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RISK SOURCES, AGILITY STRATEGY AND COMPANY PERFORMANCE AMONG MANUFACTURING SMALL AND MEDIUM ENTERPRISES IN MALAYSIA

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ABSTRACT

Small and Medium Enterprise (SME), with its significant contribution to a country's economy is gaining a corresponding interest from the research community. However, SMEs face numerous risks that could affect their performance resulting in its inability to rise to its full potential. Thus, this paper seeks to study the effect of risk sources (innovation and technology adoption risk, infrastructure risk and legal and regulation environment risk) towards company performance while introducing agility strategy in improving performance. Data was collected through a survey to Malaysian SME manufacturing companies yielding a response from 152 companies. Data were analysed using PLS-SEM. Findings indicate that innovation and technology adoption risk and legal and regulation environment risk have a significant effect on company performance. Meanwhile, the introduction of agility strategy does indicate a role in improvement of company's performance in handling these risk sources. It would seem that agility strategy plays an effective role in mitigating risks therefore improving SME's performance, contributing to knowledge of effective mitigating strategies in the field of risk management in supply chain for SMEs.

Keywords: Innovation and technology adoption risk, infrastructure risk, legal and regulation environment risk, company performance, agility, mitigation strategy

INTRODUCTION

Micro, small and medium enterprise (MSME) represents 97.4% (1,224,494 companies) of the total business established in Malaysia (SME Corp Malaysia, 2022). SMEs (the focus of this study) plays a significant role in economic growth in providing employment, increasing income, and fostering economic growth (Othman et al., 2017; Tahir et al., 2018). However, the same SMEs are prone to uncertainties and risks in business affecting their performance. Despite huge funds provided by the Malaysian government in efforts to develop for better growth, SMEs' contribution to the economy, Gross Domestic Product (GDP) is only about 37.1%, 66% of employment and 17.3% of total exports (SME Annual Report 2017/18) signaling that their performance does not compensate the huge funds received. Although SMEs constitute the largest establishment in Malaysia, their total contribution to the country's economy are still considered small. SMEs still have many shortcomings in terms of resource, knowledge and capability in contrast to multinational companies (Jeong, 2016).

SME is a company that is less structured, with small management group and inadequately organised (Lavastre et al., 2012) often encounter numerous risks in handling their business. Risks can be defined as threat(s) that causes failure in company network. The risk may come from unknown sources and cause unpleasant result to organisations. SMEs in Malaysia usually implement informal risk management practices (Md. Sum and Mahussin, 2017) with most unaware of the necessity of risk management in their organisation. It is apparent that over 83% of SMEs were neither prepared nor have any plan to deal with the pandemic situation (Shafi et al., 2020).

The supply chain disruptions brought about by COVID-19 pandemic such as bullwhip effect, demand shocks, transportation cost and supply shortage (Zhu et al. 2020) has had unprecedented negative impact for SMEs when over 50,000 companies went out of business and the remaining operating at partial capacity due to lack of demand (Dai et al., 2021). The pandemic has forced these SMEs to adapt quickly to the new normal of remote working, shorter business hours and shifting business to a digital platform and it is imperative that SMEs invest in their own resilience (SME Bank Bizpulse60, January 2021). Coupled with a more complex business environment, collaboration with partners along the supply chain adds to exposure to risks. In order to stay sustainable and competitive, SMEs need to understand risks that they may face and find ways to manage the risks to achieve economic sustainability and better performance in the long run.

Risks could rise from diverse sources and do not exist independently as multiple risks may appear simultaneously (Truong & Hara, 2018). Risk is a threat to organisation with potential to disturb normal operation activity (Mangla et al., 2015) and hinder the organisation from improving their performance (Gouda & Saranga, 2018). Many scholars agree that risks can negatively affect company's performance (Akinboade & Kinpack, 2012; Atawodi & Ojeka, 2012; Osathanunkul, 2010; Abdullahi et al., 2015; Obokoh & Goldman, 2016; Ndiaye et al., 2018). Risks can arise from either internal or external causes ranging from changes in product design (Lin & Zhou, 2011) resulting in consequences of quality issues, high production cost, and increase of production cycle time, which may cause delay in product delivery to facing high demand volatility due to shorter product life cycle and rapid changes in customer's needs (Faisal et al., 2006). A more COVID-19 relevant operational risk rise with problems among external stakeholders (Liu et al., 2010) such as inability of suppliers to supply goods due to lockdowns.

Now, more than ever, there is an acute need to overcome risks by having appropriate risk mitigation strategies in efforts to maintain economic sustainability and improve company performance (Khan & Pillania, 2008; Yang & Liu, 2012; Whitten et al., 2012; Wieland & Wallenburg, 2012). Thus, the study aims to examine the effect of sources of risks towards company performance and to fulfil the research gap and highlight the practical need of agility as a risk mitigation strategy to achieve economic sustainability and improve company performance.

LITERATURE REVIEW

Malaysian Manufacturing SMEs

Small Medium Enterprises, or known as SMEs, can be divided into three sizes: micro-enterprises, small enterprises, and medium enterprises. Malaysia used to criteria to define SMEs: Sales turnover and number of full-time employees with the “OR” basis as follows:

“For the manufacturing sector, SMEs are defined as firms with sales turnover not exceeding RM50 million **OR** number of full-time employees not exceeding 200.

For the services and other sectors, SMEs are defined as firms with sales turnover not exceeding RM20 million **OR** number of full-time employees not exceeding 75.” (SME Corp, 2022)

Within the Malaysian context, manufacturing SMEs is the largest contributor to exports and the second largest contributor to GDP in 2018 (Department of Statistic Malaysia, 2019). Although the manufacturing sector in Malaysia is at 5.3% or 47,698 SMEs compared to other sectors (Economic Census, 2016), they have immense contribution to Malaysian economy. In view of their significant role in contributing to economic growth, the strong competition from China, India and Vietnam has declined the total shares of Malaysia’s manufacturing export in world market (Eleventh Malaysia Plan, 2015). Thus, it is relevant to study the problem faced by Malaysian SMEs in the manufacturing sector, the scope of study in the present research.

Company Performance

Company performance is conducted to retrieve past organisational information and evaluate their achievement. Parker (2000) stated that results from the performance evaluation will assist an organisation to identify success, problems and fill the gap of planned target and actual target. Measuring company’s performance will help SMEs identify their situation, and help them plan strategies in order to sustain and improve their performance. Company performance can be measured by financial or non-financial methods, both measurement have their own distinctive benefit and detriment. Financial performance comes in the form of profitability, ratios, growth, and share price and non-financial measurement can be observed from the employees’ achievement and the smoothness of the work flow in the organisation. However, SMEs are different from large companies that have financial statements. Because of the difficulties to obtain accurate information on financial performance, this study follows the satisfaction measurement which refer as the extent to owner or manager satisfaction in terms of both financial and non-financial performance indicators. Thus, this study will measure the level of owner’s or manager’s satisfaction on sales, market share, and production (product innovation, work methods, work process and quality).

Sources of Risks

Literature has pointed to lack of consensus on the specific definition of risk. Risk could be referred to as an event where the outcome is uncertain (Aven and Renn, 2009) or as disruption, vulnerability, uncertainty, disaster, peril, and hazard (Ghadge et al., 2012). However, there is a widespread consensus that increase of risk will lower company’s performance, hence, the negative relationship between risk and company performance (Bavarsad et al., 2014; Akinboade and Kinfack, 2012; Nyarku and Oduro, 2017; Adomako and Danso, 2014; Mäenpää and Voutilainen, 2012; Borgelt and Falk, 2007; Fedyk and Hodson, 2019; Karedza et al., 2014). Lack of risk management will further exacerbate poor company performance (Ali & Shukran, 2015). Therefore, this study will focus on three sources of risk which are innovation and technology adoption risk, infrastructure risk and legal and regulation environment risk

affect company performance and how mitigation strategy (agility) can improve the performance of SMEs.

Agility Strategy

As one of the tools for mitigating risks in the supply chain, agility strategy has been defined as the capability to sense and rapidly respond to changes. It also involves the capability to rapidly reduce product development cycle time, increase the level of product customization and customer service, improve delivery reliability and responsiveness to changing market needs (Alfalla-Luque et al., 2018, Lim et al., 2017, Dominik et al., 2015, Blome et al., 2013, Gligor et al., 2013, Hallgren and Olhager, 2009, Swafford et al., 2008, Li et al., 2008, Sharifi and Zhang, 1999). In short, this is the capability of the companies to respond quickly to external uncertainties (Fayezi et al., 2015). Supply chain agility basically represents externally-focused manufacturers' competencies that emphasize speed at the organizational level (Um et al., 2017) and the ability of the system to rapidly reconfigure (Bernardes and Hanna (2009) and thus improve the responsiveness of the supply chain (Gunasekaran et al., 2008, Yusuf et al., 2004) in responding to potential and actual disruptions (Braunscheidel and Suresh, 2009). Agility has been argued as having a direct relationship to cost efficiency by allowing a firm to meet customers' ever-changing expectations and achieve this in a cost-efficient manner (Gligor et al., 2015). Strategic sourcing and strategic flexibility are pivotal drivers of supply chain agility (Chiang et al. (2012) and could be achieved through the synergy of flexibility facilitating the achievement of resource efficiency, a high level of customer service, and responsiveness in the supply chain (Mohammed et al., 2019, Um et al., 2017, Swafford et al., 2008). There has also been evidences that agility in the organization is critical to SMEs in order to face unexpected changes, create first-mover advantages and boost innovation which in turn would lead to a boost in firm's performance (Liu and Yang, 2020).

MATERIALS AND METHODS

Hypotheses Development and Research Model

As mentioned above, sources of risk have no specific definition. Any incidents that could be perceived as a source of threat and disrupt the normal operation activity can be a source of risk. In this study, three risks (innovation and technology adoption risk, infrastructure risk and legal and regulation environment risk) will be highlighted.

The first source of risk under study is innovation and technology adoption risk. The growth of sophisticated technologies makes information borderless. Lack of SMEs knowledge in innovation and technology will affect their ability to compete. Anuar and Yusuff (2011) argue that manufacturing SMEs are lacking in technology implementation and product innovation in their practices and believed that SMEs would be able to improve their company performance once more attention is given to technology and product innovation. Supported by Ardjouman (2014), SMEs are hindered in improving their performance because they could not innovate and adopt technology due to various reasons such as high implementation cost, inadequate technology skills, insufficient infrastructure and doubt of technology benefits to their company. Hence, innovation and technology (non) adoption risk could impact the company's performance negatively. This argument leads to the following hypothesis:

H1: There is a negative significant relationship between innovation and technology adoption risk and company performance

The second dimension is infrastructure risk. Poor infrastructure is among the highest barrier to SMEs growth and have negative influence on globalization and competitiveness (Amentie et al., 2016; Ocloo et al., 2014). In addition, infrastructure risk was found to negatively affect profitability and performance of SMEs (Abdullahi et al., 2015; Obokoh & Goldman, 2016; Ndiaye et al., 2018). Infrastructure risk

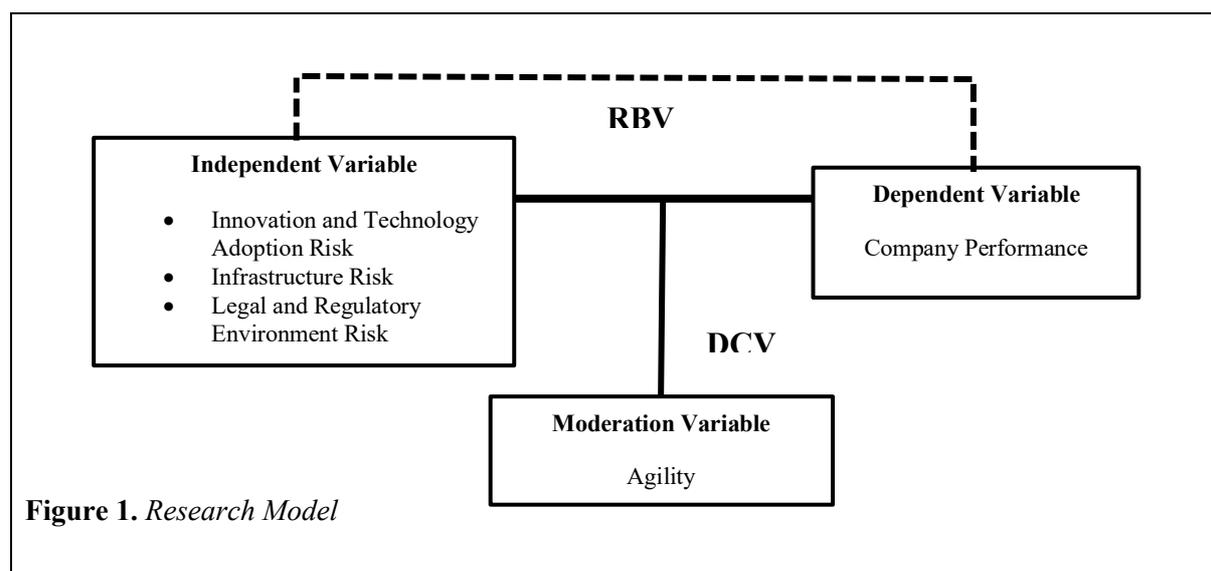
would affect company performance if the company faced problem such as the lack of quality of infrastructure provided (Zuraimi et al., 2013), which includes rail network, road condition and seaport transportation. Not only that, other infrastructure-related risks such as lack of electricity, transport and telecommunications could also affect growth of SMEs (Mambula, 2002; Amentie et al., 2016). As a result, the performance of SMEs will be affected by infrastructure risks leading to the following hypothesis:

H2: There is a significant negative relationship between infrastructure risk and company performance.

The third dimension is legal and regulation environment risk. Several studies have found that legal and regulation environment risk have significant and negative effect on company performance (Karedza et al., 2014; Akinboade & Kinpack, 2012; Atawodi & Ojeka, 2012; Ndiaye et al., 2018; Nyarku & Oduro, 2017; Adomako & Danso, 2014). SMEs, usually small companies with limited knowledge on law and regulation, face difficulties on dealing with registration process, such as getting licence and compliance cost (Zindiye, 2008). This could be due to lack of educated employees, lack of legal knowledge, less resilient on regulatory changes, lack of capacity to spend on regulatory specialised, and financial constraint (Akinboade & Kinpack, 2012; Muhammad et al., 2010; Atawodi & Ojeka, 2012). Moreover, most SMEs perceive legal and regulation as a burden especially in terms of high compliance costs (Akinboade & Kinpack, 2012) complex customs, trade regulations and complicated tax system (Nyarku & Oduro, 2017). Thus, this study would like to test the following hypothesis:

H3: There is a significant relationship between legal and regulatory environment risk and company performance.

In developing the research model in this study, the resource based view theory (RBV) and Dynamic Capabilities Theory (DCV) is used as a foundation to explain the relationship between the sources of risks and company performance. RBV is about acquiring competitive advantage, they benefit the resources by assessing their potential for value generation to enhance firm performance where resources can be a strength to firms (Wernerfelt, 1984). RBV and DCV and have been used in past studies to examine supply chain resilience (Gani et al., 2022). In this study however, we contend that sources of risks can affect resources that a firm has and that it could then have an impact on the competitive advantage of the firm. Figure 1 presents the research model for this study.



If managed correctly, sources of risks can be converted into a good resource for the firm (Eniola and Ektebang, 2014) and we therefore suggest agility as mitigation strategy to handle sources of risk and at the same time playing a role in improving company performance. Furthermore, in the relationship between agility strategy as moderator between sources of risk and company performance, we also utilise dynamic capabilities view theory to help SMEs survive in a volatile environment by being innovative and responsive (Teece et al., 1997 and Nedzinskas et al., 2013). In this study, we argue that agility strategy should be implemented as a mitigation strategy in managing sources of risks as it is perceived to be both reactive and proactive (Li et al., 2008) and may cover a wide range of changes (Charles et al., 2010) be it from customers, suppliers or competitors (Yang and Liu, 2012). As supported in previous studies (Khan & Pillania, 2008; Yang & Liu, 2012; Wieland & Wallenburg, 2012), we posit that agility strategy has an ability to moderate the relationship between sources of risks and company performance of Malaysian SMEs, thereby putting forth the following hypotheses:

- H4: Agility moderates the relationship between innovation and technology adoption risk and company performance.*
- H5: Agility moderates the relationship between infrastructure risk and company performance*
- H6: Agility moderates the relationship between legal and regulatory risk and company performance*

Method

The unit of analysis in this study is the organisation, specifically Malaysian manufacturing SMEs with key respondents of managers or owners representing the company's top management (chosen as they are the key person in the company and familiar with risks the company may face). This study's sampling frame is companies registered with SME Corporation Malaysia as it is a one-stop agency for the overall SMEs policy formulation and SMEs development programmes evaluation coordination in all sectors. Data was collected using a questionnaire as survey instrument with 5 point Likert scale measurement. Smart PLS was utilised in this study to test the agility strategy's role between risk sources and Malaysian SMEs company performance and recommended as this study is prediction-oriented (Hair et al., 2010). There were 836 companies registered in SME Corporation Malaysia, and 265 companies were deemed as an appropriate sample size following Krejcie and Morgan (1970) suggestion. 152 usable responses were obtained yielding a 57.36% response rate.

RESULTS

The results in this study were presented in the PLS path modelling form. PLS-SEM is a second-generation technique increasingly popular among social science researchers. This study follows two-steps process, the first is to assess the measurement model and the second is to evaluate the structural model (Anderson and Gerbing, 1998). As this study used reflective measurement model, the first assessment includes individual item reliability, internal consistency reliability (composite reliability), convergent validity (average variance extracted) and discriminant validity (Hair et al., 2014; Henseler et al., 2009).

Internal Consistency and Convergent Validity

Generally, the measures used for internal consistency reliability are Cronbach's alpha and composite reliability (CR). Cronbach's alpha simulates all indicators and are equally reliable and sensitive to the number of items in the scale (Hair et al., 2014; Chin, 1998). The acceptable values for Cronbach alpha and CR are equal or above 0.7 and any values less than this indicates lack of internal consistency reliability (Sekaran & Bougie, 2010; Hair et al., 2011). Table 1 shows that the Cronbach alpha and CR of all the latent variables was above 0.70, ranging from 0.722 to 0.92 with CR range were from 0.801 to 0.935. Plus, the value of AVE of each construct is above than 0.5.

Table 1:

Internal Consistency and Convergent Validity

Construct	Item	Loadings	AVE ^a	Cronbach Alpha	Composite Reliability ^b
ITA	ITA1	0.727	0.568	0.853	0.887
	ITA2	0.748			
	ITA3	0.824			
	ITA4	0.801			
	ITA5	0.759			
	ITA6	0.650			
INF	INF1	0.739	0.534	0.837	0.872
	INF2	0.744			
	INF3	0.644			
	INF4	0.828			
	INF5	0.647			
	INF6	0.765			
LRE	LRE1	0.887	0.509	0.722	0.801
	LRE3	0.590			
	LRE5	0.630			
	LRE6	0.709			
AG	AG1	0.720	0.644	0.92	0.935
	AG2	0.725			
	AG3	0.712			
	AG4	0.812			
	AG5	0.851			
	AG6	0.848			
	AG7	0.877			
	AG8	0.856			
CP	CP1	0.483	0.537	0.875	0.900
	CP2	0.632			
	CP3	0.693			
	CP4	0.717			
	CP5	0.857			
	CP6	0.840			
	CP7	0.830			
	CP8	0.735			

Notes: LRE2 and LRE4 have been deleted due to low loadings.

Discriminant Validity

Discriminant validity is one of the indicators used to evaluate construct validity indicating group of items estimates and how this construct is distinctly estimated (Byrne, 2010; Hair et al., 2010). Discriminant validity can be assessed through Fornel-lacker criterion analysis, a more conservative approach (Hair et al., 2014). In order to detect the presence of discriminant validity, the square root of AVE should be above than latent variable correlation (Hair et al., 2014; Chin, 2010). In Table 2, the square roots of each construct's AVE were greater than correlation among latent constructs confirming the validity of the constructs.

Table 2

Discriminant validity

	AG	CP	INF	ITA	LRE
AG	0.802				
CP	0.511	0.734			
INF	-0.134	-0.241	0.730		
ITA	-0.155	-0.325	0.717	0.752	
LRE	-0.273	-0.331	0.527	0.463	0.713

Hypothesis Testing

In order to obtain the significance of path coefficients, the structural model was examined through running algorithm and bootstrapping (Chin, 2010). In Table 3, five out of six hypotheses were significant. For direct relationships, two out of three (H1 and H3) hypotheses were found to have a negatively significant relationship towards company performance. Thus providing strong support for H1 ($\beta = -0.290$, $t = 2.278$, $p < 0.05$) and H3 ($\beta = -0.232$, $t = 2.616$, $p < 0.01$). Figure 2 depicts the direct relationship of innovation and technology adoption (ITA), infrastructure (INF) and legal and regulatory framework (LRE) towards company performance (CP).

Table 3:

Result of Hypotheses Testing

Hypothesis	Relationship	Std Beta	Std Error	t-Value	Decision
H₁	ITA -> CP	-0.290	0.127	2.278*	Supported
H₂	INF -> CP	0.104	0.129	0.808	Not Supported
H₃	LRE -> CP	-0.232	0.089	2.616**	Supported
H₄	ITA * AG -> CP	0.201	0.098	2.059*	Supported
H₅	INF * AG -> CP	-0.219	0.101	2.161*	Supported
H₆	LRE * AG -> CP	-0.228	0.083	2.755**	Supported

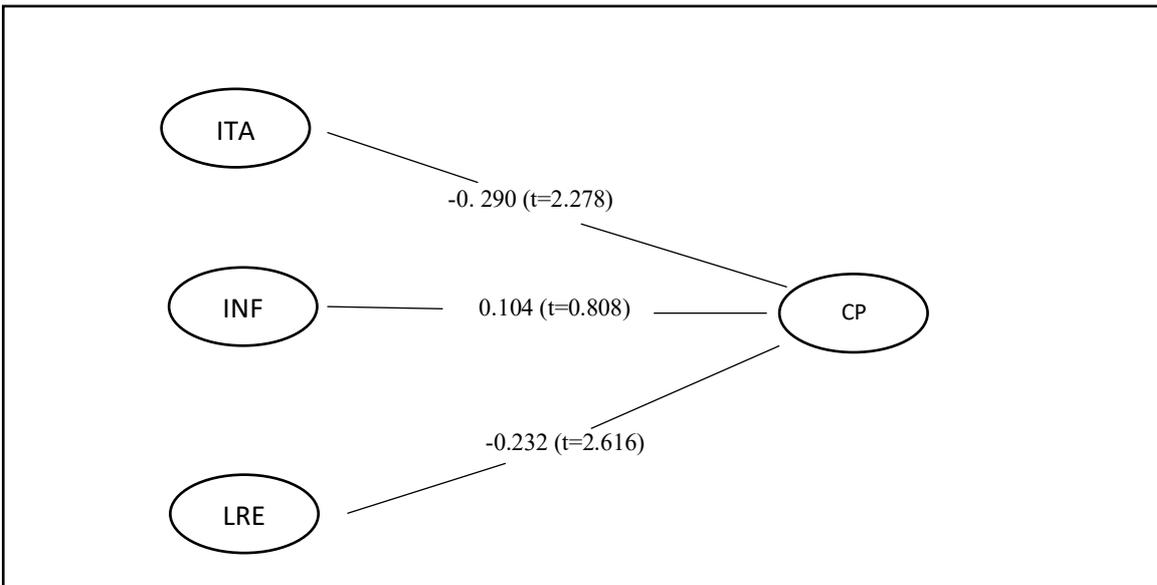


Figure 2. Structural model of sources of risk and company performance

In terms of moderating relationship, all the three relationships were found to be significant. Beta values and t-values for each hypothesis are ($\beta = 0.201$, $t = 2.059$, $p < 0.05$) for H4, ($\beta = -0.219$, $t = 2.161$, $p < 0.05$) for H5 and ($\beta = -0.228$, $t = 2.755$, $p < 0.01$) for H6.

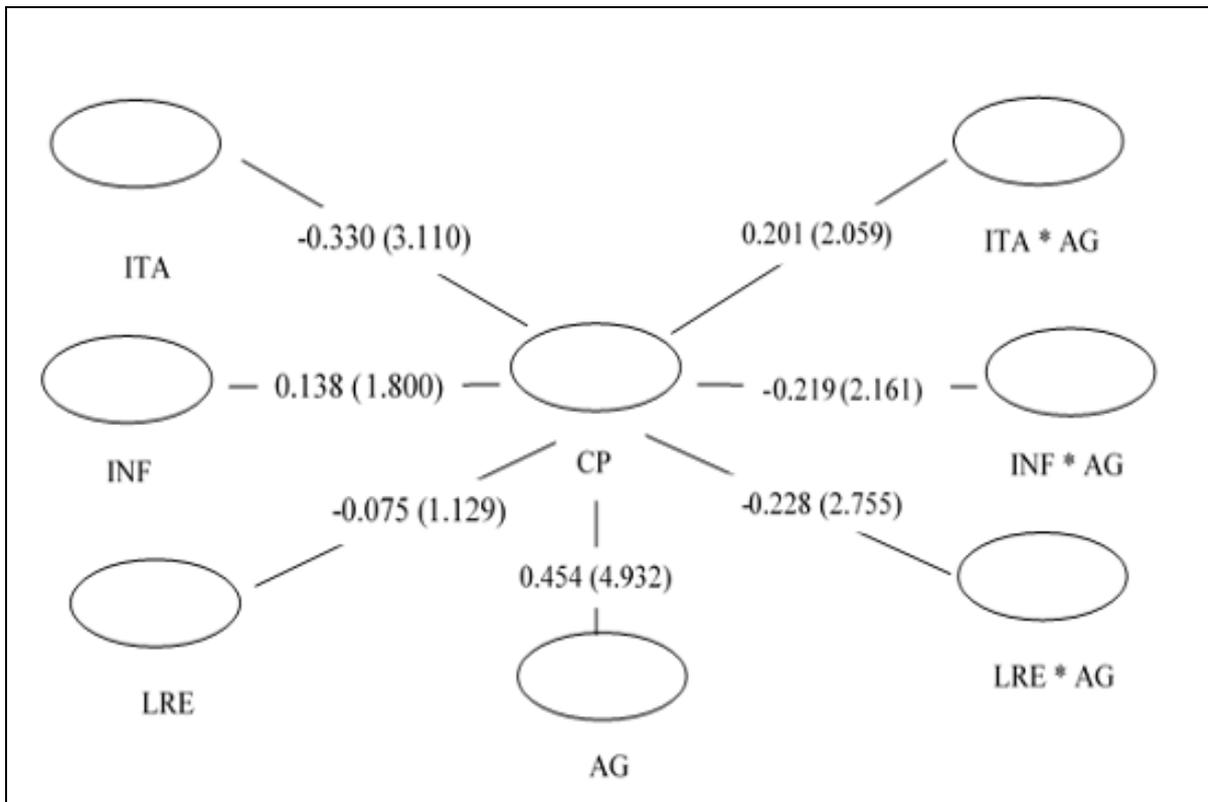


Figure 3. Structural model of sources of risk and company performance with moderator

DISCUSSION

This study wanted to investigate the effect of sources of risk on company's performance among SMEs manufacturing sector. Based on the analysis for direct relationship, the findings indicate that innovation and technology adoption risk and legal and regulation environment risk have a significant and negative effect on company's performance. However, infrastructure risk was found not to have any significant relationship towards company's performance. The second aim was to find out whether agility strategy moderates the relationships between risks of innovation and technology adoption, infrastructure and legal and regulatory framework towards company performance. In this regard, all three moderation hypotheses were supported where agility were found to moderate all three relationships.

A negative relationship of innovation and technology adoption risk towards company performance could mean that as this risk increase, the performance of the companies would decrease. This risk could also be translated as lack of innovation and technology adoption in the companies that could lead to inability to enhance company performance through product and process innovation (Anuar & Yusuff, 2011). Previous studies had pointed out that companies need to adopt technology and innovation in order to increase company performance (Karabulut, 2015; Kafetzopoulos & Psomas 2015; Mamun, 2018).

Malaysian SMEs have been known to be reluctant in adopting new technology in their company due to lack of customer demand that makes it impractical to implement new technology, coupled with shortage of capital and other resources. However, if small companies continually refuse to be innovative, they could face the risk of becoming uncompetitive (Madrid-Guijarro et al., 2009).

Legal and regulation environment risk were also found to have significant and negative impact on company performance. Previous studies found that most of SMEs claimed that legal and regulation as burdensome and disadvantageous (Akinboade & Kinfaek, 2012; Atawodi & Ojeka, 2012; Nyarku & Oduro, 2017). In fact, the findings in this study is consistent with prior research that has found negative significant relationship between legal and regulatory risk and company performance (e.g., Nyarku & Oduro, 2017; Adomako & Danso, 2014). Nyarku and Oduro (2017) stressed that the bureaucracy, complex customs and trade regulations, complicated tax system and unstable policy environment would give negative impact to SMEs growth.

According to previous research (such as Zain et al., 2012; Zuraimi et al., 2013) Malaysian SMEs are facing inadequate infrastructure. However, in this study, we found unexpected result for infrastructure risk where there was no significant effect towards company performance, in contradiction with previous studies who found significant relationship between risk of infrastructure and company performance (Obokoh & Goldman, 2016; Ndiaye et al., 2018). One possible explanation could be that Malaysian SMEs do not regard as infrastructure in itself as a particular help in terms of valuable, rare and inimitable resource to enhance performance since it is a shared resources generic to all SMEs. Or, it is also possible that Malaysian SMEs are experiencing good infrastructure as a result of government emphasis on providing excellent infrastructure in the country (Malaysian infrastructure has been rank number two in Asia and fifth in the world for infrastructure investment (New Strait Times, 2016)) that they don't perceive infrastructure as a risk anymore.

We have also proposed in this study that agility strategy be considered as a factor to mitigate uncertainties and risk that emerged from innovation and technology adoption risk, infrastructure risk and legal and regulation environment risk. Since all three risks were found significantly moderated by agility strategy, there is possible indication that these risks can be reduced through implementation of agility strategy in efforts to enhance company performance. Further support of this contention is provided by Overby et al. (2005) who argued that agility can predict the changes of competitor's action, consumer preference changes and technological advancement. Agility strategy also provide abilities to

explore new opportunities in the market and rapidly introduce the new creation to gain customer's attention (Sriariyawat, 2019) providing a strong support that SMEs that implement agility strategy can improve their performance.

Another interesting finding in this study is the fact that when a direct relationship of infrastructure and company performance is tested, no significant relationship was found. However, with the introduction of agility strategy as a moderator, the result turned significant. This indicate that agility would provide value to the companies as mitigation strategy should infrastructure risks arise (Schoen et al., 2018; Chester and Allenby, 2018).

In fact, previous study on agility as mitigation strategy concur with our results in that their findings indicated that agility's effect is significant in improving responsiveness to disruptions in supply and demand. Therefore, companies who are looking to improve responsiveness, investing in supply chain agility provides the most improvement on supply chain responsiveness for the firm (Shekarian et. al., 2020).

Lastly, the effect of agility strategy can enhance company performance and reduce effects of legal and regulatory environment risk. Overby et al. (2005) stated that agility can be a proactive and reactive move in handling regulation changes, aligned with Kitching et al.'s (2015) argument that even if regulation is a dynamic force capable of influencing business action and performance (by imposing cost and constraint for small companies), it could also create opportunities that might enhance the company performance.

CONCLUSION

In this study, the RBV theory were utilised as a foundation to understand the relationship between sources of risks and company performance coupled with DCV theory to examine agility strategy as moderator between sources of risk and company performance. It could be concluded that failure to adopt innovation and technology, as well as legal and regulatory risks, could have a negative effect on company's performance. However, when agility is introduced to mitigate these risks, it actually helps to enhance or at least to sustain company performance. This is also true for infrastructure risks should it arise and becomes a problem for the SMEs. This study provides further support of the value of agility as mitigation strategy, at least for the risks of innovation and technology (non) adoption, legal and regulatory and infrastructure.

There is some limitation that has emerged from this study, that with which provide opportunities for future direction. This study has presented some evidences on the implication of sources of risk (innovation and technology adoption risk, legal and regulation environment risk) towards company performance. As mentioned earlier in the paper, sources of risk have no specific dimension, any incidents that can threaten and disrupt operation activity can be a source of risk. Future research is encouraged to study other possible sources of risks such as the current COVID-19 pandemic on company performance and whether agility strategy can moderate any ill effects of these risks.

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