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Enterprise risk management practices among Malaysian firms

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Abstract

Enterprise Risk Management (ERM) is fast becoming a fundamental concern in all industries. ERM is a holistic approach for managers to identify risks and select appropriate responses in line with enterprise's risk appetite. This study aims to identify the level of ERM implementation among firms in different industries in Malaysia. Data were gathered from 199 firms listed on the Malaysian Bursa through a questionnaire survey. The analysis shows that ERM implementation varies across different industries and that having an ERM framework in place is more common among firms in the infrastructure, hotel, and technology sectors.

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1. Introduction

Until two decades ago risk management was not regarded as a strategic and essential management discipline. It was mainly influenced by the managers' perception of risk (Thompson, 2003). Now, managing risk is becoming a fundamental concern and the ability to identify risks and adapt to the ever-changing business environment are among the critical success factors for enterprises (Arena, Arnaboldi, & Azzone, 2010). Managerial discretion in

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identifying risks and responding to them led to different approaches in managing risk such as financial risk management, insurance, and political risk management. None of these approaches were wrong but their focuses were limited and fragmented. Hence, the need to efficiently identify and respond to various risks resulted in adoption of comprehensive risk management programs by many firms (Woon, Azizan, & Samad, 2011).

Enterprise Risk Management (ERM) is one of the approaches that goes far beyond the silo-based view of risk (Gordon, Loeb, & Tseng, 2009). It is a holistic approach in identifying possible risks that a firm would encounter and selecting appropriate responses that matches enterprise's risk appetite. Applying ERM may increase risk awareness in a firm and subsequently enhances decision making ability leading to firm value maximization (Razali, Yazid, & Tahir, 2011). Despite the benefits of ERM implementation, many organizations have yet to adopt it (Beasley, Clune, & Hermanson, 2005). In 2011, a survey of 1431 risk managers of US firms found only 17 percent confirmed that their firms had a fully integrated ERM program, 37 percent had partially integrated ERM program, and 23 percent had just started to invest in ERM program. Three percent had no program/plan for the next year (2011) while 20 percent had no plan to adopt ERM any soon (Society, 2011).

The literature pertaining to ERM, calls for further research on the level of ERM framework adoption among firms (Daud, Yazid, & Hussin, 2010; Razali et al., 2011). Specifically research on the issue in developing countries is scarce. This study examines the extent of ERM implementation among Malaysian public listed firms. Malaysia is the third fastest growing economy by GDP among South East Asian countries and 28th in the world with 5.6% GDP growth. Due to poor risk management during the financial crisis in 1997, several major Malaysian corporations were severely affected. Bank Negara Malaysia (1999) has reported financial crisis had caused more than RM45 billion reductions in their total assets. Although the recent global financial crisis (GFC) of 2008 has shed light on the importance of risk management practices of firms (Arena et al., 2010; McGinn, 2009; O'Donnell, 2009; Price, 2008; Quon, Zeghal, & Maingot, 2012), evidence shows trend towards ERM adoption but limited in practice among Malaysian firms (Daud et al., 2010; Yusuwan, Adnan, Omar, & Jusoff, 2009). This might be attributed to poor regulatory forces for compulsory adoption. The Malaysian Code on Corporate Governance only recommend ERM adoption by firms listed on the Malaysian Bursa (Lai & Samad, 2011). While previous researches reveal some factors that influence ERM implementation among Malaysian firms (Daud et al., 2010; Razali et al., 2011), there is a gap on the extent of ERM implementation among different industries. While previous research looked at ERM adoption in general, this research investigated the level of ERM implementation.

2. Enterprise risk management

Traditional risk management approaches involve disaggregated methods in order to face various risk in different units of firms (Liebenberg & Hoyt, 2003). In contrast, ERM is a relatively new paradigm that increases the ability of forecasting the portfolio of risk that a firm encounters (Beasley et al., 2005). The Committee of Sponsoring Organizations of the Tread way Commission's (COSO) defines ERM as a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives (COSO, 2004). ERM is seen as a top-down approach which constitutes identifying, assessing, and responding to strategic, operational, and financial risks in order to achieve four objectives: (1) strategy - high level goals that align with company mission, (2) operations - effective and efficient use of resources, (3) reporting - reliability of reporting, and (4) compliance - compliance with applicable laws and regulations (Harner, 2010).

Beasley et al. (2005) divided firms into five groups based on the level of ERM implementation: full implementation, partial implementation, in the planning process of implementation, thinking/assessing the possibility of implementation, and those who do not intend to implement ERM. Recent studies reveal an increase in ERM adoption and appointment of Chief Risk Officer among firms in different industries (Beasley et al., 2005; Liebenberg & Hoyt, 2003; Pagach & Warr, 2011; Subramaniam, Collier, Phang, & Burke, 2011). Kleffner, Lee, and McGannon (2003) explained that ERM implementation differ among industries while Colquitt, Hoyt, and Lee (1999) found that ERM is more common in certain industries such as financial and insurance.

There are many researches on ERM implementation in developed countries. According to Beasley et al. (2005), ERM implementation in US based companies is less in comparison to international companies. Beasley et al. (2008) showed that costs-benefits of ERM development differ among industries in the US while Gordon et al. (2009) found that a match between ERM and organizational performance depends on factors such as uncertainty and industry competition. Pagach and Warr (2010) assessed the effect of ERM on organizational long term performance and later in 2011 they found that instead of regulatory pressure, direct economic benefit is the reason for firms throughout the world, listed in Compustat, to adopt ERM.

ERM still is a new concept in many parts of Asia (Manab, Kassim, & Hussin, 2010). In Malaysia, most of previous studies considered ERM implementation in general. For instance Lai et al. (2011) explained how ERM implementation impact organizational performance. They presented the relation between enterprise risk management, business performance, and cost of capital. Razali et al. (2011) classified companies into either ERM adopted or not to determine factors which have impact on ERM adoption. Since ERM is relatively new in Malaysia, little is known on the level of ERM implementation among various industries.

3. Data collection

Data were collected through a questionnaire survey distributed to selected public-listed firms on the main board of Bursa Malaysia by a professional agency. Bursa Malaysia clusters firms into twelve industry sectors namely construction, consumer products, finance, hotels, industrial products, infrastructure, mining, plantation, properties, real estate's investment trust services (REITS), technology, and trading and services. Firms are classified into one of these sectors based on their primary activity.

At the time of data gathering, there were a total of 993 firms listed on the main board of Bursa Malaysia. To increase generalizability, sample firms were chosen from all the twelve industries. To give firms from different industries an equal probability of being selected, stratified sampling method was used. The number of sample firms needed from each industry was calculated on a pro-rata basis based on the total number of firms in that industry. Out of 320 questionnaires distributed, 199 were received representing 62 percent response rate. The units of analysis are the firms and the respondents were the Chief Risk Officers (CRO) of the sample firms. In the event of inexistence of CRO position in the firm, the Chief Financial Officer (CFO) or the most relevant senior position was chosen as the respondent. In order to assess ERM practices of the firms, following Beasley et al. (2005), we identified the level of ERM implementation in the respective firms.

4. Results

Table 1 presents the frequency of respondents in different industries. Majority of the respondents were from the industrial products, consumer products, properties, and trading/service industries. On the other hand, demographic characteristics of respondents (Table 2) shows 50 percent of respondent firms had 101 to 1000 employees and about 35 percent had estimated annual revenue of less than RM100 million.

Table 1. Distribution of respondents.

	Frequency	Percent
Consumer products	30	15.1
Industrial products	38	18.9
Construction	18	9.3
Trading/Service	22	11.2
Infrastructure	5	2.7
Finance	16	7.7
Technology	11	5.4
Hotels	2	1.2
Properties	23	11.6
Plantation	16	8.1
REITS	5	2.3
Other	13	6.6
Total	199	100

Table 2. Demographic profile of respondents.

	Frequency	Percent
Total number of full time employees	51	25.6
101 to 1000 employees	100	50.3
1001 to 2000 employees	18	9.0
2001 to 3000 employees	9	4.5
3001 to 4000 employees	2	1
4001 to 5000 employees	2	1
Above 5000 employees	17	8.5
Firm's estimated annual revenue		
Less than RM 100 million	70	35.2
RM 100-250 million	39	19.6
RM 250-400 million	28	14.1
RM 400-550 million	8	4.0
RM 550-700 million	6	3.0
RM 700 million-1 billion	13	6.5
Above 1 billion	35	17.6

On the level of ERM adoption, Malaysian firms appreciate the value of ERM implementation (Table 3). Almost 80 percent of respondents had either a complete or a partial ERM framework in place out of which 32.2 percent had complete ERM framework. Only 13 percent had no formal ERM but had plans to implement while 4 percent were investigating ERM concept. Only 3 percent had no plan to implement ERM in the company.

Table 3. Level of ERM implementation.

	Frequency	Percent
Complete ERM framework in place	64	32.2
Partial ERM framework in place	95	47.2
No formal framework but plans to implement one	26	13.1
Currently investigating concept of ERM, but have made no decision yet	8	4.0
No framework and no plans to implement one	6	3.0
Total	199	100

Table 4 depicts the level of ERM practices among different industry sectors. It is notable that all firms in infrastructure and hotel sectors have a formal ERM framework in place. In addition, all sample firms from the finance, technology, and Real Estates Investment Trust Services (REITS) industry sector either had formal ERM framework or had plan to implement one. Only a small percentage neither had ERM framework nor had plan to implement one and they were from consumer products, industrial products, construction, properties, and plantation sector. Although majority firms from the property industry had ERM framework in place, many were investigating ERM framework. Ranking of industries for firms with either complete or partial ERM framework is as follows: infrastructure and hotels 100 percent, technology 87 percent, consumer product 86 percent, construction 85 percent, plantation 84 percent, finance 82 percent, industrial products 79, properties and REITS about 75 percent, and trading/service 72 percent. The analysis shows that ERM implementation varies across different industries and

that having an ERM framework in place is more common among firms in the infrastructure, hotel, and technology sectors.

Table 4. ERM practices according to industries.

Industry	Complete ERM framework	Partial ERM framework	No formal ERM framework	Investigating concept of ERM but no decision yet	No ERM framework & no plan	Total
Consumer Products	22.73%	63.64%	9.09%	2.27%	2.27%	100%
Industrial Product	33.93%	44.64%	12.50%	3.57%	5.36%	100%
Construction	42.31%	42.31%	7.69%	3.85%	3.85%	100%
Trading/Service	24.24%	48.48%	21.21%	6.06%	0.00%	100%
Infrastructure	60.00%	40.00%	0.00%	0.00%	0.00%	100%
Finance	29.41%	52.94%	17.65%	0.00%	0.00%	100%
Technology	40.00%	46.67%	13.33%	0.00%	0.00%	100%
Hotels	33.33%	66.67%	0.00%	0.00%	0.00%	100%
Properties	28.13%	46.88%	6.25%	15.63%	3.13%	100%
Plantation	21.05%	63.16%	5.26%	0.00%	10.53%	100%
REITS	0.00%	75.00%	25.00%	0.00%	0.00%	100%

5. Conclusion

Findings of this study are consistent with Beasley et al. (2005), Colquitt et al. (1999), and Kleffner et al. (2003) where ERM implementation level is different for different industries. Meanwhile, consistent with Colquitt et al. (1999), firms in certain industries, such as financial firms, had ERM framework in place or plan to implement one. In the Malaysian context, having an ERM framework in place was extended to infrastructure and hotels industries. Furthermore, tourism is one of the industries under focus of the Malaysian government to create value (NEM, 2010). Also, suitable with Malaysia's position as a leading exporter of electronic parts (Worldbank, 2010), all sample firms from technology sector either had formal ERM framework or had plan to implement one.

The findings of this research provide insightful results for academia, industry, and regulators. Corporate governance regulatory authorities can use these results to set new rules and principles on firm's risk management practices. Further, the results provide comparable evidence of the level of ERM adoption by Malaysian firms to other developing and South East Asian economies. For future studies, authors can determine the factors influencing ERM adoption in Malaysia such as environmental certainty, technology maturity, and board of directors' characteristics. Similar studies can be carried out to compare ERM adoption in Malaysia with other developing countries or countries with higher GDP growth rate.

This study has several limitations. The results of the study may be attributed to self-reporting bias as it engaged executives of the firm to report on the level of ERM activities that the firm has adopted. Meanwhile, data was gathered from a sample of firms listed on Bursa Malaysia rather than all of them. Further studies may consider gathering data from secondary sources or external independent auditors and from all firms to reduce the self-reporting and sampling biases.

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