% of the indirect ownership of company B for his/her spouse. (According to part five of section 99B, indirect ownership of relatives includes a spouse, child or parent of the chief executive or director). It means the total indirect ownership of only these two executives are 130%. However, it is not possible to understand how much of the share of company A belonged to executive X? It is only a simple sample about the problem of indirect ownership calculation in Bursa Malaysia. To see a real example of this problem the reader is referred to see appendix 2 which indicates the information of direct and indirect ownership of annual report of Fiamma Holding Berhad in 2014.
the data collection started, are related to the year 2013. From the econometrics view, previous studies used the period of study between 6 to 8 years to find acceptable and reliable results by 3SLS and 2SLS methods (for instance, Farag et al. (2014) for 8 years, Persson (2014) for 7 years, and Kim et al. (2007) for six years). Consequently, the population of this study included 267 companies which were eligible for this research. The whole population was investigated for a period of 9 years from 2005 to 2013.

1.7 Significance of the Research

There are lacks of well defined theoretical frameworks on endogeneity and simultaneous interrelationships among instruments of agency solutions. Therefore, this study takes into consideration endogenous nature of agency problem solutions in CG issues. Applying three simultaneous equations models (SEM), this study conducts a comprehensive investigation of the interrelations between managerial incentives (ownership and compensation) and financial internal controlling instruments (dividend and leverage), and also managerial incentives and firm profitability. The significance of this research can be organized into three categories which are, Theoretical, methodological, and practical. The contributions of the proposed research as follow:

1.7.1 Theoretical Contribution

Owing to the facts that theoretical mechanisms of CG, has not considered the endogeneity and interrelations among agency instruments, this study investigates the interrelations between managerial incentives and financial internal agency solutions by using Convergence-Of-Interests Hypothesis as well as entrenchment hypothesis in a system based on simultaneous interrelation between instruments. In other words, instead of treating these theories as mutually exclusive, this study empirically tests whether these theories are substitutes, complements, or neither in the Malaysian market.

1.7.2 Methodological Contribution

The fundamental assumption of Ordinary Least Squares (OLS) estimator is based on uncorrelation between exogenous and the residual terms. Consequently, in terms of explaining interrelation (causality) among internal policies of the agency problem, the OLS leads to biased and inconsistent estimates.

Therefore, this study contributes to the growing number of pieces of research applying SEMs as an alternative to OLS regression to investigate CG mechanisms. By now, many studies have used Two Stage Least Squares (2SLS) and Three Stage Least Squares stage least squares (3SLS) as estimation methods, but they have suffered from heteroskedasticity problem. But using 3SLS- Conditional mixed process (3SLS-CMP) as a new econometrics method that solves heteroskedasticity problem in SEM is another methodological contribution. This study utilizes an
econometrically and comprehensive defensible investigation of the interrelations between managerial incentives and internal agency instrument and also managerial incentives and firm performance based on a long-period of time (nine year), exhaustive sampling (267 firms), and different econometrics methods.

1.7.3 Practical Contribution

Unlike most studies conducted in developed countries, this research will try to explore the simultaneous relationship between managerial motivates and internal controlling instruments for eliminating agency problems in the Malaysian context. In addition, this study tries to bridge the research gap in Malaysia through comprehensively investigating the role of managerial incentives in reducing the agency issue and also maximizing the firm value in a framework of simultaneous interrelation between variables. Moreover, from a practitioners (investors, shareholders) point of view, this study contributes to better knowledge on how different CG policies affect one another, which can give some information on how they should reduce agency costs.

This research is also expected to provide some rewarding guiding principles for the policy makers as well as debt financers of the capital markets in Malaysia based on the interrelation between managerial incentives with dividends and leverage. In addition, it provides insight into the interrelation between managerial incentives and firm profitability which can be useful for investors and minor shareholders.
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