International Journal of Management and Sustainability

2016 Vol. 5, No. 1, 1-10. ISSN(e): 2306-0662 ISSN(p): 2306-9856 DOI: 10.18488/journal.11/2016.5.1/11.1.1.10 © 2016 Conscientia Beam. All Rights Reserved.



SUSTAINABILITY RISK MANAGEMENT (SRM): AN EXTENSION ENTERPRISE RISK MANAGEMENT (ERM) CONCEPT

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ABSTRACT

This paper aims to provide an insight of the Malaysian experience in terms of Risk Management practices and the integration of the sustainability as part of the enterprise risk management (ERM). Sustainability has been a paradigm shift in the business operations nowadays. The awareness by most of the companies in the world towards the environmental perils leads to the sustainability development. By emphasizing the sustainability risk management (SRM) and the sustainability agendas as part of corporate strategy, it's not only effecting on the company's financial performance but also maintaining the longer term of survival in the industry.

Keywords: Sustainability, Enterprise risk management (ERM), Sustainability risk management (SRM), Corporate governance, Company's survival, Malaysia.

Received: 12 March 2015/ Revised: 13 January 2016/ Accepted: 18 January 2016/ Published: 22 January 2016

Contribution/Originality

This contributes in the existing literature by highlighting the significance of integrating ERM and corporate sustainability practices in mitigating both known and unknown risks for longer term of survival in the industry in addition to addressing the potential opportunities for improvement in the ERM practices.

1. INTRODUCTION

In ensuring that risk management is effectively implemented, its initiatives have been integrated as one of the important part of corporate governance codes in many countries of the world. Most of the countries, including Malaysia, have introduced their corporate governance

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codes and risk management initiatives. At present, there is an increase of awareness and acceptance of enterprise risk management (ERM) in Malaysia among the industry players. Corporate governance is the strongest external pressure and it has been found as one of the primary reasons for companies to adopt ERM (Kleffner et al., 2003a; Manab et al., 2007). In fact, according to Manab et al. (2010) the ERM concept and its efforts have become a growing concern especially among public listed companies (PLCs) in Malaysia. By aligning with the company's strategy and involvement of employees at all levels of the organization, enterprise-wide risk management is considered as a comprehensive approach of risk management by addressing all types of risks in the organization.

However, ERM basically failed to evaluate and identify those risks which inevitably resulted in operational surprises to the company concerned. Some of these risks involve events that rarely occur but could have a critical impact on company's operations once they arise such as of climate change risks, boycott risks, social justice risks, ecosystem risks, toxic-tort risks, and disaster risks. ERM does not take into consideration the environmental and social performance in the company's wide view (Godfrey *et al.*, 2009).

Presently, most of the organisations start looking at sustainability risk management (SRM). This new concept of risk management is an extension to ERM concept. The objective of ERM practices is to increase the shareholders' value. In SRM concept, besides the shareholders' value it also incorporates the environmental and societal aspects for company's survival. The concept of sustainability is broader and not only highlights on the environmental risk but also includes the issues of social responsibility and other important emerging risks such as poverty, stakeholder activism, national security, globalization and reputational risk. The issue of sustainability is now being stressed by the shareholders due to the expanding of social responsible investors (Crump, 2008).

Those companies that merely focus on the profit maximization without taking into considerations the risk costs in the environmental and social responsibility would experience the decline in their profits. Recent developments in the risk management field have highlighted the sustainability risk management which focuses on management of environmental and social responsibility risks (Anderson and Anderson, 2009). Thus, the aims of this paper is to discuss the integration of sustainability as a part of ERM practices and to examine the motivation to adopt the new concept of *sustainability risk management* among environmentally sensitive sectors of Malaysian listed companies.

2. RISK MANAGEMENT CONCEPT

2.1. Enterprise Risk Management (ERM)

There are many definitions given for the ERM concept. For example, Tilling hast-Tower Perrin defined ERM as in Miccolis and Shah (2000):

"A rigorous approach to assessing and addressing the risks from all sources that threaten the achievement of an organisation's strategic and objective. In addition, EWRM identifies those risks that represent corresponding opportunities to exploit for competitive advantage".

Deloach (2000) defined ERM as:

"A structured and disciplined approach: it aligns strategy, processes, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprises faces as it creates value."

The definitions signify that ERM is a comprehensive approach of risk management by looking at a portfolio view of risks; a process that aligns with the company's strategy; and involves employees at all levels of the organisation. Its implementation is for the purpose of increasing shareholders' value. Barton et al. (2002) explained the details of the risk management term from the enterprise viewpoint. The term risk includes any event or action that will badly affect the ability of an entity or organisation to achieve the desired objectives and strategies. The word management that relates to integrated, holistic, corporate, or enterprise-wide risk implies people, technology, and knowledge that are being used in managing all types of risks faced by an organisation in order to create, protect, and enhance shareholder value. The enterprise-wide term means that functional, departmental, and cultural barriers are eliminated (Deloach, 2000).

The fundamental concept is every organisation whether profit, non-profit, or government agency, provides value for its stakeholders (COSO, 2003). This had been stressed in the definitions of ERM and in the ERM concept itself. The ERM definition by Deloach (2000) and COSO (2004) and studies done by Miccolis and Shah (2000) and Kleffner et al. (2003b) showed the important role of ERM in creating shareholder value in an organisation. Deloach (2000); Stroh (2005) and Panning (2006) agreed that the function of ERM is to drive value creation, either in terms of financial and non-financial aspects. Nevertheless, a study by Fatemi and Glaum (2000) on non-financial firms of PLCs differs from other findings in ERM. The study reports that ensuring the survival of the firm is the most important goal, followed by increasing the market value of the firm. A study by Manab et al. (2010) provides evidence that supports this finding. The result of the study indicates that beside shareholders value, survival is the other reason for PLCs to implement ERM. The result contradicted the theories and other studies which state that maximizing shareholder value is the ultimate goal in implementing risk management. Most of the companies are now realizing the efficient management of risks is essential for their long-term survival. Therefore, they are now getting ahead in implementing ERM to sustain and accomplish their business goals (Frigo et al., 2011).

2.2. Sustainability Risk Management (SRM)

Current risk management approach or ERM hardly assess the emerging risks and other nonquantifiable risks arising from unforeseeable events. In fact, sustainability issues are still not encompassed in the ERM strategy (KPMG International, 2011). The awareness towards the environmental perils by most of the companies in the world leads to the sustainable development. Sustainability has been a paradigm shift in the business operations nowadays. According to Swiss Reinsurance Company (2012) "Sustainability risks are ethical concerns related to environmental and socio-economic impacts of our business transactions and the reputational risks they may entail". In order for the companies to reach the sustainability goals, a systematic process needs to be developed by the companies to identify sustainability risk (Heinrich et al., 2010).

The implementations of sustainability capture three significant values consist of growth, return on capital, and risk management. A company who fails to manage risk associated with sustainability will be imposed large fines by the regulators and corporate reputation is tarnished. The growth and return on capital of the company enhanced with the sustainable strategy implemented by the company (Bonini and Gorner, 2011). Most of the risk management practices focus on the quantitative analysis; SRM encompasses risks to the reputation deriving from social, environmental, and economic impacts (MacDonald, 2011). According to Anderson (2007) "Sustainability risk management deals with risks emanating from the environmental and corporate social responsibility areas". SRM refers to managing all corporate risks related to social, environmental, and economic aspects (Yilmaz and Flouris, 2010). Definitely, SRM is a process which addresses and manages a broad spectrum of unknown and new risks derive from sustainability issues to achieve sustainable value for a long-term survival. Due to complexity of risks facing by the business, SRM should be encompassed in the ERM framework (Anderson and Anderson, 2009). This view is also supported by Gardiner and Endicott (2011) who suggested that the sustainability should be integrated as a critical part in the ERM. The failure to incorporate the three components of sustainability which are economic, social, and environmental aspects leads to ineffective performance in the long run.

3. SUSTAINABILITY RISK MANAGEMENT PRACTICES IN MALAYSIA

Presently, most of the Malaysian companies are aware of the sustainability issues. This can be shown through the sustainability activities performed by most of the companies in Malaysia. Malaysian government dynamically contributes commitments towards sustainability. Sustainability also being is highlighted as the main goals in the New Economic Model presented by our Prime Minister, Dato' Sri Najib Tun Razak.¹ Furthermore, the Malaysian Code on Corporate Governance 2012 (Securities Commission, 2012) requires the Board to promote the sustainability in the company's strategies for the long survival. It is also recommended that all listed companies to disclose their policies on sustainability and the implementation of it in their annual reports and websites. The code provides an opportunity for all companies in Malaysia to

 $^{^{1}\} http://www.bursamalaysia.com/website/bm/sustainability_portal/introduction_sustainability.jsp$

integrate the environmental, social and governance aspects in their companies' strategies in order to ensure the longer survival of the company and increase the expected firm value.

3.1. ERM Practices

Essentially, the risk management concept and its efforts have become a growing concern among PLCs in Malaysia. A study on ERM practices in Malaysia has been done in 2009 by Manab (2009). The study used a triangulation approach to examine the extent of ERM practices among financial and non-financial of services listed companies. A total of 55 companies had participated, which comprised 14 financial companies and 41 non-financial companies. The senior manager, risk manager or internal auditor of the unit, who is heavily involved and responsible for the organisational risk management, was selected to answer the questionnaire and interviewed for the case study. From the survey conducted for this study, 94.5 percent of the PLCs agreed that risk management has become a main concern in their daily operations. Even though most companies appear to have moved from the traditional risk management (TRM) concept to ERM; still, there are some companies that have apparently implemented risk management subconsciously in an unstructured and unfocused way. Corporate governance and compliance are vital mainly at the initial stage of ERM implementation. From the survey, 94.6 percent of PLCs reported that their ERM initiatives are driven by corporate governance. In fact, improved corporate governance is the most selected reason for all non-financial companies (100 percent) to adopt and implement ERM and in financial companies it is among the main motivation factors. In addition, the result of p value showed that improved corporate governance had a significant difference between the types of sector at the 10 percent significant level (p = 0.061). This was due to most of the companies generally perceived that improved corporate governance had a greater significance in successfully adopting the ERM practices. Based on findings from a case study, the companies that have been considered successful in implementing risk management are not only being driven by corporate governance and compliance, but also they are driven by good business practices, and value creation. Survival is cited as a motivating factor in the financial sector.

Table-1. Percentages of PLCs with ERM Drivers According to Type of Company

| | Percentage within | 'p' | | |
|-------------------------------|-------------------|----------------|--------|--|
| EWRM Drivers | Financial | Non- financial | value | |
| Compliance | 85.7 | 75.6 | 0.351 | |
| Mandate from BOD | 57.1 | 75.6 | 0.165 | |
| Shareholders value | 78.6 | 73.2 | 0.494 | |
| Technology | 7.1 | 4.9 | 0.594 | |
| Improved decision making | 85.7 | 68.3 | 0.182 | |
| Improved corporate governance | 85.7 | 100.0 | 0.061* | |
| Improved communication | 21.4 | 14.6 | 0.413 | |
| Globalisation | 7.1 | 9.8 | 0.623 | |
| Competitive pressure | 7.1 | 7.3 | 0.735 | |
| Stakeholder pressure | 0.0 | 4.9 | 0.552 | |
| Good business practice | 85.7 | 65.9 | 0.141 | |

^{*}Significant at 10 percent

The study discovered that ERM is found to be a good starting point for risk management efforts. There are a lot of weaknesses that block the abilities of people from quantifying risks. ERM approach is a process that involved all people at all levels of the organisation, and the objective of its implementation to create value was failed. The ERM concept is more general, which focuses more toward operational risks rather than a specific type of risks. There is lack of core people who acquire statistical numerical competency. Such capability is necessary to quantify the risks and to be able to create values. Failure to achieve the objective of value creation and survival would mean that the implementation of ERM is more of following the risk management trend.

3.2. SRM Practices

Besides ERM practices, Malaysia was ranked as a third place out of ten countries (Korea, India, Malaysia, Thailand, Singapore, Indonesia, Taiwan, Hong Kong, Philippines, China) in the Asian Sustainability Rating (2010) by Responsible Research and CSR Asia.² This shows that most of the Malaysian companies realized the importance of sound governance and responsible business practices. Consequently, a current study is conducted to examine the SRM practices among environmentally sensitive sectors of Malaysian listed companies such as manufacturing, construction, oil and gas, and plantation. This paper discussed the early findings of the study which focused on the stages of ERM implementation, as SRM is an extension of ERM and the motivation or the reasons for the companies to implement SRM.

From a survey analysis on 53 companies, 60.4 percent of the companies mentioned that their ERM program was fully implemented across the organization. While, 28.3 percent was partially implemented across the business segments and the remaining of 11.3 percent was at the early stage of implementation. This indicates that the some of the environmentally sensitive sectors of Malaysian listed companies are still improving their risk management practices and not ready for SRM practices yet. However, in terms of the driven factors of SRM implementation, the reasons of the companies to implement SRM was not only for corporate governance compliance (71.7 %) but also because of good business practices (71.7 %), and improved decision making (69.8 %). This in line with Laszlo (2008) that good business practice is the influencing factor for companies to adopt SRM in achieving sustainable competitive advantages.

The driving factors were further examined according to the sectors as showed in Table 3. Good business practice (100 %) has become a main factor for companies in plantation sector to adopt SRM and followed by manufacturing sector (76.2 %). Improving risk based decision making is the reason for construction's companies to adopt SRM. Meanwhile, corporate

²Asian Sustainability Rating 2010 http://www.asiansr.com/Sustainability_in_Asia___ESG_Reporting_Uncovered.pdf>[accessed on 12 July 2012]

governance compliance (90 per cent) is a main motivation factor for companies in oil and gas sector to adopt SRM.

Table-2. Percentages of PLCs with SRM Driving Factors

| SRM Drivers | Percentage |
|--------------------------------------|------------|
| Good business practice | 71.7 |
| Corporate governance compliance | 71.7 |
| Improve risk-based decision making | 69.8 |
| Regulatory compliance | 64.2 |
| Operational effectiveness | 54.7 |
| Board of Directors (BOD) request | 32.1 |
| Long-term shareholder value | 26.4 |
| Occurrence of unexpected risk events | 24.5 |
| Value added function | 22.6 |
| Corporate reputation | 18.9 |
| Technological advancement | 5.7 |
| Competition | 5.7 |
| Stakeholder pressure | 1.9 |

Table-3. SRM Driving Factors According to Sectors

| Percentage within Type of Sector | | | | | |
|----------------------------------|---------------|--------------|-----------|------------|-----------|
| SRM Drivers | Manufacturing | Construction | Oil & Gas | Plantation | ʻp' value |
| Good business practice | 76.2 | 61.1 | 70 | 100 | 0.424 |
| Improve risk-based | 76.2 | 72.2 | 50 | 75 | 0.500 |
| decision making | | | | | |
| Comply with regulatory | 66.7 | 66.7 | 60 | 50 | 0.912 |
| Technological | 9.5 | 0 | 0 | 25 | 0.617 |
| advancement | | | | | |
| Corporate governance | 52.4 | 89 | 90 | 50 | 0.028** |
| compliance | | | | | |
| Occurrence of unexpected | 33.3 | 11.1 | 30 | 25 | 0.425 |
| risk events | | | | | |
| Corporate reputation | 14.3 | 16.7 | 20 | 50 | 0.410 |
| Board of Directors | 23.8 | 55.6 | 40 | 25 | 0.700 |
| (BOD) request | | | | | |
| Operational effectiveness | 57.1 | 61.1 | 50 | 25 | 0.601 |
| Long-term shareholder | 43 | 11.1 | 30 | 0 | 0.086* |
| value | | | | | |
| Competition | 9.5 | 4.8 | 0 | 0 | 0.699 |
| Stakeholder pressure | 0 | 0 | 0 | 25 | 0.006*** |
| Value added function | 14.3 | 22.2 | 30 | 50 | 0.414 |

Note: *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent

Based on the findings, it showed that the integration between sustainability and risk management not only strengthen the corporate governance, but also, most importantly, it ensured the survival of the company. Generally, the practice of sustainability in Malaysia is still at an early stage and the encouragement towards the environmental initiatives by the Malaysian companies is critically needed.

There was an association between stakeholders, pressure and type of sectors at the 1 percent significance level (p = 0.006). The result indicated that the industrial sectors exposed more to the environmental risk and were tend to receive greater pressures from the stakeholders as

mentioned by González-Benito and González-Benito (2006). In addition, there was a relationship between corporate governance compliance and type of sectors at the 5 per cent significance level (p = 0.028). Complying with the corporate governance requirements is essential for a company to identify sustainability risks and opportunities in fulfilling stakeholder's needs and in align with the study by Benn *et al.* (2009). Lastly, there was also an association between long-term shareholders value and type of sectors at the 10 per cent significance level (p = 0.086). According to Jondle *et al.* (2013) the integration of ethical values in risk management would be an advantage to the company to strategically protect the shareholder value in the long term.

4. CONCLUSION

This paper has provided the insights of the sustainability in addressing the potential opportunities for improvement in enterprise risk management (ERM) practices. Based on the various literatures, it can be anticipated that the integration of sustainability in the risk management provides the opportunities for the businesses to boost their profit as well as demonstrates the environmental and social awareness. The result of the ERM study shows in terms of the empirical evidence on the weaknesses of ERM practices. The study suggested for the improvement by integrating ERM with sustainability as not only for creating value but also for company's survival. The current study on SRM practices shows that most of the Malaysian listed companies especially in plantation sector realized the importance of SRM as for good business practices and the adoption of SRM is not only be driven by corporate governance compliance. Thus, the integration of sustainability into the business plan would help Malaysian companies to manage environmental, social and financial risk efficiently. In essence, the sustainability encourages the better lives for people, preserve the world's environment as well as ensure the longer term of company's survival.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

Anderson, D., 2007. Sustainability risk management as a critical component of enterprise risk management:

Global warming - climate change risks. In International Insurance Society Seminar, Berlin, 2007.

Anderson, D.R. and K.E. Anderson, 2009. Sustainability risk management. Risk Management and Insurance Review, 12(1): 25-38.

Asian Sustainability Rating, 2010. Available from http://www.asiansr.com/Sustainability in AsiaESG Reporting Uncovered.pdf [Accessed 12 July 2012].

- Barton, T.L., W.G. Shenkir and P.L. Walker, 2002. Making enterprise risk management pay off: How leading companies implement risk management. New Jersey: Financial Times/Prentice Hall PTR, Pearson Education, Inc.
- Benn, S., D. Dunphy and A. Martin, 2009. Governance of environmental risk: New approaches to managing stakeholder involvement. Journal of Environmental Management, 90(4): 67–75.
- Bonini, S. and S. Gorner, 2011. The business of sustainability: McKinsey Global Survey results. Available from

 http://www.mckinsey.com/insights/energy resources materials/the business of sustainability mckinsey global survey results [Accessed January 27, 2012].
- COSO, 2003. Enterprise risk management framework: Draft. Available from http://www.tripadvisor.com/
 [Accessed September 17, 2005].
- COSO, 2004. Enterprise risk management integrated framework. New York: AICPA.
- Crump, R., 2008. Sustainability: The new ERM. London: Euromoney Trading Limited.
- Deloach, J., 2000. Enterprise-wide risk management: Strategies for linking risk and opportunities. London: Financial Times/Prentice Hall.
- Fatemi, A. and M. Glaum, 2000. Risk management practices in German firms. Journal of Management Finance, 26(3): 1-17.
- Frigo, M.L., R.J. Anderson, C. Landes and J. Thomson, 2011. Embracing enterprise risk management practical approaches for getting started. Committee of Sponsoring Organizations of the Treadway Commission COSO. Available from http://www.coso.org/documents/EmbracingERM-GettingStartedforWebPostingDec110_000.pdf [Accessed January 10, 2013].
- Gardiner, T. and M. Endicott, 2011. ERM and sustainability: Beyond buzzwords. Canadian Underwriter, 78(3): 20-23.
- Godfrey, P.C., C.B. Merrill and J.M. Hansen, 2009. The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. Strategic Management Journal, 30(4): 425–445.
- González-Benito, J. and O. González-Benito, 2006. A review of determinants factors of environmental proactivity. Business Strategy and the Environment, 15(2): 87-102.
- Heinrich, R., R. Amhof and L. Caduff, 2010. Sustainability risks: Fitness check for executive and supervisory boards.

 Available from https://www2.eycom.ch/publications/items/board/2010_sust_risk/2010_EY_SR_e.pdf
 [Accessed 6 September 2012].
- Jondle, D., T.D. Maines, M.R. Burke and P. Young, 2013. Modern risk management through the lens of the ethical organizational culture. Risk Management, 15(1): 32–49.
- Kleffner, A.E., R. Lee and B. McGannon, 2003a. The effect of corporate governance on the use of enterprise risk management: Evidence from Canada. Risk Management and Insurance Review, 6(1): 53-73.
- Kleffner, A.E., R. Lee and B. McGannon, 2003b. Stronger corporate governance and its implications on risk management. Ivey Business Journal, 67(5): 4-10.

- KPMG International, 2011. Corporate sustainability: A progress report. Available from https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/corpora te-sustainability-v2.pdf [Accessed March 1, 2013].
- Laszlo, C., 2008. Sustainable value: How the world's leading companies are doing well by doing good. Stanford, CA: Stanford University Press.
- MacDonald, D.B., 2011. When risk management collides with enterprise sustainability. Journal of Leadership, Accountability, and Ethics, 8(3): 56-66.
- Manab, N.A., 2009. Enterprise-wide risk management (EWRM) implementation, compliance and value creation. Thesis, UiTM, Malaysia.
- Manab, N.A., M.R. Hussin and I. Kassim, 2007. Enterprise-wide risk management (EWRM) practices among listed companies in Malaysia. Proceeding MFA 9th Annual Conference, Shah Alam, Selangor.
- Manab, N.A., I. Kassim and M.R. Hussin, 2010. Enterprise-wide risk management (EWRM) practices:

 Between corporate governance compliance and value creation. International Review of Business
 Research Papers, 6(2): 239-252.
- Miccolis, J. and S. Shah, 2000. Enterprise risk management: An analytic approach: Tillinghast-towers Perrin monograph. Available from www.tillinghast.net/ [Accessed April 8 2005].
- Panning, W.H., 2006. Making ERM happen. Best's Review, 1. Available from http://www.willisre.com/documents/publications/Analytics/Analytics/Enterprise Risk Manage ment/Panning Best Review column 17 January 2006 Making ERM Happen 1.pdf.
- Securities Commission, 2012. Malaysian code on corporate governance 2012. Kuala Lumpur: Securities Commission.
- Stroh, P.J., 2005. Enterprise risk management: At united healthcare. Strategic Finance, 87(July): 27-35.
- Swiss Reinsurance Company, 2012. Swiss Re's sustainability risk framework. Zurich, Switzerland: Swiss Re.
- Yilmaz, A.K. and T. Flouris, 2010. Managing corporate sustainability: Risk management process based perspective. African Journal of Business Management 4(2): 162-171.

BIBLIOGRAPHY

KPMG, 2001. Enterprise risk management: An emerging model forbuilding shareholder value. Available from http://www.kpmg.com [Accessed September 15, 2010].

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