Abstract: Small and medium-sized enterprises (SMEs), especially their business risks and performance, are the primary economic drivers of the construction sector in Malaysia. Most studies focused on the performance of SMEs, but their business risks were underexplored. With that, the current study aimed to determine the elements of business risks that affect the performance of SMEs in the construction sector within the Malaysian context. For this study, five construction companies in different states were selected as case studies. Financial risk, government regulation, managerial capacity, delay in the project, and technology were identified as the critical elements of business risks that affect the performance of SMEs. Through the emerging new ventures in the business market, the performance of SMEs is undoubtedly one of the vital economic drivers that can boost the country’s economic growth.

Keywords: SMEs; performance of SMEs; business risk

INTRODUCTION
The contribution of small and medium enterprises (SMEs) in the development of the world economy is significant, both in terms of its contribution to GDP and the provision of employment opportunities and growing from prosperous and healthy economic providers. Companies are defined as legal entities that have the right to economic activity and conduct their own business, such as entering into contracts, owning property, holding liabilities, and opening bank accounts (Mahmudova & Katonáné Kovács, 2018; Daud et al., 2017; Md Fadzil et al., 2020). Past research by the British Insurance Brokers Association has shown that one of every five small businesses suffers a significant disruption every year, and 80% of the businesses affected by a significant incident close down within eighteen months, while 90% of those who lose data close down within two years. These incidents are caused by the failure of small businesses to manage their risk for the right business continuity (Cover Sure, 2007; Yazid et al., 2020).

The role of the construction industry in each country is crucial, especially in providing employment opportunities as well as key drivers of development, social welfare, and the country’s economy. Many studies on company performance have been conducted to assess the success or market position achieved by a company (Felipe Hernandez-Perlines, Antonio Ariza-Montes & Luis Araya-Castillo, 2019; Omar & Zineb, 2019; Mahmudova & Katonáné Kovács, 2018; Rashid et al., 2018; Gupta & Saini, 2016; Mohammed Sani et al., 2015; Seedee, 2012; Chelliah & Mohamed, 2010; Al-Matari, et al., 2014; Salleh et al., 2012; and Jaakkola, 2006). The industry is exposed to many technical & business risks that often represent greater exposure than traditional ones. The emerging business risks in the construction sector have contributed to the decline in the performance of SMEs. It should be noted that these business risks are not “new,” as they have always been an essential task of management (Baraka, Haytham, 2019). Business risks today are different due to the incorporation of formal risk management frameworks by the banks, particularly on the measurement of different risk types, which requires a well-defined interpretation of “business risk.” However, the definition of business risk has remained inconclusive due to the diverse contexts involved. Certain studies defined “business risk” as the combination of all risk types (Marshall, 2001; Balou & Knechel, 2002) whereas other studies defined the term as residual risk after all other risk types were identified (James, 1996; van RZ Lelyveld, 2006; Kuritzkes & Schuermann, 2006; Salleh et al., 2020; Salleh & Ahmad Saufi, 2020). Meanwhile, concerning the capital asset pricing model, Conine (1982) and Amit and Wernerfelt (1990) described the business risk as non-systematic risk, specifically idiosyncratic or diversifiable risk.

When it comes to strategic management, business risk or also known as strategic risk refers to the risk of executing an ineffective strategy, such as flawed strategic choices (Aizî et al., 2018; Salleh et al., 2018; Glassman, 2000; Marshall, 2001; Alexander, 2005). On the other hand, business risk in the economic-capital context refers to the uncertainties in the demand and price of products and services (Matten, 2000; Schroek, 2002; Crouhy et al., 2006). According to Van Lelyveld (2006), business risk is related to the variations in the margins and volumes

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(e.g., changing competitor behaviour or customer preference), resulting in the drop of earnings below the fixed cost base. Despite its exclusion from the Pillar I capital requirements in Basel II, this definition of business risk is applied by banking supervisors (BCBS, 2004). Furthermore, policymakers and other relevant stakeholders are familiar with market risk but less familiar with business risk (Kuritzkes & Schuermann, 2006). Referring to the definition proposed by Doff (2004), the study viewed business risk as to the risk of financial loss as a result of the changes in the competitive environment (that involve competitors, customers, officials, or other economic players) or the extent of adapting to the changes.

The construction sector involves numerous risks given its engagement with the government, projects, clients, designs, contractors, consultants, and even the market (Arditi, 1985; Diakwa, 1990). The construction sector poses many risks because of its involvement with governments, projects, customers, design, contractors, consultants, and markets (Burhan et al., 2017; Salleh et al., 2017; Rashid et al., 2018). Unlike other sectors, the construction sector must seek useful concepts and solutions to continuously improve their efficiency and performance (Segerstedt & Olofsson, 2010). This applies to all industries and supply chains in the construction sector, where efforts are made to adapt and fulfill the growing demands for higher business value and competence. After all, the nature of the construction projects is complex, given the uncertainties involved (e.g., weather or project duration) despite the definite scope of these projects. The related stakeholders (including site team and office-based staff) under the direction of the project manager should collectively address the identified potential risks to ensure the completion of the project. Construction companies need to identify the value of their projects in this highly competitive market (Ford, Lander, & Voyer, 2002).

**METHODOLOGY**

For the current study, five construction companies were selected as case studies to obtain a better understanding of the different characteristics of SMEs in the construction sector. Through the use of case studies, the study can accommodate different research strategies to explore diverse settings. The number of required case studies depends on the judgment of the researcher on the significance or reproduction of the findings (Yin, 2003). Table 1 presents the details of these five construction companies in this study. A total of four to 10 case studies are deemed adequate to develop theories (Eisenhardt, 1989). All five selected companies were Bumiputera companies, where at least 51% of the company shares and company staff are Malays.

**Table 1: Details of the selected SMEs in the current study**

<table>
<thead>
<tr>
<th>Company</th>
<th>Category</th>
<th>Location</th>
<th>Year of establishment</th>
<th>Status of the company</th>
<th>Main client</th>
<th>Number of full-time workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>G1</td>
<td>Terengganu</td>
<td>1996</td>
<td>Bumiputera</td>
<td>Private/Government</td>
<td>9</td>
</tr>
<tr>
<td>B</td>
<td>G1</td>
<td>Kedah</td>
<td>2002</td>
<td>Bumiputera</td>
<td>Private/Government</td>
<td>11</td>
</tr>
<tr>
<td>C</td>
<td>G3</td>
<td>Johor</td>
<td>2000</td>
<td>Bumiputera</td>
<td>Private/Government</td>
<td>25</td>
</tr>
<tr>
<td>D</td>
<td>G1</td>
<td>Selangor</td>
<td>2001</td>
<td>Bumiputera</td>
<td>Private/Government</td>
<td>15</td>
</tr>
<tr>
<td>E</td>
<td>G1</td>
<td>Sabah</td>
<td>2007</td>
<td>Bumiputera</td>
<td>Private/Government</td>
<td>5</td>
</tr>
</tbody>
</table>

SME entrepreneurs in the construction sector were acquired from the Department of Statistics Malaysia according to the number of SMEs (by state). The selection of SMEs for this study was made based on their company size from different states (i.e., Sabah, Terengganu, Selangor, Kedah, and Johor) were selected. The selected construction companies consisted of a small-sized enterprise and four micro-enterprises, which represented the sampling frame of this study. The participants in this study were randomly selected. The contributions of SMEs consecutively declined from 47.2% in 2016 and 47.1% in 2017 to 46.4% in 2018. Business risks are identified as a significant threat to SMEs in the construction sector.

**FINDINGS AND DISCUSSION**

**Financial risk**

There are certain risks for all construction projects, which include financial risk or, in other words, the chances of an organization or the government defaulting in its bonds, resulting in a financial loss for the bondholders. Financial risk is generally related to project funding problems, including the project duration and operation or equity financing. Financial risk is recognized as a significant risk for the construction sector, as the extent of its negative implications on the budget, timeframe, quality, and overall achievement of the construction project is the most substantial and dominant. For instance, whether the construction project can be completed within the targeted budget and timeframe.

Based on the interview findings, all five construction companies in the current study identified financial risk as the most significant risk for small-sized enterprises and micro-enterprises. Some of the major causes of financial risk that often result in loss of money include delay in payment and increase in the raw material costs. One of the interviewed construction companies further identified high tax charges (GST and SST) as one of their financial concerns. Apart from that, several interviewed construction companies identified several financial concerns that
are related to cash flow and price increase or fluctuation. Healthy cash flow is integral for these companies to sustain their business operation as well as for their workers’ salary and investing purposes. In most cases, claims are not granted when the construction projects are fully completed, as claims are often granted earlier as the first payment. This fact is evidenced by P1, explaining late payment was a result of financial risk since money need to top up with the escalation in raw material cost. The same fact is acknowledged by P3 on the high charges of GST and SST caused the company cash flow problem. Here are quotes P1 and P3:

“late payment and escalation in the raw material costs are the main causes that contribute in the financial risk which results in loss of money.” (P1)

“financial problem is one of the biggest problems due to the high charges in GST and SST. We also experienced in cash flow problem that will gives impact in our company performance.” (P3)

Financial-related problems greatly affect the performance of their construction projects. Hence, in order to minimise financial risk, most companies opt for bank loans as alternatives or make use of their capital. The interviewed companies in this study revealed that they obtain bank loans from Bank Islam Malaysia Berhad, Hong Leong Islamic Bank Berhad, and Alliance Islamic Bank Berhad. P1 and P3 had raised.

“we manage the financial problem by get a loan from bank as our alternatives to overcome that situation. Hence, our company received financial support through Bank Islam Malaysia Berhad, Hong Leong Islamic Bank Berhad and Alliance Islamic Bank Berhad.” (P3)

“We receive financial loan in a small amount because construction’s company is the service sector not like other company whereby, they are product sector and others”.

Meanwhile, use of existing financial resources will result in financial problems for companies such as quote by P4.

“we only use our own capital in this construction sector, and we did not apply any bank loan.” (P4)

**Government regulation**

Government regulation is another potential business risk for SMEs in the Malaysian construction sector. Given the constant changes in the construction sector, the related regulation that governs their operation inevitably changes. Based on the interview findings, all five construction companies in the current study indicated their full compliance with government regulation. The interviewed construction companies reported no financial support from the government. Only two construction companies in this study received a loan from Hong Leong Bank and Bank Islam Malaysia Berhad, respectively. Moreover, all interviewed construction companies appeared to be impacted by the political changes in Malaysia last year, specifically during the political takeover by the then-opposition party (Pakatan Harapan). For instance, the opportunities to acquire new projects for SMEs have become limited. These companies also revealed to be mostly affected by taxes (SST), particularly when it comes to the raw material cost. This fact is explained by P3 and P5, who said:

“yes, of course, the government regulations have a big impact on our project’s operation, especially on SST.” (P3)

“Another issue arises on this factor is the period for the claim. Sometimes, there happen to be delay due to the regulation for us to follow the standard operating procedure (SOP).” (P5)

**Managerial capacity**

Managerial capacity is another potential business risk for SEMs in the Malaysian construction sector. Unlike larger organizations, smaller organizations require a more extensive range of management competencies for growth (Snell & Lau, 1994). Based on the interview findings, most of the construction companies identified managerial capacity as an integral component of their performance—problems such as the lack of skilled and experienced workers and low-cost training facilities significantly affect their human resource development practices. The interviewed participants in this study further highlighted issues about the competencies of on-site workers and their capabilities in handling new technologies. Three of the interviewed construction companies further revealed their preference for skilled workers, rather than unskilled workers, as the latter group requires higher cost and time-consuming training. Moreover, one of the managers also expressed insufficient time to monitor the performance of these unskilled workers constantly. Nevertheless, the other two construction companies in this study reported hiring both groups of workers, regardless of their competencies, as unskilled workers can be hired at a lower salary, resulting in lower labor costs for the companies. Here’s an excerpt by P3:

“The problem that arises in our company is the worker are not fully criteria that the company wants.” (P3)

Adding to that, small-sized enterprises also encounter another primary concern, specifically the recruitment of new workers. According to P1, not all workers fulfill the criteria set by the company. The necessary managerial capacity in the management of human resources is pivotal for the sustainability and development of SMEs, given the relationship between their performance and capability to recruit and sustain the workers. Besides that, SMEs are also concerned about cost. All five interviewed contractors expressed their preference for foreign workers at the project site, as compared to local workers, given the lower cost involved and readiness to work longer hours in a harsher environment. Based on the interview findings, these companies reported hiring contract or part-time workers according to the project criteria to address issues of insufficient workers. This is attributed to the
motivation of the companies to sustain and complete the projects. Meanwhile, new construction companies were found to have limited managerial capacity and experience to sustain and operate their company and projects. “the company only hired skilled and experienced workers in handling machinery. We do not provide any training because it will increase the cost. Cost is always our main concern.” (P1)

Further, P5 justified the problems are unlike issues of lack of skills, which could address through training, and ineffective management. throughout the basic understanding of production techniques and skills, elements of business finance, the conditions of the operation, and capacity to handle unanticipated issues “We prefer to hire a skilled worker because the training that provides for the unskilled workers will take a longer time. Moreover, we don’t have enough time to monitor them.” (P5)

“We from our experience, hire foreign labor is more hardworking; they can be on-site very early in the morning and finish late.” (P5)

Delay in project
The delay in the construction projects is a common, uncontrollable factor in the South and Southeast Asian regions, even for a well-planned project schedule, due to numerous reasons. Based on the obtained interview findings, all five interviewed construction companies reported experience of delay in the project that substantially affects their performance. For instance, one of the companies identified land acquisition as a significant reason for the delay in the project—the cost involved in land acquisition for individual states can be very high. Besides that, other construction companies in this study identified utilities as one of the reasons for the delay in the project, as the relocation of the project requires time; therefore, the supply of utilities for smooth project development is integral.

“existing utilities were my concerns because it may take some time to relocate it.” (P2)

Adding to that, the majority of the interviewed construction companies encountered issues in renting machinery from suppliers who are mostly based in Kuala Lumpur. As a result, the companies were not able to promptly acquire the required products and equipment, resulting in a delay in the project. For example, according to P3, the delay in the project because of machinery issues to perform the project.

“When the machinery breakdown, we will face a problem because usually, it will take a few days for the supplier to fix the machine as the machinery we rent from the supplier is in Kuala Lumpur. So, it may be a delay in the project.” (P3)

Sharing the same opinion with P3, referring to P2, the company also had a problem with machinery and equipment that caused the delay in the project. That also delayed because of difficulty getting the material from suppliers.

“We faced the difficulty of getting the material because some of the material can only get supplied from Kuala Lumpur. In some cases, it may be costly and took days to get it.” (P2)

The machinery breakdown due to the changing weather patterns and project location also affects the progress of the construction project. For instance, most of the construction companies would not operate on a rainy day, as operating on such weather would damage the materials and machinery and put the safety of on-site workers at risk.

“If the rainy season, the project will take much longer to finish.” (P3)

Furthermore, another reason for the delay in the project includes the delay in payment for the completed work. This would cause critical cash flow to the contractors as well as pose unfavorable circumstances to the contractual payment chain. Payments that are made on time ensure smooth progress and the success of a construction project. The interviewed construction companies in this study mutually agreed on the significant impact of a delay in the project on their financial performance, as they are required to compensate the client if the project cannot be completed on time. There are various options to prevent such delay, such as by reducing the unnecessary expenses or hiring more workers to expedite the progress. The delay in payment caused them not to complete the project on time.

“late payment and escalation in the raw material costs are the main causes to us, which is resulting in project delay.” (P3)

“If there is a delay in the project, it will automatically affect our finances.” (P4)

“We have experienced late payment from clients, and it brings difficulty to us.” (P1)

All the companies agreed delay in the project will affect the performance in terms of financial loss because they need to pay for the compensation to the client if the project cannot be done on time. As quoted by P5:

“I will look up for other plans to make sure my project in the line and to be complete as schedule.” (P5)

Technology
Past studies demonstrated the positive influence of technology on the business risk in the construction sector. Recognizing the critical role of technology in business operations in this modern era, SME entrepreneurs experience difficulties in applying new technology. Most of the interviewed construction companies in this study revealed the use of software in their day-to-day operation, which simplifies the process of storing data such as financial reports and up-to-date technology on machinery for higher efficiency. However, the incorporation of technology into the business for a construction company can bring positive prospects (e.g., higher productivity)
and certain risks (e.g., higher cost). Taking the case of higher cost, the use of the software is costly, given the price of the software or technology involved, and the need to upgrade regularly.

“New technologies do help a lot in our operations; however, our main problem to implement them is cost.” (P2)

Furthermore, it takes time for senior workers to learn new software or technology, given their familiarity with the conventional manual approach. After all, it is a common practice to learn by doing. As for a microenterprise, lower cost and minimal risk are the main business goals, even with the implementation of new technology. The supervisor or project manager represents the contractors in supervising the work progress and would guide and provide order for those who are not familiar with the work. Their need for specific changes in their operation is limited due to the costs involved. The current industry practices that emphasize training and downplay the need for technology have influenced the direction of these SMEs. Hence, contractors tend to select the most cost-effective and convenient alternative to technology.

“Sometimes, senior workers age from 40 to 50 years old face difficulties adapting with today’s technology since they are not used to it.” (P4)

DISCUSSION

Commercial risk, contractual risk, and operational risk are the most significant business risks in the construction sector in the United Kingdom (Amos & Dents, 1997). The managerial and design factors were identified as the most dominant problems in the development of high-rise in Jakarta, Indonesia, (Santoso, Ogunlana, & Minato, 2003). Meanwhile, financial risk was identified as the most significant issue for the construction sector in China, which included capital return problems, delays in payment, and unreasonable demand for upfront capital (Fang et al., 2004; Yazid et al., 2020). Besides that, personnel risk that involved client, designer, contractor, subcontractor, and supplier was also identified as a dominant issue for the construction sector in China (Zou, Zhang, & Wang, 2007).

As for the construction sector in Malaysia, financial risk was found to be the most significant type of business risk. All five interviewed construction companies in this study highlighted the substantial impact of financial risk on their performance in terms of project duration, expenses, and quality, as the majority of the companies encounter a delay in payment and an increase in the raw material cost. Additionally, the cash flow problem was identified as a dominant reason for financial risk. Healthy cash flow is pivotal, given its role as the primary source of fundings to sustain the business operation (including workers’ salary) and make the investment for market penetration and growth.

Apart from financial risk, government regulation, managerial capacity, delay in the project, and technology highlighted. The interviewed construction companies in this study identified the delay in the project as a significant business risk after financial risk. Land acquisition highlighted as the primary reason for high project costs in individual states. This type of business risk dramatically influences the performance and productivity of SMEs. In order to avoid the risk of delay in payment, the companies should take action to minimize unnecessary expenses. As depicted in Figure 1, five major types of business risks significantly affect the performance of SMEs in the Malaysian construction sector.

Fig.1: Business risks that affect the performance of SMEs in Malaysia

CONCLUSION

Overall, financial risk found to be the most significant type of business risk that affects the performance of SMEs in the Malaysian construction sector. Financial risk contributes a substantial impact on the budget, timeframe, quality, and overall achievement of the construction project. The performance of a construction project can substantially improve by managing significant business risks, rather than focusing on numerous minor business risks. Moreover, financial risk is inevitably the most significant risk that affects the life cycle of a construction project, as the completion of such a project typically involves a large number of resources in terms of money and time, as well as effort. Conclusively, the present study successfully identified five critical elements of business
risks that affect the performance of SMEs in the construction sector within the Malaysian context: (1) financial risk; (2) government regulation; (3) managerial capacity; (4) delay in project; (5) technology. The study recommended the risk management process is one of the best approaches that can be implemented in understanding and managing risks in a project. All steps in the risk management process should be included when dealing with risks, to implement the process in the project efficiently.

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REFERENCES