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Do Knowledge Management Capabilities Reduce the Negative effect of Environment Uncertainties on Organizational Performance? A Study of Public Listed Companies in Malaysia

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Abstract: The degree of environmental uncertainty (EU) continues to affect corporate financial performance. However, utilizing knowledge management capabilities (KMC)wisely can reduce this effect. The purpose of this study is to investigate the effect of EU's dimensions (market, technology, competitive threat, and region specific uncertainty) on financial performance and to see whether KMC mediates between the two. Of the returned questionnaires from senior managers of public listed companies (PLCs)in Malaysia, a total of 176 were usable and analyzed using AMOS. The findings showed that, amongst the EU variables, competitive threat and technology uncertainty have significant and negative effect while, the region's specific uncertainty has significant effect too but positive on financial performance of the companies. In addition, KMC showed a full mediating role between technology uncertainty and financial performance, while only partially between competitive threats and financial performance. Companies suggested utilizingKMC to improve performance and to reduce the effect of EU.

Keywords: Knowledge management capabilities, Environmental uncertainty, Financial performance, Public listed companies, Compeititon threat

1. INTRODUCTION

The advancement in technology and the rapid changes in customers and market behavior has increased the complexity of making decisions. Decisions are mainly based on information (Laudon & Laudon, 2005). However, in light of scarcity of information due to uncertainties, making right decision becomes a difficult task for top management. This lack of information is referred to as environmental uncertainty (EU) (Duncan, 1972). Decisionsmade by managers at the top level are strategic in nature and thus are important, consume significant resources and capabilities, and are irreversible (Grant, 2010). Managers cope with uncertainties

by shaping the external environment (Allaire & Firsirotu, 1989) covering competitors' actions, technology, and consumer tastes and preferences, which are characterized by the absence of a uniform pattern, unpredictabilityand unexpected changes (Fynes *et al.*, 2004). In addition, following the trend and comprehending the direction and scale of industry changes, are some of the most intractable problems managers face (Warren, 1995).

Researchers pointed out that the EU in business organization could include several dimensions. These dimensions like uncertainties in technological, supply and resource availability, as well as changes in demand, fluctuations in the financial market, amendments made by regulatory agencies, new union demands, intensity of innovations and competitive threats (Chin *et al.*, 2014; Fink *et al.*, 2008; Fynes *et al.*, 2004; Phua, 2007; Tsai &Huang, 2008; Abdullah, & Zainal, A.M, 2011). Recently, new dimensions of uncertainty have emerged such as country and region-specificuncertainties. This dimensionis mainly related to the fluctuation of exchange rate, imports, exports which have major effect on the revenues of companies. West and Drnevich (2010) reported that region-specific uncertainty has affected the performance of companies in United States (US).

To reduce the negative effect of EU, knowledge management (KM) researchers believe that knowledge as a source of competitive advantage can significantly improve the performance of companies (Grant, 1996; Darroch, 2005; Lin & Tseng, 2005; Tanriverdi, 2005; Young, 2006; Alaarj, Zainal A. M & Bustamam, 2016). KMC have proven to contribute to innovation and coordination, improve decision making, speed the response to market change, reduce redundancy of knowledge and information, and improve the organizational performance (Sambasivan *et al.*, 2009a; Hilman &Zainal A. M., 2013; Tseng & Lee, 2014). Thus, having high KM capability scores can guide organizations to make better decisions and formulate timely strategies that can enhance their competitiveness.

Previous studies have investigated the effect of KMC on organizational performance (e.g. Tseng, 2014; Liu & Deng, 2015; Sambasivan *et al.*, 2013; Sambasivan *et al.*, 2011). However, few studies have incorporated them as a solution to reduce the effect of uncertainty (e.g. Liao & Hu, 2007). The studies in developing countries in term of KMCor EU is still limited (Alaarj *et al.*, 2016). Malaysia is a member of Association of Southeast Asian Nation (ASEAN) and it is a member of World Trade Organization (WTO). Recently, the country has signed the agreement of Trans-Pacific Partnership (TPP) (Petri & Plummer, 2016) which will facilitate the entry of more international competition. Thus,Malaysian-ownedorganizations need to sharpen their competitiveness to face these threats (Tiwari & Kainth, 2014). The purpose of this study is to investigate the mediating role of KMCbetween EU and the financial performance of PLCs in Malaysia. This introductory section will then be followed by literature review, development of conceptual model, the methodology adopted, findings and conclusion including suggestion for future work.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Environmental Uncertainty

Duncan (1972) viewed EU as a lack of information and knowledge for decision-making purposes. Most of the strategists have placed great emphasis ongaining knowledge by scanning the external environmental for strategy formulation (e.g. Grant, 2010, Zainal A. M *et al.*, 2014). However, when the external environmental is unclear and difficult to be predicted, organization will be unable to expect the outcomes of a response

choice (Milliken, 1987). These uncertainties are the results of the interaction between the components of the general business environment evolving from technology advancement, regulations amendments and social expectations (Sharma *et al.*, 2007). Therefore, EU is a complicated construct as it contains various factors and can be looked upon from different viewpoints (Sutcliffi & Zaheer, 1998). Thus, many authors have identified and defined them differently and each of the influence is recognized based on variability, complexity and vulnerability (Habib *et al.*, 2011; Pagell & Krause, 1999; Qi *et al.*, 2014; Vecchiato, 2012; Sambasivan *et al.*, 2009b; Zainal A. M *et al.*, 2009).

Fynes *et al* (2004) investigated the impact of EU on supply chain. They operationalized uncertainty into demand, supply, and technological uncertainty. Demand and supply uncertainty mediates the relationship between supply chain relationship quality and its performance. Chin *et al* (2014) in their extensive review of the related literature divided uncertainty into three types: demand, technology, and competitive threat. The findings suggested that the integration between suppliers and customers could reduce the negative effect of EU on firm performance. On the other hand, West and Drnevich (2010) divided uncertainty into macro-environmental, industry specific, region specific and firm specific uncertainty. Their findings showed that all these types of uncertainties influence the organizational performance. In a somewhat similar approach, Kawai and Strange (2014) divided uncertainty into market and technological uncertainty. The reported findings reviewed, suggested that market uncertainty has a significant negative influence on subsidiary performance. Another study followed the approach of the previous researchers and divided uncertainty into market, technology, and competitive threats to find their influence on the performance of hotel industry in Turkey. It is found that only competitive and market uncertainty influences the hotel strategy and performance in Turkey (Köseoglu *et al.*, 2013). Eroglu and Hofer, (2014) investigated the effect of uncertainty on organizational performance and measured EU from three components, namely intensity of innovation, demand, and competitiveness. Their findings reported that the three types of uncertainty account for 40% of inter-industry variation in the effect of inventory leanness on firm performance.

Previous studies tend to have a consensus on the dimensions of EU. The majority of researchers considered technological, market, and competitive uncertainty as the major dimension of the EU construct (Chin *et al.*, 2014; Fynes *et al.*, 2004; Köseoglu *et al.*, 2013; Eroglu & Hofer, 2014). However, recent events such as the political instability, the natural disaster, and economic instability, have added some influential factors to the measures of organizational performance especially in terms of export and import expenses since exchange rate has been affected. These have resulted in a new dimension been incorporated namely region specific uncertainty. As a result, the construct of EU in this study is operationalized to include technological, market, competitive threatsand region-specific uncertainties.

2.2. Knowledge Management Capabilities

KMC is defined as an organization's ability to accumulate critical knowledge resources and manage, assimilate and exploit them to its advantage (Miranda *et al.*, 2011). KMC were incorporated as a single as well as multidimensional construct in the literature. Gold *et al.* (2011) divided KMCinto processes and infrastructure capabilities. The first includes knowledge acquisition, conversion, application and protection while the latter includes technology infrastructure, structure, and culture (Alavi & Leidner, 2001; Gold *et al.*, 2001; Liu *et al.*, 2004; Tseng, 2014; Alaarj, Zainal A. M & Bustamam, 2015). KMC as a single dimensionwas incorporated by Özbağ *et al.* (2013) to testits mediating role between human resource capabilities and

innovation in organizations in Turkey. In this study, the KMCis employed as a mediator between EU and the financial performance of PLCs in Malaysia.

2.3. Organizational Performance

Organizational performance is an indicator to measure how well market orientation and financial goals are fulfilled by an organization (Li & Lin, 2006; Chin, Hamid, Rasli, & Tat, 2014). Financial and non-financial measurements were used as indicators of organizational performance (Maltz *et al.*, 2003; Tseng, 2014). Nevertheless, Evans and Davis (2005) pointed out that the measurements of performance must be chosen based on its relevance to the research objectives. This study is focusing on the effects of EU on performance. Since previous studies which investigated such causal relationship, have employed mainly financial indicators as performance measures (e.g. Hung & Chou, 2013; Meissner & Wulf, 2014), then this study did the same. The financial indicators were sought through the process of self-reporting from the senior executives in the companies. Earlier researchers such as Alaarj *et al.* (2016) have used this method.

2.4. Development of Hypotheses

The focus of this study is on the effects of EU on organizationperformance.However, there are various components of EU and the hypotheses to be developed will look at four chosen critical ones and are deliberated below:

2.4.1. Market Uncertainty

Market uncertainty mainly refers to the changes in the market structure and behavior that lead to unpredictable demand of customers. It is the most common and severe type of uncertainty (Davis, 1993). This uncertainty comes from lack of clarity in the dynamics of the market and their effects on the organization's operations, and demand and supply conditions in the industry (Jabnoun, Khalifah, & Yusuf, 2003; Zainal A. M. *et al.*, 2009). Customer demands have become increasingly difficult to predict in terms of timing and place, volume and product mix (Tachizawa & Thomsen, 2007). In addition, heterogeneity in customer demands also derived from a variety of customization such as delivery lead time, technology changes, and different pricing rates (Faucheux & Froger, 1995; López-Gamero *et al.*, 2011). Market uncertainty was incorporated by many researchers who attempted to find its effect on organizational performance. López-Gamero *et al.* (2011) in an exploratory study found that market uncertainty affects the competitive advantage of organizations. Kawai and Strange (2014) found that market uncertainty influencesnegatively the subsidiary performance. In this study, the market uncertainty is expected to influence negatively the financial performance of PLCs in Malaysia. Thus, it is hypothesized:

H1: Market uncertainty has a negative effect on financial performance.

2.4.2. Technological Uncertainty

Technological uncertainty is defined as a lack of common knowledge and agreement about what production technology will be relevant in the future (Chin *et al.*, 2014). Technological uncertainty has the potential to undermine an organization's competitive base (Anderson & Tushman 1990). Researchers suggested that to

reduce technology uncertainty, organization need to get involved in technology sourcing partnerships (Steensma & Corley, 2000), buy relevant strategies linked to technology so as to achieve superior performance (Abdullah *et al.*, 2009), or the integration between suppliers and customers so that the negative effect of technological uncertainty on organization performance could be reduced (Chin *et al.*, 2014). Researchers found negative effect of technology uncertainty on organizational performance (López-Gamero *et al.*, 2011).However, Köseoglu *et al.* (2013) found no effect of technological uncertainty on the performance of hotels in Turkey. This study proposes a negative influence of technological uncertainty on financial performance of PLCs in Malaysia. Thus, it is hypothesized:

H2: Technology uncertainty has a negative effect on financial performance.

2.4.3. Competitive Threats

Competitive threats refer to the extent to which the increase in competition could affect the organizational performance in term of exports, imports and market share. The classical competitiveness literature emphasized that costs and product differentiation can put companies in strategic positions in the marketplace (Porter, 1990). Parnell and Lester (2008) mentioned that Wal-Mart had used a low-cost/differentiation strategy to achieve competitive advantage compared to many retailers. Abdullah *et al.* (2009) pointed out that cost leadership strategy, when mediated by make strategy, generates better performance than other types of sourcing strategies. Recent study by Chin *et al* (2014) found negative effect of competitive threat on organization performance. López-Gamero *et al.* (2011) refer to the negative influence of competitor actions on the competitive advantage of companies. Matanda and Freeman (2009) found that competitive intensity influence export performance improvement, cooperation, commitment, and power. In this study, it is expected that the competitive threats influence negatively the performance of PLCs in Malaysia. Thus, it is hypothesized:

H3: Competitive threats have a negative effect on financial performance.

2.4.4. Region-Specific Uncertainty

Region-specific uncertainty is defined as the political, economic, and natural resource disorder in countries that have trade ties with each other. A study conducted by Spaliara and Tsoukas (2013)on five countries included Malaysia, Korea, Singapore, Indonesia, and Thailand reported that sensitivity of survival to financial indicators is significantly higher during the crisis. On the other hand, during such crisis, the exchange rate as well as the real interest rate will be affected significantly(Caporale *et al.*, 2005; Fratzscher, 2009; Hallren, 2014). Furthermore, different geographic regions will be experiencing different economic growth rate (West & Drnevich, 2010). This study incorporates this particular factor because Malaysia is a member of several regional agreements such as ASEAN, WTO, and recently TPP. Being a member of these agreements leads to more dynamic interactions and competition from regional and international players. Political instability in one member country can affect the costs of import and export and even the exchange rate. Thus, it is anticipated that the Malaysian organizations will be affected by the events in other countries that have trade ties with Malaysia. Accordingly, this study expects that region specific uncertainty can have an effect on the performance of PLCs in Malaysia. Thus, it is hypothesized:

H4: Region-specific uncertainty has a negative effect on financial performance.

2.5. KMCas Mediator

Many researchers have used KMC as a mediator. For example, Villar *et al.* (2014) used it as a mediator between knowledge practices and exports earnings. They divided KMCinto internal knowledge development and external knowledge integration. The findings highlight the relevance of knowledge practices to foster exports, providing new insights for managers dealing with dynamic capabilities in SMEs. Similarly, the study of Özbağ *et al* (2013) investigated the influence of the same mediator on the relationshipbetween HR capabilities and innovation. The authors employed KMC as a single dimensional construct and found that it played a partial mediating role. Other researchers have tested the mediating role of KMC. For example, Cepeda and Vera (2007) found that KMC played a mediating role between desired knowledge configuration and available knowledge configuration in Spain. Similarly, Ju *et al.* (2006) found that KMC also played a mediating role between organizational learning and innovation in Taiwan. KMC also mediates the effect knowledge assets and business process capabilities (Wu & Chen, 2014), business performance and knowledge governance mechanism (Chen & Fong, 2012), and KM practices and exports (Villar *et al.*, 2014). Accordingly, this study believes that when organizations master and sharpen theirKMC, they are able to make fruitful decision that reduce the effect of uncertainty and increase the financial performance. Thus, the following hypotheses are added:

H5: KMC mediates the effect of market uncertainty on financial performance.

H6: KMC mediates the effect of technological uncertainty on financial performance.

H7: KMC mediates the effect of competitive threat on financial performance.

H8: KMC mediates the effect of region specific uncertainty on financial performance

3. METHODOLOGY

A quantitative methodology was applied with respondents extracted from companies listed in the stock market.

3.1. Sampling and Data Collection

The population of this study is the PLCs in Malaysia. These companies are listed in the Main Market. Convenience sampling method was deployed resulting in the need for a total of 419 questionnaires to be mailedto the executives at the top management level. A total of 181 responses were returned with five questionnaires removed after being considered as outliers thus making a response rate of 29% which is considered as sufficient for the purpose of this study. Similar methodology was done on KMC research (Chen and Fong in 2012 and Villar *et al* in 2014 with 143 and 157 responses respectively).

3.2. Instrument

An online questionnaire was employed as the instrument for data collection. The questionnaire consists of three parts. The first part covered the dimensions of environmental uncertainty adapted from Köseoglu *et al.* (2013) except the region specific uncertainty dimension, whichwere self-developed and validated by professors in strategic management. The second part is the KMC, which consists of six items and adapted from Özbağ *et al* (2013). Lastly, the financial performance measured by four items adapted from Tseng (2014). A ten-point Likret scale was used to assess the items. The scales ranges from (1) strongly disagree

to (10) strongly agree. The use of ten point Likret scale is based on the recommendation of Awang (2014) because these scales are more efficient compared with five or seven point scales. A pilot study carried out gave a Cronbach's Alpha score greater than 0.7.

4. DATA ANALYSIS

4.1. Measurement Model

Data analysis was done using AMOS version 22.0. The Maximum likelihood estimation was used as the sample size was relatively small (Shah & Goldstein, 2006). There are many indices generated from AMOS but only a few will be used for this paper (Hair *et al.*, 2010). Accordingly, RMSEA, GFI, CFI, IFI, and Chi-sq were selected. As a result of measurement model analysis, some items were deleted due to correlation and low factor loading. After modification, all the factors loading scores were greater than 0.60 (the minimum value as recommended by Hair *et al.* in 2010 and Awang in 2014). In addition, all indices showed good values (RMSEA=.074, IFI=.91, CFI= .91, GFI=.80, and Chi-sq= 2.05) except for GFI. This was lower than the recommended level but as pointed by Hair *et al.* (2010), if more than three of the indices are acceptable, researchers can proceed to the next level of analysis.

4.2. Convergent and Discriminant Validity

Convergent and discriminant validity were confirmed using the outputs of the measurement model. The convergent validity was confirmed when the composite reliability (CR)> 0.70 (Hair *et al.*, 2010) and the average variance extracted (AVE) >0.50. In addition, the Cronbach's Alpha (CA) is >0.7 (Hair *et al.*, 2010). Table 1 shows the convergent validity.

Table 1
Convergent Validity, Factor Loading, and Reliability

	CR> 0.70	*AVE>0.50*	*CA >0.70*	*FL>060*
KMC	0.835	0.562	0.772	0.63-0.85
FP	0.832	0.556	0.791	0.64-0.89
MU	0.878	0.591	0.811	0.71-0.88
RSU	0.911	0.672	0.821	0.71-0.87
CT	0.913	0.679	0.752	0.72-0.90
TU	0.936	0.710	0.761	0.79-0.90

In term of the discriminant validity, Awang (2014) suggested to look at the diagonal value (presented in bold in Table 2) and they should be higher than its row and column to achieve the discriminant validity. Table 2 shows that the diagonal value is > than their rows and columns. Thus, discriminant validity was confirmed.

4.3. Hypotheses Testing and Discussion

There are two types of hypotheses tested in this study. First,is the direct causal effect and second the mediating effect. Figure 1 shows the final model of this study. It presents the structural model with unstandardized estimates.

Table 2
Discriminant Validity

KMC	*FP*	*MU*	*RSU*	*CT*	*TU*
0.749					
0.032	**0.746**				
0.562	0.294	**0.869**			
0.196	0.444	0.745	**0.819**		
0.415	0.287	0.819	0.814	**0.824**	
0.471	0.249	0.796	0.592	0.691	**0.843**

Note: KMC:Knowledge management capabilities, FP: Financial Performance, MU: Market uncertainty, RSU: Region specific uncertainty, CT: Competitive threats, Technological uncertainty.

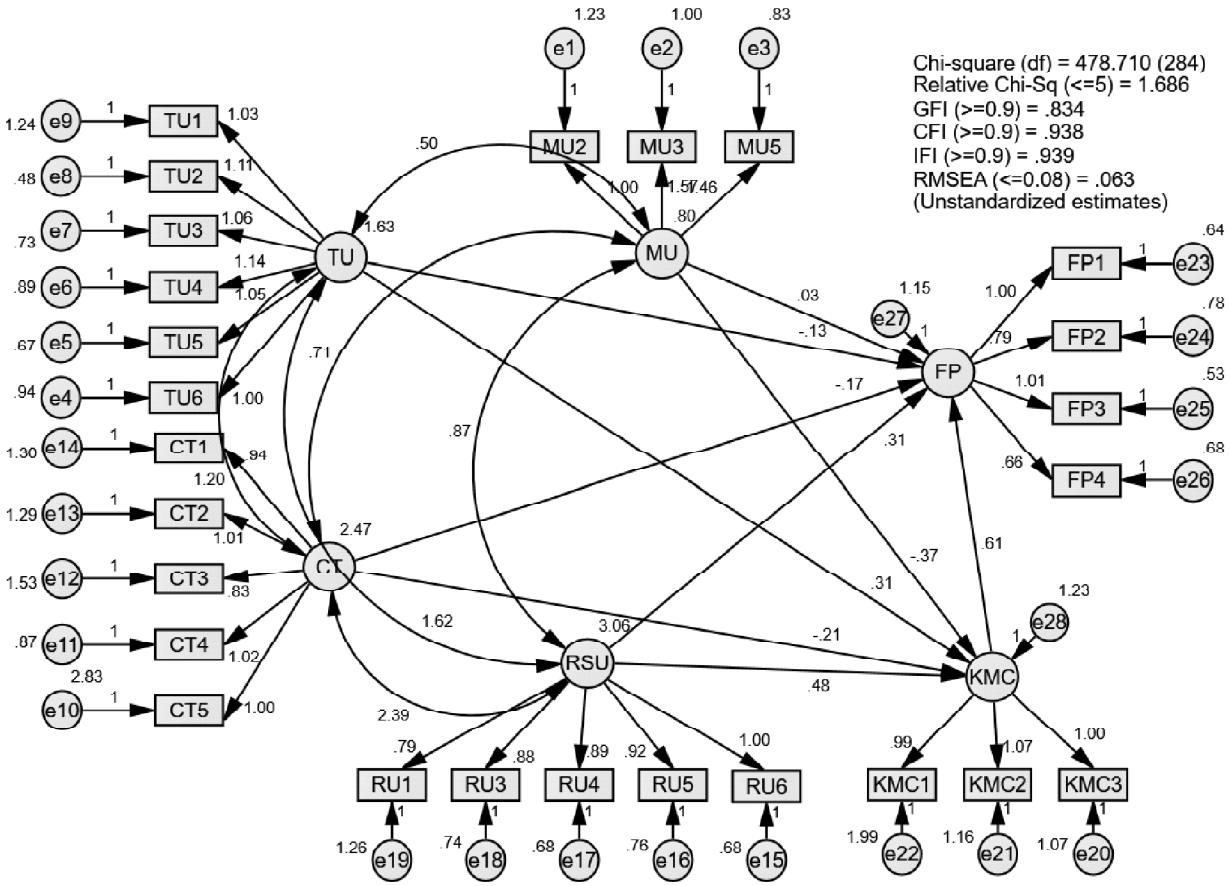

Figure 1: Final Research Model

4.3.1. Direct causal effect

Table 3 shows the direct causal effectmeasurement. It shows that two of the hypotheses are accepted while the others were rejected.

Table 3
Result of Direct Effect Hypotheses

D.V		*I.V*	*Estimate*	*S.E.*	*C.R.*	*P*	*Label*
Financial Performance	<—-	Market Uncertainty	-.01	.095	-.104	.91	Rejected
Financial Performance	<—-	Technological Uncertainty	-0.20	.079	-2.537	.01	Accepted
Financial Performance	<—-	Competitive Threat	-0.37	.103	-3.592	.01	Accepted
Financial Performance	<—-	Region specific Uncertainty	0.23	.110	2.142	.03	Rejected

For the first hypothesis, it was expected that market uncertainty has negative effect on financial performance. The results shows a negative effect but not significant (β =-.01, P=0.91). Thus, H1 is rejected. On the effect of technological uncertainty on the financial performance, it is significant (β =-.20, P=.01). Thus, H2 is accepted. The third hypothesis predicted the negative effect of competitive threat on financial performance. The values indicated were β =-.37 and P=.01 and thus, H3 is accepted. For the fourth hypothesis, it was expected that region specific uncertainty to have negative effect on financial performance. However the result showed a positive effect where the values of β = 0.23 and P = 0.03. Thus, H4 is rejected. This could be due to the fact that during the survey, Malaysia was experiencing a stable economic and political condition and thus the region specific uncertainty indicators gave a low scores thus not significant. This leads to a conclusion that stable countries benefit from the region specific uncertainties.

4.3.2. Mediating Effect

Four hypotheses predicted that KMC mediates the effects of the dimensions of EU on financial performance. Table 4 shows the result of the hypotheses testing.

Table 4
Hypotheses of Mediating Effect

D.V		*I.V*	*Standardized estimate*	*Unstandardized Estimate*	*S.E.*	*C.R.*	*P*	*Label*
KMC	<—-	Region Uncertainty	.641	.477	.183	2.601	.009	Significant
KMC	<—-	Competitive Threat	-.232	-.211	.069	-3.064	.017	Significant
KMC	<—-	Technological Uncertainty	-.402	.310	.127	-2.442	.012	Significant
KMC	<—-	Market Uncertainty	-.251	-.370	.161	-2.294	.022	Significant
Financial Performance	<—-	Market Uncertainty	-.021	.020	.097	-.209	.835	Not significant
Financial Performance	<—-	Technological Uncertainty	-.110	-.132	.079	-2.678	.007	Significant
Financial Performance	<—-	Competitive Threat	-.101	-.172	.103	-1.235	.217	Not significant
Financial Performance	<—-	Region Uncertainty	.483	.203	.116	1.746	.081	Not significant
Financial Performance	<—-	KMC	.582	.612	.064	9.791	.001	Significant

To test the mediating effect, Awang (2014) suggested that researchers should compute and compare the direct effect with the indirect effect. If the direct effect measures are reduced after entering the mediator, and the indirect effect greater than the direct effect, then it can be concluded that the mediating effect had occurred. However, if the direct effect stays significant, then the mediation is partial. Full mediation occurs when the direct effect turns to insignificant while the indirect still significant. Accordingly, simple regression was done to examine the effects between the variables. All the dimensions of environmental uncertainty have significant negative direct effect on financial performance. Next, we examine both the multiple regression direct effect and indirect effect. Table 5 shows the direct effect and indirect effect of the paths. The indirect effect is calculated by multiplying the standard estimate of the effect of IV on mediator with the standard estimate of the effect of mediator on DV.

Table 5
Direct and Indirect effect measures

D.V	*Mediator*	*I.V*	*Direct effect*	*Indirect effect*	*Type of mediation*	*Label*
Financial Performance	KMC	Market Uncertainty	-.02	No mediation	No mediation	Rejected
Financial Performance	KMC	Technological Uncertainty	-.11	-.23	Partial mediation	Accepted
Financial Performance	KMC	Competitive Threat	-.10	-.14	Full mediation	Accepted
Financial Performance	KMC	Region specific Uncertainty	.48	.37	No mediation	Rejected

Based on the findings in Table 5, it can be seen that KMC does not mediate the effect of two EU dimensions namely market and region specific uncertainties on financial performance. Thus, H5 and H8 are rejected. However, the mediating effect of KMC between two other EU dimensions namely technology and competitive threat uncertainties on financial performance are confirmed although the former is only partial. Thus, H6 and H7 are accepted.

We further scrutinize the data to test for possible effect or differences. For example we divided experience into high and low (Mean =11.6 years). The finding showed that in the case of high experience, the negative effect of EU on financial experience disappeared. In other word, there is no significant negative effect of any EU dimension on financial performance. In contrast, when the experience is low, the market, technology, and competitive threat has significant negative effects on financial performance. While region uncertainty is still positive in high and low experience.

Table 6
High and Low Experience of Top Management

IV	*DV*	*Low experience*	*High experience*
Market Uncertainty	Financial performance	(-) Sig	(-) Not sig
Technological Uncertainty	Financial performance	(-) Sig	(-) Not sig
Competitive Threat	Financial performance	(-) Sig	(-) Not sig
Region specific Uncertainty	Financial performance	(+) Sig**	(+) Sig**

Sig: Significant, (-): Negative, (+): Positive

** Region specific uncertainty was hypothesized to have negative effect on financial performance.

Thus, it can be concluded that high experienced managers are more capable to deal with EU, reduce the negative effect, and to some extent even capitalize on EU to create competitive advantage for their companies. Further, the low revenue companies are less capable to deal with EU compared with high revenue companies. This could be due to the fact that high revenue companies are financially capable to use knowledge management systems and strategic alliance partners to reduce the effect of EU.

5. CONCLUSION

The purpose of this study was to investigate the effects of Environmental Uncertainty (EU) on the financial performance of Malaysian PLCs. The mediating effect of KMCbetween the dimensions of EU and financial performance was then done. The findings showed that competitive threat and technology uncertainty have significant negative effect on financial performance while market uncertainty has no effect. Surprisinglythe region specific uncertainty has positive and significant effect on financial performance of companies. In term of the mediating effect, it was found that KMC played a full mediating role between competitive threats and financial performance, with only a partial mediating role with technology uncertainty.

Malaysian PLCs are encouraged and recommended to implement and utilize the benefits of KMCso that they can be better prepared to face the increasing competition. As for future research, our findings open the door for more studies in term of the effect of region specific uncertainty(which covered the region, country and sector/industry), on the financial performance of companies. It is also recommended for future research to incorporate growth strategies such as merger, acquisition, and strategic alliance to test their moderating role between EU on financial performance.

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