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Assessment and Management of Risks of Housing Developers: Malaysian Perspectives

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Abstract

Housing property industry is highly risk prone, with complex and dynamic housing project development and environment creating an atmosphere of high risk and uncertainty. The industry is subjected to various technical, socio-political and business risks. In light of this, it can be said that an effective system of risk assessment and management remains a challenging task for the industry practitioners. The objective of this study is to identify and assess the significant risks encountered by the housing property companies in Malaysia as well as to evaluate its risk management practices with specific focus to the extent of implementation of Enterprise Risk Management (ERM).

Keywords: Risk, enterprise risk management, housing developer

1. INTRODUCTION

The housing property industry faces a lot of risks and uncertainty than other industries. The process of housing development requires a myriad of people with diverse skill sets and coordination of a vast amount of complex and interrelated activities. According to the real estate development view, housing project development is a complex, entrepreneurial, high risk, capital intensive and a long term multidisciplinary endeavor (Ball, 2010).

The business nature of the housing industry is cyclical which accounts for the fluctuation performance of the housing developer. It is highly sensitive to the macro-economic outlook. When the global economy is bearish, developer would obtain instantaneous impact on their business. For example, the 2008 global credit crunch, which was started by the subprime mortgage crisis that burst the price bubble followed by a chain of financial failures, saw many housing developer in Malaysia experiencing serious impact on their businesses on which real estate demand slowed down and assets price dropped (Ong, 2011).

Some of the risks faced by the housing developers includes a downturn in the property market, increases in interest rates, increases in construction costs during the project, changes in supply and demand, changes to the laws relating to property development, unexpected delays, etc (Yardney, 2002). For over two decades, this industry also has been grappling with problems related to the housing industry that includes delayed projects, sick projects and abandoned projects. This issue has caused hardship to many buyers and remains unresolved till today.

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The enterprise risks mentioned above should be managed effectively and companies should focus not only on the root cause of the problem but also pay attention to every level of the work in the organization either at project level, strategic business level or corporate level. In recent years, a paradigm shift has occurred regarding the way organizations view risk management. The trend is moving from a silo-based perspective to a holistic view of risk management that is commonly referred to as Enterprise Risk Management (ERM). ERM is a process that is an organized and systematic way of managing risks throughout the organization. ERM is not a once-done activity, but an ongoing process (Daud, 2008). In addition to that, findings from survey done in the construction industry in Germany had posited that the ERM has been categorized as an important element of the key success factor for organizational performance (Roland Berger Strategy Consultants, 2004).

Nowadays, ERM system has been widely adopted by many companies in the U.S such as GE, Wal-Mart, Bank of America (Drew et al., 2005) and some of the companies have shared their success stories of ERM implementation including PNC Bank, The Hartford and AEGON Canada, Inc. (ERM Symposium, 2005). Results from the study done by researchers on ERM's adoption by Malaysian Listed Companies revealed that some of the companies in Malaysia such as Khazanah Nasional Berhad (Daud, 2011), Telekom Malaysia Berhad; Tenaga Nasional Berhad; MMC Corporation Berhad; Tradewinds (Malaysia) Berhad (Golsan & Rasid, 2012) have already adopted the ERM framework to their advantage. In Malaysia, the research areas include the level of adoption of ERM in Public Listed Companies, Multi-National Companies and Government-Linked Companies. However, research in these areas is still scarce and limited. Therefore, this study is undertaken to fill-in the gaps by focusing on the extent to which ERM implementation is carried out specifically in relation to the housing property industry in Malaysia.

For that reason, the objectives of this study are two-fold. Firstly, is to identify and to assess the significance risks faced by the housing developers; secondly, is to examine the risk management practices by the housing developers with specific focus to the extent of ERM implementation.

2. LITERATURE REVIEW

2.1 Risks an Housing Property Company

Balton, Shenkir and Walker (2002) define the term "risk" as including any event or action that "will adversely affect an organization's ability to achieve its business objectives and execute its strategies successfully". The COSO framework (2004) defines risk as the possibility that an event will occur and adversely affect the achievement of objectives.

In the context of housing property industry, a working definition of risk and uncertainty would be along the lines of risk and certainty characterize situations in which the actual outcome for a particular event or activity is likely to deviate from the estimated or forecasted value. Risk and uncertainty can also be associated with the assumptions about weather, inflation, strikes and other external aspects of projects (Othman, A., 2010).

Millington (2000) and Ball (2010) grouped the risks in the housing development into several clusters:

(1) Planning Risks. The major risks that are likely to arise at the planning stage are that insufficient development will be allowed on a site, that onerous and costly conditions may be attached to an approval, that the approving authority may require expensive planning contributions, or that no approval at all may be given (Millington, 2000). These kinds of risks involve land value risk: land acquisition land exploitation risk, planning permit risk.

(2) Operation risks. These risks involve construction risk, supply chain risk, technological risk, etc. The main risks with respect to construction work are that site conditions may result in unanticipated site work being required, the start of construction may be delayed, completion of construction may be delayed, construction work may cost more than the estimated value (possibly because of increased labor and material charges) and that other problems such as the non-availability of materials, industrial problems, and bad weather may result in an extended construction period with resultant cost increases and delayed receipt of returns from the completed development (Millington, 2000)

(3) Financial risks. The main areas of risk with respect to finance is that loan funds will be unavailable or insufficient, that the rate of interest payable on loan funds will be too high, that rate will increase during the development period, and that use of loan funds will be withdrawn before the completed development is marketed successfully. The developer should seek to ensure that the funds will be sufficient to allow successful completion of the project with a provision for contingencies such as cost over-runs or extended construction or marketing periods (Millington, 2000). Financial risk consists of market risk, credit risk and liquidity risk (Vandemaele, 2009).

(4) Business, strategic and reputation risks. Business risk refers to the typical risks a company faces such as uncertainty about the demand for products, the risk associated with the actions by competitors, etc. Strategic risk refers to the risk associated with significant investments for which high uncertainty exists about success and profitability (Crouhy et al., 2006). Emblemvåg & Kjølstad (2002) defined strategic risk as “risks that arise in pursuit of business objectives”. Reputation risk refers to the risk that a good reputation, which can lead to value creation, turns to be a bad reputation and, as a result, company value is destroyed.

(5) Legal, Tax and Regulation risks. It also concerns the risk of not obtaining the required permits and the risks involved with buying existing companies to acquire land positions. Another example in legal risk is involvement in lawsuits or the infringement of legal norms (Vandemaele, 2009). Example of tax risk is a change in tax law that may have vast implications for a firm.

(6) Political Risks. Changes to the laws and regulation relating to property development include housing development law, environmental controls, landlord and tenancy controls, stamp duty, land tax, income taxation and capital gains tax that could adversely affect the profitability and viability of property development project (Yardney, 2005).

2.2 Risk Management and Enterprise Risk Management

The art of risk management is to identify risks specific to an organization and to respond to them in an appropriate way. Two decades ago risk management was not considered as a comprehensive and strategy-focused risk management discipline. Rather it was influenced by the managers' insight of risk (Berenger, Justus & Ansary, 2016). However, the increasing risky environment in which debacle can have major and far-reaching consequences requires the management of the organization adopt a new perspectives on risk management that is referred to as Enterprise Risk management (ERM). It should be one that not only prevents debacles but also enhance shareholder value.

Lam (2000), defines ERM as an integrated framework for managing credit risk, market risk, operational risk, economic capital, and risk transfer in order to maximize firm value. (Makomaski 2008) defines ERM as a decision making, discipline that addresses variation in company goals. Perhaps the most acceptable one is the definition by the Committee of Sponsoring Organization of the Treadway Commission (COSO) (2004) which defines ERM as;

“A process, affected by an entity's board of directors, management, and other personnel, applied in a 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 achievements of the entity's objectives.”

There are two main role played by ERM. First, is to integrate and to coordinate all types of risks across the entire organization; Second, is by using ERM; users are able to identify any potential events that may affect the organization.

ERM is represented as a three-dimensional matrix of eight elements deemed essential for achieving strategic, operational, reporting and compliance goals. Firstly the *internal environment* (1) determines how risk is perceived and addressed by the organization, defining its approach to risk management. *Objective setting* (2) is the process by which the entity's goals are defined and communicated across the organization. *Event identification* (3) encompasses the recognition of internal and external events (both risks and opportunities). *Risk assessment* (4) is the analysis and evaluation of potential risks, considering their frequency of occurrence and their impact. *Risk response* (5) covers the identification of proper actions for responding to risks, and aligning them with the organization's risk appetite. *Control activities* (6) are the policies and procedures for ensuring that risk responses are effectively carried out. *Information and communication* (7) denotes the mechanisms for ensuring effective communication and flows of information across the organization. Finally, *monitoring* (8) refers to the ongoing management activities for verifying the effectiveness of the processes put in place.

The goal of an ERM initiative is to create, protect and enhance shareholder value by managing the uncertainties that could either negatively or positively influence achievement of the organizational objectives. Another interesting value about ERM is that “a culture of risk awareness is created” in business organization (Moeller, 2007).

2.3 ERM and its Implementation

Many ERM models have originated from the banking, finance and insurance industry as banks and financial institutions have exhibited leadership in risk management practices for the past few decades (Teoh, 2009). The level of implementation of ERM is at a more mature stage in some industries, for example, Mikes (2008) noted a widespread application of enterprise-wide risk management in the financial services industry.

In the insurance industry, Acharyya and Johnson (2006) found that the level of understanding of nature of ERM varies significantly between companies and between different parts of the same organization, within a single discipline i.e. finance. Several empirical studies have investigated the determinants or factors associated with ERM adoption and implementation in firms. The Casualty Actuarial Society (CAS, 2003) reported six factors that led an organization to practice; (1) more complicated risks faced by the business organization nowadays such as the advance of technology, globalization, the uncertainty of irrational terrorist activity; (2) pressure from regulators, rating agencies, stock exchanges, institutional investors and corporate governance oversight bodies; (3) the increasing tendency towards an integrated or holistic view of risks; (4) the growing tendency to quantify risks; (5) boundary-less benchmarking; (6) view risk as opportunity.

In Malaysia, several researchers have examined company implementation of ERM (see for example, Suria, Salinah & Che Ruhana (2015); Rasid & Rahman (2009); Teoh (2009); Daud (2008); Yazid (2008). Rasid & Rahman (2009) study on the stage of ERM development in the financial institutions in Malaysia. Their findings were consistent with other studies done in the global context (Mikes, 2008; Beasley et al., 2005). The study revealed that most of the firms have either implemented a complete or partial ERM framework. The study also further indicated that the proportion of firms that have a complete ERM in place and partial ERM in place was almost equal, with 43% with complete and 47.2% with a partial ERM in place. Their study found that the financial institutions tend to adopt ERM because of the requirements set by regulators. This finding is consistent with Beasley et al. (2005) that banking and insurance companies are more likely to implement ERM due to explicit calls for more effective risk management emerging from industry regulators or leaders.

3. RESEARCH METHODOLOGY

3.1 Data and Sample

This study uses questionnaires for collection of data from the top management of the company that includes Board of Directors, Chief Executive Officers, Chief Finance Officer, Chief Risk officer and Chief Internal Auditors. The population of this study was the private housing developers listed on the Bursa Malaysia. The private housing developers were chosen because they represent the largest providers of medium and high cost housing in Malaysia (Goh, 1997). Moreover, they played a greater role in providing houses under the National Housing Policy. All companies were selected regardless of capital contribution, place or number of employees. Of the 90 respondents, 50 respondents (about 56%) responded to the questionnaires.

4. RESULTS AND DISCUSSION

4.1 Profiles of the Company

The majority of the companies who responded to this study had been established for more than 20 years representing the highest frequency of 66%, 33 companies out of 50 companies. About 7 (14%) ranged between 16 to 20 years, 7 (14%) ranged between 11 – 15 years and about 3 (6%) between 6 to 10 years. None of the companies belonged to the range of 1 to 5 years. This is to justify that the majority of the property companies listed in the Bursa Malaysia are an experienced companies with more than 20 years in the industry. Refer to figure 1.

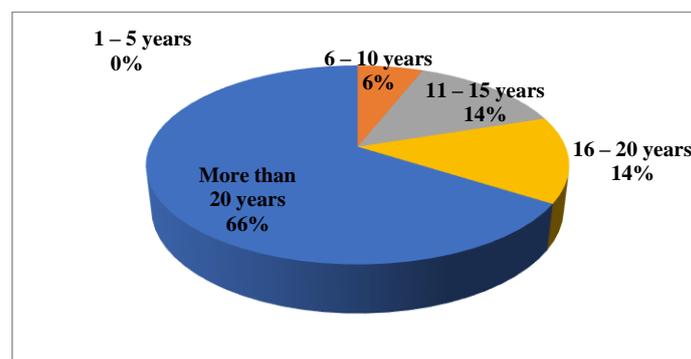


Figure 1: Years of Company's establishment

4.2 Category of Risks Significant to the Company

This study made an assessment on the risks encountered by the housing developers listed in the Bursa Malaysia. The likert-scales ranging of 1 for low significance to 7 for high significance were used to assess the risks. The results are shown in Table 1 below.

Table 1. Categories of risks that are significant to the company

	Yes	% Yes	Mean	S.D	Rank
Planning risks					
Land value risk	33	66.0	2.97	1.34	10
Land exploitation risk	29	58.0	3.00	1.41	8
Planning permit risk	38	76.0	3.13	2.06	6
Operation risk					
Construction risk	48	96.0	3.72	1.39	2
Technological risk	40	80.0	2.98	1.19	9
Supply chain risk	40	80.0	2.81	1.37	12
Financial risks					
Interest rate risk	47	94.0	3.02	1.41	7
Market risk	48	96.0	4.89	1.36	1
Credit risk	44	88.0	3.20	1.63	5
Business risks					
Strategic risk	42	84.0	3.33	1.44	3
Reputation risk	44	88.0	3.30	1.68	4
Legal, tax and regulation risks					
Legal risk	46	92.0	2.89	1.55	11
Tax risk	41	82.0	2.10	1.02	14
Regulation risk	46	92.0	3.02	1.51	7
Political risk	43	86.0	2.75	1.59	13

It was found that market risks are rated significantly higher as compared to the other risks with a mean score of 4.89. It is followed by construction risks (3.72); strategic risks (3.33); reputation risks (3.30); and credit risks (3.20). These risks are the top five risk areas encountered by the housing developers in Malaysia. The risks that are rated significantly low by the companies are tax risks (2.10) and political risks (2.75). These risks are the least risks encountered by the housing developers.

Housing developers ranked market risk listed in the financial or economic risks as the highest risk significant to the business due to the fact that the nature of the property business is very much dependent on market conditions, especially on supply and demand of houses (Hasmori (2012). The result is supported by Fisher (2004) who claimed that property development is a response to price signals from property market. The group is exposed to market risks from the state of property prices and construction costs. The result is consistent findings of Teoh A.P. (2009) and Ernst & Young (2011). Research of Ernst & Young, Malaysia ("Ernst & Young") and The Institute of Internal Auditors Malaysia (IIA Malaysia) in 2011 on risk management practices in Malaysia identified the five top risk areas as: (1) market dynamics risks arising from the changing business environment; (2) people risks; (3) liquidity and credit risks; (4) value chain risks; and (5) business planning and resource allocation risks. Findings from the 2015 Strategic RISK Asia-Pacific Benchmark Survey's risk has ranked the economic risks as one of the top risks encountered by majority of the firms around the world (Asia Risk Report 2015). Until now, the economic risks still become the top priorities of risks as per mentioned in the Global Risk Report 2017.

Many organizations appear wary about liquidity in the market and their access to available credit in the wake of the 2008 worldwide credit crunch. Of particular concern has been the ability to sustain operations in the event that funding is not available to sustain working capital. It is true especially during a market downturn in an environment in which internally generated funds would not be sufficient. In an interview done with a key player in the industry from the National Council Member of the REHDA Malaysia, the interviewee pointed out that the strategic risks and operational risks are among the most important risks to be managed.

The researcher has made an analysis on the risk governance structure (refer Table 2). The study found that majority of the housing developers had a formal risk governance structure. About 72% of the companies being surveyed have a risk committee with the appointment of a risk manager at about 60%. The majority has a specific person managing risk such as the chief risk officer, chief finance officer, chief executive officer or head of internal auditor. The majority of them has ERM practices for more than 5 years, which indicated that the housing

developers listed on Bursa Malaysia have begun to embrace the ERM COSO framework since its introduction in 2004.

Table 2. Profile of risk management structure

Variable	Frequency	Percentage (%)
Existence of Risk Committee	36	72
Appointment of Risk Manager	30	60
Existence of Risk management System	50	100

This result is in line with findings of Ernst & Young (2011) who posited that many organizations believe they have a formal and relatively mature governance, risk and compliance frameworks in place. This indicates that the efforts taken by the regulators to enhance the Governance, Risk and Compliance (GRC) standards in Malaysia since the early 2000s may have paid off as mentioned in the report (Ernst & Young, 2011). Study done by Sara (2014) confirm that about 75% of property companies had ERM in place. However, for those who have no formal risk structure in place, they relied on informal processes based on long-term experience and shared responsibilities of senior management.

4.3 Extent of ERM implementation by housing developers

Descriptive statistics (means and standard deviations) were computed based on the data collected from questionnaire by using seven-point Likert scale of 1=strongly disagree and 7=strongly agree to measure the extent of ERM implementation. Table 3 below shows the result of descriptive statistics of the variables.

Table 3. Descriptive statistics for the extent of ERM implementation

Variables	Min	Max	Mean	S.D	Rank
ERM Dimensions					
Internal Environment	4.88	7.00	5.88	0.63	2
Objective setting	5.00	7.00	5.91	0.66	1
Event Identification	5.00	7.00	5.78	0.59	4
Risk Assessment	3.83	7.00	5.54	0.83	8
Risk Response	5.00	7.00	5.70	0.70	5
Controls	4.75	7.00	5.69	0.67	6
Information and Communication	5.00	7.00	5.81	0.65	3
Monitoring	4.33	7.00	5.68	0.82	7

The table shows mean observed value ranging from 5.54 to 5.91 for the variables of the extent of ERM implementation. For the standard deviation, observed variables are range from 0.63 to 0.83. These indicate that the data has captured sufficient variation with regards to the extent of ERM implementation in the housing developers.

Analysing the mean score of the individual elements of the ERM COSO components, all components or dimensions of ERM COSO have a mean value more than 5. This study discovered that the ERM dimension of objective setting received the highest mean score of 5.91. This aligned with the ERM objective as derived from COSO definition, in which ERM is a process that will help a company meet its objectives. COSO notes that objective setting is one of the first steps in an ERM process and that objective setting is a precondition to such components or dimensions as risk assessment, risk response and others. Gates' et al. (2012) study posits a positive association between objective setting and other dimensions.

The second in the list was internal environment (5.88); followed by information and communication (5.81); event identification (5.78); risk response (5.70); controls (5.69); monitoring (5.68). The internal environment has been ranked as the second highest dimension of extent of ERM implementation by the companies. This is aligned with the COSO ERM framework that placed the internal environment at the top compared with other dimensions. The reason behind that is COSO looks at this component in a more future philosophy-oriented approach (COSO, 2004). Thus, this indicates that the companies' management philosophy, BOD, integrity and values, commitment to competence, risk appetite, organization structure, assignment of authority and responsibility and human resource policies and practices are in sync at all good establishments.

Control activities have been ranked as the second lowest amongst dimension by the companies. According to Moeller (2007), an organization faces a more difficult task in identifying control activities to support their enterprise risk management framework as control requires proper procedures embodied in the business operation. Perhaps contributing to this result could be the fact that many companies prefer to outsource their internal audit function. Teoh (2009) reported that out of the publicly listed companies in Malaysia being surveyed, about 91%

of them outsourced the internal audit function and about 65% of the companies did not have audit staff certified as a Certified Internal Auditor (CIA).

The lowest mean score is for risk assessment (mean value 5.54). The reason for this is probably the low score given by the respondents to the quantitative method used in assessing significant risks, the minimum score given to risk assessment is as low as 3.83. There are two techniques in assessing the significant risks, i.e., quantitative methods (e.g., Monte Carlo simulation, sensitivity analysis, etc.) and qualitative methods (e.g., brainstorming, assumptions analysis, interviews, risk registers, etc.). The majority of the housing developers ranked qualitative methods as the most frequent methods used in assessing significant risks compared to quantitative methods. Applying quantitative methods requires an understanding of technical and practical aspects; this in turn means that these many companies are not yet using these methods extensively.

5. CONCLUSION, LIMITATION OF THE STUDY AND FUTURE RESEARCH

Risks need to be managed effectively. Essentially, the risk management concept and its efforts have becoming a growing concern among public listed companies in Malaysia. Result from this study had revealed that the ERM implementation amongst housing developers listed in the Bursa Malaysia is found to be encouraging. These companies have realized the needs of managing enterprise-risks holistically with response to the changing, yet challenging business environment especially in an industry like housing property development. This is similar with what has been reported in other countries (Sara, 2014; Teoh, 2009; Desender, 2007; Walker et al., 2002).

The higher adoption rate of more robust system of managing risk by housing developers can be associated with the severe distress experienced from events such as the Asian financial crisis in 1997/1998 and also the 2008 global credit crunch when real estate demands slowed down and prices of assets dropped. Furthermore, the maturity of housing developers in the business has strengthened the adoption rate in the industry. The majority of the housing developers listed on the Bursa Malaysia were in the business for more than 20 years. Based from this study, 33 of the 50 companies, representing 66% of the sample has been in the business for more than 20 years. This study supported Daud (2008) findings that posited the longer companies had been established the higher more likely that they had ERM in place or the more likely they were to implement ERM in their organizations. Her results also revealed that the majority of firms whose financial statements the Big Four had audited had adopted ERM. Another motivating factor for the developers to have more robust systems in managing risk is perhaps due to the assessment of their business performance (qualitative and quantitative measures) annually by The Edge Malaysia to be nominated as the top 30 developers in Malaysia. As quoted from Datuk Wira Chor Chee Heung, the Housing and Local Government Minister in his speech during the TPDA 2011 ceremony:

“...The Top Property Developers Award could be a vehicle and driving force to benchmark the performance of the top property developers in the country. It is the government’s desire that through the practice of excellence, the property industry will be further challenged to greater heights while at the same time contribute to enhance the quality of life for the community”

This study has its own limitations, just like any other study. First, this study is quantitative, using questionnaire as a primary data source. The information collected was self-reported, and possibly some respondents may not have replied in a careful manner. The measurements of variables are based on the perceptions of respondents who are Board of Directors, CEO, Risk Manager, Finance Manager and Head of Internal Audit with varying involvement in risk management. As such, their observations may be open to bias. Furthermore, they may not give an exact view about what actually the organization does in practice. This study relies on the interview method to support the findings obtained from the questionnaires. Second, the sample used in this study is concentrated on housing developers (private) listed on the Bursa Malaysia. Thus, the findings of the study may not be generalized to the other industries in the same domain (listed in the Bursa Malaysia) such as construction companies. Besides it cannot be generalized to other housing developers not listed on the Bursa Malaysia as well as the public companies. There are different categories of housing developers in Malaysia, including private companies and public companies. They can be differentiated by their size, number of employees, size/number of houses developed and firm experience.

Based on the limitations of the study, qualitative research should be pursued to capture more in-depth data and practical discovery of the extent of ERM implementation in the housing property industry as well as in other industries. The in-depth study can benefit the researcher of the issue of bias and also in getting a clearer picture on how ERM actually works in practice in a Malaysian organization.

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