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The Effect of Enterprise Risk Management Practice on SME Performance

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Abstract

Research Aims - This study aims to identify the effect of Enterprise Risk Management (ERM) on Small and Medium Enterprise (SME) performance.

Design/methodology/approach - This study employed a multiple regression analysis. SME performance was treated as dependent variable, whereas ERM was the independent variable.

Research Findings - Multiple regression analysis indicated that ERM has a significant effect towards firm performance. However, only one of the ERM elements namely objective determination has a significant effectt on SME performance.

Theoretical Contribution/Originality - This study contributes to the body of knowledge from the standpoint of ERM by testing the effect of each element of ERM described under the Committee of Sponsoring Organizations of the Treadway Commissions (COSO) towards firm performance. Perhaps, each element of the ERM might has different effect towards an organization. Thus, Resource Based View (RBV) Theory was supported which hold that the organisational resources are the main factor to influence the organisational performance.

Managerial Implication in the South East Asian context - ERM conducted in SMEs are expected to be able to develop strategies in minimising the risks that may or may not be faced by SME firms. In fact, an effective risk management can assist SME managers and owners in achieving their defined business objectives. Thus, risk management enhances the firm's value, maximise profitability, and consequently improve SME performance.

Research limitation & implications - This study has improved the measurement of ERM practices among SMEs and identified ERM elements that affect SME performance in particular.

Keywords - SME, enterprise risk management, ERM, COSO, performance

INTRODUCTION

Small and Medium-Sized Enterprises (SMEs) are known as one of the pillars of the Malaysian economy. According to the Malaysian Department of Statistics in the SME Annual Report 2017/2018, the contribution of SME Gross Domestic Product (GDP) to Malaysia's overall GDP has increased by 0.5%, which is from 36.6%

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in 2016 to 37.1% in 2017. In addition, SMEs become an important source of employment. It also maximises efficiency of resource allocation and distribution by mobilising and utilising human resources in addition to local materials (Rosli & Norshafizah, 2013). The major increase of SME participation in Malaysia plays an important role in the country's economic development (Aziz & Mahmood; Idar & Mahmood; Rosli & Norshafizah, 2013). According to the Economic Census 2016, the SME business establishment in Malaysia recorded a significant statistic of 98.5% or 907,065 SMEs.

However, there are many challenges and difficulties faced by SMEs which have led to the shorter tenure to remain in the market. In fact, Yusuf and Dansu (2013) highlighted that 70% of SMEs could not last for a long time. In other words, only a small proportion of SMEs remains in the market for more than five years. There are several obstacles of SMEs to remain in the market such as inadequate and incomplete facilities, insufficient working capital, bureaucratic matters, and ineffective management. In addition, SME sector also expose to a high costs of conducting a business due to relatively low production and consumer demand for the products, variations in regulatory agencies and taxes (Yakob, Ramli & Bakar, 2015). Therefore, these obstacles lead to the failure of SMEs to achieve business objectives and subsequently affect SMEs performance.

Any obstacle that can interfere with the achievement of business objectives can be referred to as risk. Therefore, in order to overcome the risk, knowledge and ability to manage the risk is essential in ensuring the sustainability of SMEs in the market. Florio and Leoni (2017) demonstrate that enterprise risk management (ERM) as a collective and comprehensive approach in managing organizational risk had eventually enhances organisational performance. Furthermore, organisations may reduce direct and indirect costs such as financial issues and income fluctuations through ERM. ERM implementation in organisations such as SMEs can improve risk awareness among entrepreneurs and their employees, thus may enhance decision-making as well as enterprise value optimisation (Soltanizadeha, Siti Zaleha, Golshan, Quoquab & Rohaida Basiruddin, 2014). Moreover, ERM covers a broader range of risks such as environmental, compliance, financial and strategic (Narvaez, 2011). Besides, ERM aims to contribute to the enhancement of shareholder value (Liebenberg & Hoyt, 2003). ERM techniques are currently considered more appropriate and practical compared to traditional risk management (TRM) because of some of the weaknesses inherent in TRM. Among them, TRM is based on a silo approach in which risks are managed separately between departments and not as a whole (Kleffner, Lee & Mcgannon, 2003). Indeed, TRM only addresses pure risks that include hazards and operational risks affecting the organization. The risks in the TRM are not interdependent and are rather defensive as the TRM focuses more on the protection of the organization against bad or negative financial scenarios (Narvaez, 2011).

Given that SMEs are facing with various risks and ERM as a mechanism that can manage the risks effectively in order to improve the organisation performance, this study aims to examine the effectof ERM implementation on SME performance. Indeed, the study on ERM and its relationship with the SME performance are considered timely as SME encounters many challenges in managing risk of their daily business. In addition, effective ERM helps entrepreneurs to handle their business in effective manner by maintaining the core elements of SME operations as mention in Star Online October 9 2017. Previous studies have also found that very few researches have examined the relationship of risk management factors on SME performance (Lukianchuk, 2015; Angeline & Teng, 2016). The results of this study are expected to provide input to the related parties and stakeholders in understanding the importance and necessity to implement ERM. Besides, ERM may be recommended as a requirement to start a new organisation, especially SMEs.

THEORETICAL BACKGROUND

Resources are an essential input for managers, entrepreneurs, scientists, financial analysts, or even accountants in carrying out their daily activities. Basically, resources can be in the different forms such as financial, human capital, expertise, strategy, information that derive from internal or external resources. In fact, internal resources and capabilities influence the strategic decisions made by firms to remain competitive in the industry. Furthermore, firm's internal capabilities could add value to the customer value chain, product diversity, and new market development. Previous studies have been formulated the concept of utilising the firm's internal resources in order to gain competitive advantage of the firms, which then known as Resource Based View Theory (Khotimah, 2014). RBV holds that the organisational resources are the main factor to influence the organisational performance (Conner, 1991).

Generally, each firm or organization has performanced differently. According to the RBV theory, the different performance across firms is due to the different possession of internal resources. Furthermore, RBV also stated that competitive advatanges are derived from internal sources. This argument is however contrast with industrial organization theory which highlighted that the competitive advantage of firms or organization is determined by external business factors (Purnomo, 2013). Moreover, RBV perceives that firms are competing with each other using their own resources and capabilities (Peteraf & Bergen, 2003). In fact, Khotimah (2014) further highlighted that RBV views firms as a group of resources and capabilities owned by the firms.

Specifically, RBV theory focuses on the firm's ability to maintain a combination of resources that are not owned or built in the same way by other competitors. Thus, the differences in the firm's resources and capabilities as compare to other competitors would create competitive advantage for firm. It then gradually improves firm performance.Therefore, the emphasis of RBV theory is creating competitive advantages by utilizing all its available internal resources to drive better firm performance than other firms.

One of the internal resources that been a focal discussion in recent years is ERM.

ERM is a corporate strategy that been used to manage risks in comprehensive manners. Different businesses are facing different risks that firms need to face. Firms have their own strategies developed to manage these risks. The risk management strategy is the firm's ability to integrate existing firm resources. Risk management strategies carried out by a firm cannot be owned or developed in the same way by other firms. This is in line with the concept of RBV theory. RBV theory views firms as a group of resources and capabilities owned by firms. This theory focuses on the firm's ability to maintain a combination of resources that are not owned by or built in the same way by competitors (Khotimah, 2014). In fact, ERM is a firm-specific (Beasley, Pagach & Warr, 2008) and the its implementation differs from one firm to another.

Furthermore, firms might operate in different industries, which then lead to different risk exposure across industries. Therefore, ERM as an internal resources of a firm is able to manage these risks in effective manners and subsequently contribute to better firm performance. This is consistent to Elahi (2013) who argued that firm's ability to manage risk can be used to create firm competitive advantage. Based on the above discussion, this study aims to examine the relationship between ERM practice and SME performance. In contrast to existing literature which focus on the effect of ERM as a whole, this study provides different mechanism in explaining the effect of each element of ERM prescribed under the Committee of Sponsoring Organizations of the Treadway Commissions (COSO) towards SMEs performance. Perhaps, each element of ERM might offer different competitive advantage and different effect towards the firms.

The following sections review the definition of SME, followed by the overview of SME performance and the empirical evidence of the relationship between ERM and SME performance. Research methodology is presented in section 5, while section 6 discusses research results and conclude in the final section.

DEFINITION OF SMES

The definition of SMEs is varied across countries. In fact, there is no specific definition of SMEs that used worldwide (Altman, Sabato & Wilson, 2008). However, several indicators are used to define SME such as number of employees, annual sales, fixed capital investment, the number of technical equipments such as plant and machinery, stock market, and SME growth rate. According to Altman, Sabato and Wilson (2008), SMEs can be defined based on the total annual sales and number of firms' employees. A firm is classified as SME if the annual sales are less than 50 million Euros or less than 250 employees. Altman, Sabato and Wilson (2008) also highlighted that the classification of SMEs in the United States is based on four criteria, namely (1) profit oriented; (2) has a premise in the United States; (3) show an increase in the country's economic growth through tax contributions; and (4) does not exceed the size of the numerical standard of the industry involved. However, this definition is contrast to SME definition in Nigeria. According to Ogechukwu (2011), SMEs are those enterprises with minimum sales less than N100 million and have less than 300 employees.

In Malaysia, the definition of SMEs are benchmarked by annual sales value and number of employees. For examples, small enterprises in manufacturing is between RM300,000 to RM15 million annual sales, while the number of employees is between 5 to 75 employees. For medium-sized enterprises, annual sales must reach at least RM15 million to RM50 million and the number of employees is between 75 to 200 employees. In other sector such as service sector, an enterprise is categorized as small size enterprise if recorded annual sales between RM300,000 and RM3 million, while the number of employees ranges between 5 to 30 employees. For medium-sized enterprises, the annual sales must be at least RM3 million and not more than RM20 million. The number of employees ranges between 30 to 75 employees.

In sum, the definition of SMEs across the world is differed and categorized based on different indicators or criteria. Basically, size of annual sales and numbers of employees are two indicators of SMEs that commonly used in the previous studies.

SME PERFORMANCE

The contribution of SMEs in terms of economy is increasingly significant, especially in the developing countries. SME Corporation Malaysia highlighted that 98.5% of business establishment in Malaysia are SMEs, which contributed 7.2% of national GDP in 2018, increase from 5.9% in 2017. Furthermore, the issue of SME performance has been debated by academics scholars and practitioners in the recent years. In fact, firm's performance is vital for SME as it measures the ability of SMEs to generate higher profits in order to remail relevant in the industries. Najmi, Rigas and Fan (2005) suggest the importance of performance checking and monitoring to ensure appropriate steps are taken to maintain a good performance and remain viable in the market. As such, business continuity management program is essential for SMEs to ensure their existence in the market (Madrid-Guijarro, Auken & Garcia, 2007). However, previous studies have shown that only 30% of SMEs are able to remain in the market up to five years after establishment (Idemobi, 2012; Yusuf & Dansu, 2013).

Firm performance can be influenced by various internal and external factors in the business (Akinruwa, Awolusi & Ibojo, 2013). However, internal factors such as ERM are seen to be more critical as firm has the ability to control internal factors to create competitive advantages, which then affect the performace of the firm. In fact, several studies in the past have examined the relationship between ERM implementation and SME performance. For instance, Gatzert and Martin (2015) demonstrate that ERM implementation contribute towards the improvement in SME performance, as measured by earnings, share prices, and reduction in cost financing. This finding also suggest that ERM increase the capital efficiency of the firms.

ENTERPRISE RISK MANAGEMENT AND SME PERFORMANCE

Yaakub and Mustafa (2015) claimed that risk is a barrier in improving SME performance. SMEs are exposed to risks related to cash flow, customer loss, marketing, physical (including natural disasters), competitors and finance matters (Azende, 2012). In fact, SMEs are considered as inefficient to encounter its potential risks and uncertainties (Yusuf & Dansu, 2013). Therefore, the ability of SME managers in identifying the risks adequately and taking the appropriate steps to manage risk is very critical to ensure its sustainability in the industry (Yakob, Ramli & Bakar, 2016). Accordingly, Tahir and Razali (2011) highlighted that risk needs to be fully integrated as it is a key emergence factor for holistic approach of managing risk, known as ERM. This is in line with Monda and Giorgino (2013) who stated that ERM involves a comprehensive view of risk, which consider the interrelation between one risk to another. In addition, Mike (2005) had emphasised that ERM is a systematic approach in managing diverse risks.

Therefore, effective risk management strategies allow firms to achieve its objectives and increase stakeholders' value. (Yazid, Wan Daud & Hussin, 2008). In addition, an efficient ERM implementation enables firms to utilize their resources efficiently and subsequently maximise firm's returns (Yakob, Ramli & Bakar, 2016). In fact, the newly updated ERM framework by COSO (2017) further highlighted that the integration of ERM across entities will allow to realise numerous benefits including increasing opportunities, identifying and managing risks across entities, enhancing positive outcomes and benefits, reducing negative shocks, decreasing performance variability, increasing resource utilisation, and increasing firm durability. As such, firms' risk exposure can be managed and controlled effectively through the implementation of ERM and supports the firms to achieve its objectives.

Previous studies have shown the positive relationship between the implementation of ERM ad firm performance. For instance, Arpita (2013) finds that ERM practicing firms listed in the Indian Stock Exchange have successfully increased their firms' value. In fact, this finding is consistent to the other empirical studies on the valuation effect of ERM (Hoyt & Liebenberg, 2008; Gordon, Loeb & Tseng 2009; Hoyt & Liebenberg, 2011; Baxter, Bedard, Hoitosh & Yezegel, 2012; Li, Wu, Ojiako, Marshall & Chipulu 2013; Acharyya & Mutenga, 2013; Grace, Leverty, Phillips, & Shimpi, 2014; Sanjaya & Linawati, 2015). From a financial perspective, risk management is an essential part of any business (Anton, 2011). Specfically, risk management provides tax incentives and minimizing bankruptcy and financial distress cost. Furthermore, risk management reduces earnings volatility, promotes cost savings and creating good reputation for the firms. Thus, SME with good management would be able to overcome any potential risks through appropriate actions (Smit & Watkins, 2012) and contribute to the success of the SMEs in long term. Yusuf and Dansu (2013) further highlighted that an efficient risk management would improve SME performance and subsequently position itself stronger in the market. On the other hand, poor management will jeopardise performance and may threaten the firm (Kagwathi et al., 2014). Although risk is often viewed as a threat to a firm, an efficient and effective risk management can turn into a positive opportunity (Zohoori, 2013). Accordingly, Afipudin (2005) suggests that risk is usually regarded as a negative matter, but risk is not inevitably dreadful. Therefore, risks need to be managed in effective manner to bring value to the firms. Effective risk management allows, SMEs to achieve their objectives and ultimately enhance the stakeholder value (Shima, Mahmood, Happy & Akbar, 2013). As poor risk management may encourage unethical practices and increase probability of business failure, SME entreprenuers should aware on the positive outcomes from effective risk management practices. In fact, Manab & Ghazali (2013) stressed the necessity of each firm to implement risk management program to enjoys its benefits.

In the SME context, literature review have proved the existence of relationship between risk management and performance. This relationship is found in studies by Nyakang 'O and Kalio (2013), Yaakub and Mustafa (2015), Angeline and Teng (2015), Mwangi (2014), and Yusuf and Dansu (2013). In a conceptual study, Ansong (2013) has strongly recommended to impelement risk management due to its positive impact on SME financial performance. Study in Ghana suggests that risk management improves SMEs access to credit and subsequently improves financial performance (Tagoe, Nyarko and Anuwa-Amarh, 2005 as cited from Ansong, 2013). Meanwhile, Alrashidi and Baakeel (2012) find that operational risk management has positively affected SME financial growth and development in Saudi Arabia.

Unfortunately, ERM is still relatively foreign and not considered as important. This was evidenced by a survey on 1431 risk managers in 2011, which found that only 17% of them confirmed that their company have a fully integrated ERM program, 37% had incorporated some of the ERM programs, 23% had recently invested in some ERM programs, 3% have no programs or plans, while another 20% of them do not plan to use ERM (Soltanizadeha, Siti Zaleha, Golshan, Quoquab & Rohaida Basiruddin, 2014). Despite its benefits and ability to increase firm value, ERM remain ambiguous and unclear for certain organization. In fact, many firms have not implement ERM to manage entprises risks. Therefore, empirical study is tempted to be conducted especially in SME sectors to examine whether the positive valuation effect of ERM exists among the SMEs.

RESEARCH METHODOLOGY

Data

Selangor has the highest number of corporate establishments in Malaysia as compared to the other states in Malaysia, with 19.8% or 179,271 business firms (SME Annual Report, 2017). In fact, several locations in Selangor such as Section 7 Shah Alam, KL Sogo, Sungei Wang, BB Plaza and Kenanga Wholesale City had become the focal points of entrepreneurs. Business premises in these area offers wide range of items including clothing, electronics and women's accessories. However, Bangi Sentral has been identified as another attractive area for entrepreneurs in the past five years. Bangi Sentral is located in Section 9 Bandar Baru Bangi and most premises in this area started their business in small scale through online selling activities. Among the businesses available in Bangi Sentral areMuslimah scarves and clothing like Bella Ammara, food and beverages such as QNA Republic Café, and hotels or lodging such as Buff Evo Soho Bangi Sentral. As this location becoming popular among entrepreneurs and has contributed to the development of SMEs in

Selangor, SMEs in Bangi Sentral have been selected as a sample for this study. A non-probability sampling method i.e. convenience sampling is employed in determining sample respondent due to the failure to obtainthe list of businesses (sample frame) operated in Bangi Sentral from the local authority. According to Sekaran and Bougie (2013), non-probability sampling is a sampling method in which every population element has no equal opportunity to be selected as a sample. In addition, purposive sampling is used to determine specific goals that can inform or meet specified criteria (Sekaran & Bougie, 2013). Specifically, this study targets SMEs employers and managers as respondent because they are assumed to be more responsive of the business activities in terms of strategy, operation, finance, law and human resource.

Data is collected through questionnaire, which distributed among 300 respondents in Bangi Sentral. The questionnaire is divided into four sections, namely sections A, B, C and D. Section A covers demographic questions regarding the background information of the entrepreneur, while section B contains questions regarding firm information. In addition, section B also provides open-ended questions that require respondents to state their number of full-time employees, type of insurance or takaful coverage taken by the organisation, and the size of the business based on business assets.

Meanwhile, questions in section C is related to ERM, which consist of eight components (number of items), namely internal environment (7); objective determination (7); identification of risk events (8); risk assessment (9); risk response (5); activity control (5); information and communication (5); and monitoring (5). This questionnaire was adapted from a study conducted in Texas on the implementation of ERM in SME (Altemeyer, 2004). However, the questions have been modified to ensure it represents the respondents' understanding in the Malaysian context. This study uses eight ERM components developed by COSO because existing studies do not focus on comprehensive risk management measurement. Both Nyakang 'O and Kalio (2013) and Yusuf and Dansu (2013) look at risk management in terms of risks faced by SMEs. Meanwhile, Yakob and Mustafa (2015) focus on risk management from a supply chain perspective. While Lukianchuk's (2015) study looked at risk management from a cash flow fluctuation. Whereas, Angeline and Teng (2016) and Mwangi (2014) measure risk management in just a few aspects. Alrashidi and Baakeel (2012), in turn, look at risk management from an operational standpoint only.

Next, section D contains 9 items related to financial performance of the organisation from 2012 to 2015. Furthermore, questions related to performance in this section are based on a study conducted by Azizi (2009). This study measure performance using primary data i.e. obtained from questionnaire rather than secondary data due to several reasons. First, financial data of SMEs is difficult to obtain. In fact, SME owners or manager viewed financial data is a sensitive matter and tend not to disclose accurate financial data (Khan, Khalique & Nor, 2014). Therefore, the financial data provided by SMEs may inaccurate (Tippins & Sohi, 2003) and unreliable

(Kraus, Harms & Schwarz, 2006 as cited in Khan, Khalique & Nor, 2014). Second, the secondary data provided by SMEs do not reflect the real situation (Dess & Lumpkin, 2005; Sapienza, Smith & Gannon, 1988) because managers or owners tend to manipulate financial data to avoid individual or corporate taxes (Zulkiffli & Perera, 2011). Finally, the secondary data may be misinterpreted due to variations in the total profit amount (Covin & Slevin, 1989) and may also lead to comparisons of secondary measurement among SMEs in different industries (Dawe, 1999 as cited in Zulkiffli & Perera, 2011).

Items and questions in Sections C and D are measured using six-point Likert scale, where scale 1 shows strongly disagree and scale 6 representsstrongly agree.

Model specification

In this study, the relationship between ERM and SME performance is viewed through the eight elements of ERM as described by COSO (2004). In addition, SME attributes such as enterprise age, legal status, capital source, and size are used as control variables. Thus, the effect of ERM on SME performance can be illustrated through multiple linear regression model as stated in equation (1). The independent variable in this study is ERM, while the is SME performance act as the dependent variable.

$$PRES_i = a+b_1PD_i+b_2PO_i+b_3PPR_{\mathrm{i}}+b_4PR_i+b_5TBR_{\mathrm{i}}+b_6KA_i+b_7MK_i+b_8P_i+b_9U_i +b_{10}SP_i+b_{11}SM_i+b_{12}SZ_i+\varepsilon_i \quad (1)$$

where, $PRES_i$ is representing SME performance (dependent variable) while ERM measurement consist of 8 elements which are PD_i: Internal Environment; PO_i: Objective Determination; PPR_{i}: Identification of Risk Events; PR_i: Risk Assessment; TBR_{i}: Risk Response; KA_i: Activity Control; MK_i: Information and Communication; and P_i: Monitoring. Control variables are characterized by U_i: Firm Age; SP_i: Legal Status; SM_i: Capital Source; SZ_i: Size are the control variables. Finally, a is the regression constant, b refers to regression coefficient and ε_i represents the error term.

The coefficient b in the above equation represents the relationship strength and direction between dependent and independent variables. Assuming that ε in the linear regression model is independent to the independent variable and normally distributed, the significant relationship between the dependent variable (*PRES*) and the independent variable (*ERM*) can be proved by null hypothesis testing, $b = 0$ at the significance level a=0.05. If the estimated probability value is $\rho < 0.05$, then the null hypothesis is rejected. This means that there is a significant relationship between the dependent variable and independent variable. The main focus of this model is to estimate the relationship between ERM elements (8) and SME performance. Other variables including firm age, legal status, capital source and size are treated as control variables in order to control the effect of these variables on the relationship between ERM and SME performance. The conceptual framework for the relationship between these two variables is as illustrated in Figure 1.

RESULTS OF THE STUDY

Descriptive analysis of the entrepreneurs' background

Out of the 300 questionnaires distributed, only 91 were valid due incomplete questionnaires. Furthermore, SMEs owners were reluctant to give full cooperation in answering the questionnaires.. Table 1 shows the distribution of personal information of SME owners or managers. The respondent consists of 70.3% female and 29.7% male. The majority of the respondents are those aged between 26 to 40 years old, while 16.5% and 11% are below 25 years old and above 40 years old respectively. In addition, 64.8% of the respondents had previous work experience before venturing in business, and 61.5% had business start-up experience. Indeed, this findings are expected as most of businesses in Bangi Sentral started their business via online medium. A total of 45.1% of the respondents hold an Bachelor Degree. Consistent to the population distribution in Bandar Baru Bangi, most of respondents are Malays with 92.3%, while only few businesses owned by Chinese (3.3%), Indians (1.1%) and others (3.3%).

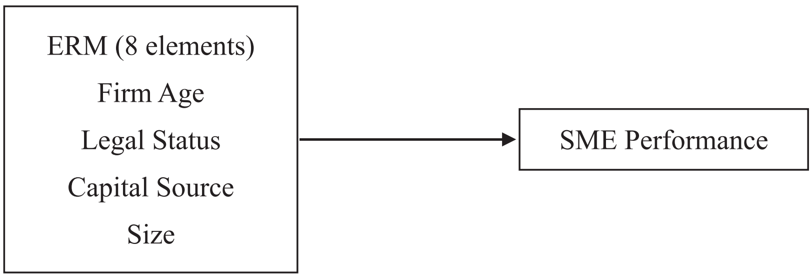

Figure 1
Conceptual Framework

Table 1
Background Information of SME Owners

Profile	Category	Number	Frequency (%)
Gender	Male	27	29.7
	Female	64	70.3
Current Age (year)	Below 25	15	16.5
	26-30	24	26.4
	31-35	27	29.7
	36-40	15	16.5
	41-45	2	2.2
	46-50	3	3.3
	Above 50	5	5.5
Work Experience	Yes	59	64.8
	No	32	35.2
Experience in Starting Up a Business Before Venturing in the Current Business	Yes	56	61.5
	No	35	38.5
Highest Academic Qualification	Secondary School	6	6.6
	Diploma	27	29.7
	Bachelor's Degree	41	45.1
	Master's Degree	13	14.3
	PhD	2	2.2
	Others	2	2.2
Race	Malay	84	92.3
	Chinese	3	3.3
	Indian	1	1.1
	Others	3	3.3

Descriptive analysis of the SME

As shown in Table 2, 63.7% of SMEs in Bangi Sentral are those business with current age less than 5 years. It reflects that businesses in Bangi Sentral are probably their first business. Likewise, 76.9% of the respondents had less than 5 years of experience as an owner or manager of SME. A total of 44% confirmed that their business is a sole ownership status, 40.7% is a private limited business, 14.3% partnership and 1.1% limited liability partnership. Furthermore, 50.5% of the respondents have insurance or takaful coverage while the other 49.5% do not have any coverage. In addition, majority of SME owners in Bangi Sentral (76.9%) started their businesses with capital from their own savings. This is a good practice as they do not being burdened with bank loan. The remaining 23.1% of respondents had to engage with a bank loan to start their businesses. In term of categorization of SME size based on the number of employees, a total of 58.2% is micro-sized while small-sized represent 39.6% and only 2.2% fall under medium-sized SME.

Results of the reliability test

The reliability test on the items representing ERM elements and SME performance need to be performed to see if each item is consistent with each other. Table 3 shows the Cronbach's Alpha coefficients for eight ERM elements and SME performance. According to Sekaran and Bougie (2013), in general, reliability which less than 0.6 is considered weak, 0.7 is acceptable and 0.8 is considered good. In this study, Cronbach's Alpha coefficient values for all eight ERM elements and SME performance items exceeded 0.8. Hence, it can be concluded that all items in ERM element and items in SME performance are reliable and poses internal consistency.

Profile	Category	Number	Frequency (%)
Business Age (year)	Below 5	58	63.7
	5-10	23	25.3
	11-15	6	6.6
	16-20	2	2.2
	Above 25	2	2.2
Experience as Owner/ Manager	Below 5	70	76.9
	5-10	17	18.7
	11-15	3	3.3
	16-20	1	1.1
Business Legal Status	Sole Ownership	40	44.0
	Partnership	13	14.3
	Limited Liability Partnership	1	1.1
	Private Limited	37	40.7
Business Capital Source	Own Savings	70	76.9
	Loan	21	23.1
Business Size	Micro	53	58.2
	Small	36	39.6
	Medium	2	2.2

Table 2
SME Information

Descriptive analysis of ERM and SME performance

In assessing ERM levels and SMEs performance, this study used mean scores as suggested by Covin and Slevin (1989) and Dess and Lumpkin (1996). The mean scores were ranked into low with score between 1.00 and 2.67, medium for score 2.68 to 4.35 and score of 4.36 to 6.00 for high. Based on Table 4, the average values for ERM and SME performance are 4.596 and 4.449 respectively. In general, the mean scores for ERM and SME performance are relatively high. The mean scores for ERM are the results from the eight elements of ERM, namely internal environment, objective determination, identification of risk events, risk assessment, risk response, activity control, information and communication, and monitoring. Whereas SME performance mean scores derive from several factors such as cash flow, gross profit margin, net operating profit, sales growth, return on sales and investment, profitability ratio on sales, return on shareholder equity, and ability to finance business from profitability. However, the minimum and maximum values of ERM and SME performance imply the presence of variation across samples. Some of SMEs do not implement ERM and performed poorly, as shown by the minimum value of 2.00 for both ERM and SME. On the other hand, the maximum value of ERM and SME performance are 5.93 and 6.00 respectively. It shows that few SMEs have implemented ERM and deliver very good performance.

The results of regression test[1]

Regression tests were conducted to examine the effect of ERM on SME performance based on the regression model in Equation 1. From the regression, the value of R^2 is 0.247 (adjusted R^2 = 0.130), which indicates that only 24.7% of the variation in SME performance is explained by ERM. In fact, this value is relatively low as other variables may also affect SME performance. In addition, the value of F= 2.105 with ρ = 0.026 implies that the model is highly significant at 5% level.

Among eight elements of ERM used in this study, only PO element has a significant effect towards SME performance at 10% level, as shown in Table 5. In fact,

Table 3
Reliability Test

Enterprise Risk Management	Cronbach's Alpha
Internal Environment	0.847
Objective Determination	0.893
Identification of Risk Events	0.946
Risk Assessment	0.931
Risk Response	0.885
Activity Control	0.861
Information and Communication	0.906
Monitoring	0.916
SME Performance	0.965

Table 4
Descriptive Analysis

	Minimum	Maximum	Mean	Variance
ERM	2.00	5.93	4.596	0.399
PRES	2.00	6.00	4.449	0.756

[1]Data for regression tests were reduced to 90 samples (original data is 91) as one of SME hasa limited liability partnership status.

the value of the coefficient of 0.49 shows that each unit improvement of objective determinantion would increase 0.49 units in SME performance. In other words, the clear the objectives set by SMEs, the greater the performance of SMEs. The findings of this study are consistent with Beasley, Pagach and Warr (2008) and Liebenberg and Hoyt (2003), which prove the positive effect of objective determination on firm performance. In sum, that the objective determination among SMEs in Bangi Sentral has directly affects their firms' performance.

In fact, risk management objective must be determined before management team identifies any event that may affect the achievement of corporate objectives (COSO, 2004). ERM allows management to perform the process of objective determination, which align with the organisation's missison and within corporate risk apetite. It can summarised that objective determination is a formal process to define organisation's mission, goals and objectives. Furthermore, the failure of organisation to provide proper planning will lead to poor monitoring. Therefore, the objective determination is the key planning aspect for organisationto set clear risk management (corporate) objectives.

However, other elements of ERM such as internal environment, identification of risk events, risk assessment, risk response, activity control, information and communication, and monitoring were not significant. Apparently, this finding is consistent with a study in Sri Lanka which indicated that several elements of ERM such as internal environment, objective determination, identification of risk events, risk response, risk assessment, and activity control are found to be insignificant (Alawattegama, 2018). This may be due to some of the constraints inherent in SME firms regarding ERM implementation. The owners/ managers of the firm have little knowledge of the concepts of risk management that render their risk management strategies unavailable in their respective firms. Implementing ERM requires high costs and this can be a hindrance to SME firms, given that SMEs have very limited resources. Furthermore, the impact of implementing ERM on SME performance has yet to be clearly determined. Thus implementing ERM may not be a necessary agenda. Finally, all control variables comprising SME characteristics are also

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
	B	*Std. Error*	*Beta*		
1 (Constant)	2.383	0.708		3.367	0.001
PD	-0.113	0.232	-0.087	-0.488	0.627
PO	0.488	0.267	0.372	1.828	0.071*
PPR	0.143	0.233	0.130	0.613	0.542
PR	0.099	0.272	0.084	0.365	0.716
TBR	-0.347	0.223	-0.303	-1.559	0.123
KA	-0.006	0.283	-0.005	-0.022	0.982
MK	-0.047	0.273	-0.041	-0.173	0.863
P	0.207	0.257	0.178	0.804	0.424
U	-0.119	0.196	-0.065	-0.608	0.545
SP	-0.038	0.195	-0.021	-0.195	0.846
SM	0.608	0.219	0.290	2.771	0.007
SZ	0.002	0.002	0.135	1.236	0.220

Dependent Variable: PRES; *significant at the confidence level α=0.1.

Table 5
Results of Regression Test

found to be insignificant towards SME performance.

Empirically, this study shows that ERM has a significant relationship with SME performance in Bangi Sentral. Interestingly, the empirical findings of this study support Yusuf and Dansu (2013), who argued that risk management implementation would lead for greater SME performance and have strong position in the market. In addition, several studies in the past have shown that risk management has a significant relationship with SME performance (Nyakang 'O & Kalio, 2013; Yaakub & Mustafa, 2015; Tagoe, Nyarko & Anuwa-Amarh, 2005; Alrashidi & Baakeel, 2012: Angeline & Teng, 2015; Mwangi, 2014). In broader view, the results of the study also support the prior studies in ERM, who found that ERM-firms have successfully increased their firm value (e.g. Hoyt & Liebenberg, 2008; Gordon, Loeb & Tseng 2009; Hoyt & Liebenberg, 2011; Baxter, Bedard, Hoitosh & Yezegel, 2012; Li, Wu, Ojiako, Marshall & Chipulu 2013; Acharyya & Mutenga, 2013; Arpita, 2013; Grace, Leverty, Phillips, & Shimpi, 2014; Sanjaya & Linawati, 2015).

However, this study also suggests that SMEs in Bangi Sentral have not fully implemented ERM strategy. One reasonable explantion is the operation tenure of business premises in Bangi Sentral, which mostly under five years. Furthermore, majority of businesses are sole proprietorship and micro-size business that been managed by owners or managers with less than five years of experience. Therefore, SMEs in Bangi Sentral are relatively new to business and managed by inexperienced owners or managers. In fact, lack of experience and knowledge in the business may lead to lack of awareness and responsiveness towards the importance of ERM to their businesses.

Hence, the overall implementation of ERM may be viewed less important. This might be due to the perception of SMEs in Bangi Sentral, which may regard ERM implement less necessary as most of them are relatively small enterprises. Furthermore, these SMEs also would not expect to be exposed to higher risk and challenges as big firms do. As ERM entails high costs, SMEs are financially incapable to fully implement ERM into their business. In fact, most of SMEs use their own savings or loans to start up their business. As the source of capital is very limited, and the implementation of ERM has not become a priority. Moreover, SMEs in Bangi Sentral might implement ERM without having a specific structure. In fact, Ow (2009) highlighted the unstructured of risk management implementation in the SMEs.

CONCLUSION

This study aims to examine the impact of ERM practice on SME performance. Results from multiple regression analysis show that ERM has a positive and significant effect towards SME performance. However, only one element of ERM i.e. objective determination has a significant effect on SME performance, while the remaining seven elements namely internal environment, identification of risk events, risk assessment, risk response, activity control, information and communication, and monitoring were found to be insignificant.

However, this study somehow shows that the implementation of ERM in SMEs is able to enhance the SME performance. One explantion for this finding is the fact that ERM in SMEs has not been fully implemented as compared to large firms. In fact, many businesses include SMEs are less prepared to deal with major risks such as rising medical costs, employee benefit costs and cyber risk (Travllers Risk Index, 2016). ERM conducted in SMEs are expected to be able to develop strategies in minimising the risks that may or may not be faced by SME firms. The effective risk management can assist SME managers and owners in achieving their defined business objectives. By recognising the importance of ERM implementation, risk management strategy has become a key agenda for SME entrepreneurs in managing their respective businesses.

At present, the risks faced by organizations are increasing without geographical limitations. As risk is very dynamic, risks that were once absent or less important have now become a major threat to the organization. However, some organizations may not well prepared to deal with their risk exposure, which then become the main concerns for stakeholders. As such, ERM could assists organization to manage these risks. The ERM process that begin with risk identification to risk monitoring is capable to minimize the impact of risk in achieving organizational objectives and subsequently enhances shareholder value. As for SMEs, risk management would maximise profitability, enhances firm's value and improve their performance. The results of this study provide inputs to SME related parties such as SME Corp in enhancing the knowledge of SME entrepreneurs regarding the importance of ERM through training, short courses and skill workshops. ERM awareness and practices are essential and should be a priority in any organization. In addition, the findings of this study can serve as a guideline for policy makers or the government in highlighting and determining the implementation of ERM as a requirement to start a new organisation including SMEs.

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