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ENTERPRISE RISK MANAGEMENT AND VALUE CREATION: INITIAL FINDINGS AMONGST NON-FINANCIAL PUBLIC LISTED COMPANIES IN MALAYSIAN BOURSE

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ABSTRACT

This study aims to highlight whether the implementation of Malaysian Code of Corporate Governance (MCCG) in 2000 and the revise version in 2007 gives impact to enterprise risk management (ERM) and creates value for companies listed in the Malaysian Bourse. Using a standard and reliable variables with acceptable testing methods provide justifiable methodology of testing. From test result, it is found that MCCG2000 produces more impact compares to MCCG2007. Nonetheless, caveat should be in place as these are only initial findings with a long road ahead for confirmation.

Keywords: Enterprise risk management (ERM), Non-financial companies, Corporate governance, Malaysia

INTRODUCTION

It is a common and acceptable knowledge that the East Asian financial crisis in 1997 has left a scar on Malaysian firms and the economy as a whole. Jin (2001) in his report estimated that one tenth of the 800 public-listed companies on the Bursa Malaysia were severely affected by it and poor corporate governance and risk management was cited as a major contributor to the companies' failure. This in turn caused severity in corporate governance problems in the Bursa listed companies. An earlier study by Claessens *et al.* (1998) also views that much of the East Asian financial crisis has in part been attributed to the weak performance and risky financial structures of corporates itself. Their study reveals that operational performance of East Asian corporates was

indeed not as phenomenal as many had thought with investment with risky projects/ventures. Moreover, their study suggest that the financial structures of many East Asian corporates could not withstand the combined shocks of increased interest rates, depreciated currencies, and large drops in domestic demand as where the trigging factor of the 1997 Crisis. Finding from their study is further supported by Poon (1999) specifically to Malaysian financial and economic condition.

Malaysian government in March 2000, through its financial regulator formularizes and introduces The Capital Market Master-plan to stamp out governance woes which were viewed to be the culprit to the 1997 crisis. Apart from the Master-plan, the Malaysian Code on Corporate Governance 2000 (MCCG 2000) was also introduced where risk management for the first time clearly stated and viewed as one of the principal responsibilities of the board of directors (BOD). In MCCG 2000, it is stated in the 3rd and the 6th of principle responsibilities of the BOD on the Best Practice Provision AA1 in Part 2, which requires the board to understand the principal risks of all aspects of the business in order to achieve a proper balance between risks incurred and potential return to shareholders, and to ensure that there is a sufficient framework of reporting on internal financial controls and regulatory compliance. Although initially, the requirement on best practices of the code is voluntary, the code was linked with Malaysian Bourse Listing Requirement 2001 making it compulsory for listed companies to disclose the internal control report in its annual report.

In October 2007, MCCG 2000 was revised from lessons learned since induction. In essence the Malaysian Code on Corporate Governance revised 2007 (MCCG 2007), recognizes the importance of the internal audit function by requiring all companies to have an internal audit function. In order to preserve the independence of the internal audit function, the head of internal audit should report directly to the audit committee. Moreover, MCCG 2007 strives to strengthen the role of audit committees by requiring the committees to comprise fully of non-executive directors. In addition, all its members should be able to read, analyze and interpret financial statements so that they will be able to effectively discharge their functions. Although at a glance, MCCG 2007 seems to be a minor improvement from MCCG 2000. Nonetheless, it is a significant move as it is now mandatory instead of voluntary initiative for a company to have its own internal auditing committee which includes its risk management team.

Risk management has begun as a field in the early 1950s was limited in scope to pure loss exposures only where risks were managed through controlling and financing techniques. Insurance has been the most popular financing approach in managing corporate risk. It has been used to manage property, liability, and related insurable risks. This approach is known as Traditional Risk Management (TRM) where risks are managed by independent departments or units where each group has its own languages, skills and procedures.

The global and specific company environmental change of risk as well as the complexity and speed of these changes have increased the uncertainty and risks endure by the company. These rapid changes have shown that managing risk by isolation is no longer suitable due to traditional risk managers have failed to develop skills that would enable them to contribute to the broader idea of integrated risk management approach within their business entities (Conley, 1999) and to consider shareholders wealth in the decision making process (Meier, 2000). Thus, most of the companies now have moved from the traditional way of risk management to an integrated or enterprise risk management.

Enterprise Risk Management (ERM) is relatively a new trend of risk management and has become a global issue and receiving much attention in this part of the world including Malaysia for all types of organizations regardless of sizes. Paradigm shift of the ERM approach arises from four important issues, namely, i) the increasing of challenges in internal and external factors of risk and the disintegrating approach of TRM. Follow by ii) the occurring of recent corporate scandals and financial collapses, then, iii) the increasing concern on corporate governance issues; and finally, iv) the driving motivation to create and preserve shareholder value.

ERM considers and manages all sources of risk, regardless of the type. It engages everyone within the entire organization, starting from the very top at the governance level, right down to the bottom at the ordinary level of employees. ERM involves managing the risk of a potential loss within an organization (downside) as well as the opportunity (upside) created from a systematic risk. It addresses not just a hazard risk, but also financial, strategic and operational risks and these types of risks are treated in a single portfolio of risk. ERM is a rigorous approach where companies could assess and address all types of risks from all sources within an organization. Its implementation is for the purpose of increasing shareholder value.

A good corporate governance and integrated way of risk management are important in order to stabilize, maintain, and increase the growth of the company. They are linked together to assist how organizations can better understand the risks, to improve and deliver its objectives and to mitigate, assess, and manage risk in an appropriate manner. The main function and objective of both corporate governance and ERM is to maximize shareholder value (Sobel and Reding, 2004; Busco *et al.*, 2005). Moreover, risk management and sustainable growth provide a signaling perspective to current shareholders and prospective investors portrays in Kanani *et al.* (2013).

Therefore, this study is intended to find out the effectiveness of ERM with corporate governance compliance and value creation in for-profit companies. The main concern of this study is to examine whether the implementation of Malaysian Code of Corporate Governance has an impact to ERM and creates value for companies listed in the Malaysian Bourse.

METHODOLOGY

The primary objective of our study is to examine the changes in financial characteristics of firms' adopting ERM. Unfortunately given the Malaysian Corporate Scenario, firms do not in general, publicly announce the adoption of ERM. Moreover, companies tend to disclose only minimal details of their risk management programs. This view concurs to earlier study by Tufano (1996) and Pagach and Warr (2010). Therefore, this study focuses on introduction of MCCGs by the Securities Commissions (SC) and the Malaysian Bourse (Bourse) as a signal of a firm's adoption of an enterprise risk management (ERM) process. There are good reasons to believe MCCGs should coincides with the decision to follow an ERM program as MCCGs are strictly governs and enforced by the Bank Negara, SC, and the Bourse.

This study employs the use of random alphabetical listing selection of listed companies in the 2010 Bursa Listed Companies Schedule excluding financial and insurance regulated companies. The primary reason to this is that these companies are "*said to be*" compliance to not only compliance to local ERM but also with BASEL II accordance. The following table summarizes this study samples;

Table-1. Sample by Sectors

Sector	Number of Company	Percent
Construction	19	5.2
Consumer Product	44	12.0
Hotel	3	0.8
Industrial Product	100	27.2
IPC	3	0.8
Non-Regulated Finance	50	13.6
Plantation	21	5.7
Properties	47	12.8
Technology	9	2.4
Trading and Services	72	19.6
TOTAL	368	100.0

To test whether MCCG 2000 and MCCG 2007 implementation are associated with changes in key financial variables, the basic approach is to measure changes using *Independent t-Test* and *Paired-Sample t-Test* in these variables in the years after the code implementation relative to the years before. The main reason in comparing between the two MCCGs is that study by Manab *et al.* (2007) found that only 41.2% of ERM was placed the risk management department. Hence, the MCCG2007 is expected to produce better result as it is now compulsory for all companies to have its very own risk management department. The following and its motivation are the variables used in the analysis are an adoption from Pagach and Warr (2010) study.

Financial Characteristics

This study examines the financial characteristics that related to the possibilities of the company experiencing a costly outcome. The first financial characteristic is leverage as companies with higher leverage are prone to experience financial distress. Moreover, excessive leverage may also limit a company's ability to pursue additional profitable investment projects. Pagach and Warr (2010) points out that the impact of ERM adoption on leverage is unclear as companies that were previously at their target leverage level or/and with greater control of operational risks would suggest that the company could increase its debt capacity. In this study leverage is measure as total liabilities to assets:

*Leverage= Total Liabilities/Total Assets (*1)

Financial slack or cash availability provides a measure of a company's ability to continue its operation during a period of operating cash shortage. Financial slack measures the amount of highly liquid assets (such as cash or marketable securities) that the company has in hand that could be used to make up for any deficit in its operating cash flows. Companies adopting ERM may decide to increase its financial slack to provide a greater mitigation against financial distress, or similarly in leverage, may feel less financial slack is needed given that they are able to manage risks thoroughly. Financial slack is measures as the proportion of the company's assets that are cash or cash equivalents against its total asset, as shown below;

Slack = Cash and Marketable Securities/Total Assets (2)

This study also examines profitability measure as ERM adoption would produce a better overall management of the company. On the other hand, profitability could suffer, if ERM causes in an increase of operational costs. As with leverage, Pagach and Warr (2010) points out that the effect of ERM adoption on profitability is ambiguous as more coordinated management and loss avoidance may boost profits by reducing avoidable losses. Moreover, greater emphasis on risk management also may lead to a favorable outcomes and profitability may also be endogenously determined with ERM adoption. To measure accounting return, this study uses return on equity as shown in the following equation;

ROE = Net Income / Book Equity (3)

Asset Characteristics

The asset characteristics used in this study are those that provide information about the degree to which a company's assets are likely to be decreased in value upon financial distress. Such asset characteristic is opacity. Opacity is intangibles assets (such as, name brand and goodwill) that does not have a physical accounting value but nonetheless stated it is balance sheet. In *DataStream*, this

is can be found in item WC02649. As news technology disperse rapidly, companies that derive much of their operating income from opaque assets would have difficulties in liquidating these assets at fair market value to avoid financial distress as information asymmetries would normally associated opaque assets and the relative lack of marketability for such assets. Opacity is the ratio of intangibles to total assets, as shown below;

Opacity = Intangibles / Total Assets (4)

The second asset characteristic examine in this study is firm's value or its growth options. Companies with growth options would have considerable amount of the firm's value tied to future income, but with unrealized current cash flows. Because of the uncertain nature of the payoff from such assets, the value of these investments is unlikely to be fully realized in bankruptcy. Study by Nisa and Nishat (2011) uses Market to Book as predictors to firm's equity performances. In this study, Q-ratio or approximate Q is use as proxy to Tobin's Q which is a company's growth options or performance indicator. This variable which is introduced by Chung and Pruitt (1994) is used and a result from the following formulas:

Approximate Q = [(MVE + PS + DEBT)]/Total Asset (5)

Where:

MVE : Year-end companies' share price and the number of common shares outstanding
PS : Value of the companies' outstanding preferred stock
DEBT : Value of the companies' short-term liabilities net of its short-term assets, PLUS the book value of the companies' long-term debt
TA : The book value of the total assets of the company

If, after adopting ERM, the company considers financial distress to be less likely, therefore, it is expected that investment in opaque assets and assets with growth options to increase.

Market Characteristics

Market characteristics provide information about the degree to which a firm's equity benefits from a reduction in the expected costs associated with financial distress. Previous work such as by Beasley, (Pagach and Warr, 2010) has examined the market reaction to ERM adoption, and it's consequently. However, this paper however does not include an event study style analysis as exact date of ERM adoption in this study' sample could not be ascertained.

FINDINGS AND DICUSSIONS

Analysis for this paper starts with overall samples to test whether MCCG 2007 produces different effect to that of MCCG 2000. Result from the use of independent samples t-test is shown in the following Table 2.

In Table 2, test result shows a significant reduction debt to asset ratio between MCCG2007 compares to MCCG2000. This improvement in ratio suggests that MCCG2007 has been successfully enhanced MCCG2000 and further decrease operational risk amongst local non-financial companies. Moreover, although this may not promote decline in venerability of bankruptcies as the ratios still in mid-30 percent, nonetheless it does to suggest that local companies are relying less on debt for their capital.

Table-2. Independent Samples t-TestforMCCG2000 and MCCG2007

Variables	Mean Post MCCG 2000	Mean Post MCCG 2007	Changes	t-statistic
Debt / Asset	.381501	.341983	-0.039518 **	-2.304
Slack	.373775	.360747	-0.013028	-0.647
Returns on Equity	.133532	.250478	0.116946	1.524
Opacity	.371331	.363271	-0.00806	-0.310
Approximate Q	.771154	.785775	0.014621	1.268

Note:*, **, *** indicates significance at the 10%, 5%, and 1% levels respectively.

Also shown in Table 2 is that changes in other variables are tested to be insignificantly different. Nonetheless, it should be noted that returns on equity (ROE) does shows a substantial improvement (11 percent) and on a whisk away to be tested significant. This welcome signs insinuate that comparing between these two MCCGs, non-financial companies are able to increase investment returns to their shareholders the period. However, negative changes in slacks and opacity indicate that companies are holding less highly liquid assets and investing less in intangible assets though holding companies' value intact.

As a whole, ratio performances against MCCG2000 and MCCG2007 implementation, the outcomes are encouraging as nearly all ratios produced shows a justifiable result that can be rationalizes.

Further separate analysis are also conducted in this paper focusing on whether implementation of MCCG2000 and MCCG2007 itself produces favorable outcomes. As both MCCGs have its own ERM properties, with MCCG2007 as a revise version of MCCG2000, each MCCG should provide an improvement in post adoption ratios compares to pre-adoption ones. In this section, the

implementation of MCCG2000, as shown in Table 3, starts the finding analysis and discussion on each MCCG.

Table-3. Paired Samples t-Test between Sample against Pre and Post MCCG 2000

Variables	Mean Pre MCCG 2000	Mean Post MCCG 2000	Changes	t-statistic
Debt / Asset	.404959	.394745	-0.010214	-0.482
Slack	.370755	.351900	-0.018855	-0.823
Returns on Equity	.028138	.111293	0.083155	1.532
Opacity	.378552	.344931	-0.033621	-0.966
Approximate Q	.727884	.758221	0.030337**	2.094

Note:*, **, *** indicates significance at the 10%, 5%, and 1% levels respectively.

In Table 3 result shows that companies recorded a positive significant increase in companies' value suggest that the code have succeeded in directing companies to sustain its value. As MCCG2000 was adopted just only after 1997 crisis, it is a longed-for outcome. Although other variables does not show any significant positive result, nonetheless, ROE shows a good sign of improvement though tested to be insignificant. Summarizing the outcome from the MCCG2000 implementation, it is clear that non-financial companies have benefited from it as potential growth is possible with the increase of companies' value. A contrast in outcome from MCCG2000 implementation can be seen with the implementation of MCCG2007 as shown in the following Table 4. In Table 4, none of the companies' ratios shows sign of significant improvement or decline from MCCG2007 implementation. This suggests that the MCCG2007 implementation is indifferent in bringing or bridging out ERM practices amongst non-financial companies listed in Malaysian Bourse.

Table-4. Paired Samples t-Test between Sample against Pre and Post MCCG 2007

Variables	Mean Pre MCCG 2007	Mean Post MCCG 2007	Changes	t-statistic
Debt / Asset	.354271	.344533	-0.009738	-0.801
Slack	.359346	.369719	0.010373	0.599
Returns on Equity	.203738	.185560	-0.018178	-0.584
Opacity	.351205	.379912	0.028707	1.221
Approximate Q	.770110	.782832	0.012722	1.544

Note:*, **, *** indicates significance at the 10%, 5%, and 1% levels respectively.

As a glance, implementation of MCCG2007 seems to have an insignificant impact to ERM practices to both non-financial as well as the financial companies. Nonetheless, one cannot rule out that lesson learned from 1997 crisis have matured most Malaysian Bourse listed companies in their governance and financial decisions, hence the revise code only does little as to give a significant impact to an ongoing ERM practices.

Overall, it is found that both MCCGs do not improve ERM practices in Malaysian Bourse listed

financial companies with test result from later code reveals that financial companies firms' value has decline since the code implementation. Nonetheless, the reason being as such is contributed by other external financial factor rather than the implementation of the code itself. Last but not least, is that thought this paper is only being an initial analysis, it has some similarity to Pagach and Warr (2010) where their study also finds little impact from ERM implementation to a wide spectrum of firm variables. Nonetheless, post adoption of MCCGs result provides a positive signaling to current shareholders of future returns, similarly mentioned by Kanani *et al.* (2013). As a summary, MCCGs has indeed achieved its objectives in embracing/enhancing ERM practices by Malaysian Bourse listed non-financial companies especially during MCCG2000 implementation.

CONCLUSIONS

The aim of this paper is to highlight the impact of MCCGs implementation to non-financial listed in the Malaysian Bourse. As MCCG2000 being the first time of such code been implemented in local financial settings, its impact were thought to be lesser to that of MCCG2007 (a revise version from MCCG2000). At a glance, comparative test result suggests that MCCG2007 does produce the desired outcome, as leverage ratio is significantly lower after the implementation of MCCG2007. However, a refine examination reveals that MCCG2000 produces better result where non-financial companies firms' value has improve upon the first code implementation.

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