Dynamic Capabilities, Environmental Dynamism and Small and Medium Enterprises’ Internationalization Level*

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Abstract

International business research presents a broad consensus on the importance of dynamic capabilities in the internationalization of SMEs. However, there is a lack of research on assessing the impact of dynamic capabilities and the level of SMEs’ internationalization operating in a turbulent and dynamic business environment. This study examines the impact of environmental dynamism and three sets of dynamic capabilities, namely, sensing, seizing, and reconfiguring capabilities on internationalized SMEs’ geographic scope. In addition, this research examines the association between internationalized SMEs’ characteristics: SME’s age, size, and SME owner/manager’s international experience and SMEs’ geographic scope. This study used a quantitative research and employed survey questionnaires to collect data from 305 internationalized Malaysian manufacturing SMEs. Anova tests and Chi Square tests were employed to analyze data collected from respondents using SPSS. Research findings revealed that environmental dynamism and dynamic capabilities have a significant impact on internationalized SMEs’ geographic scope, however, none of the internationalized SMEs’ characteristics had a significant relationship with their geographic scope. The result of this research suggest internationalized SMEs owner/managers need to possess sensing, seizing and reconfiguring capabilities, and monitor business environmental dynamism to increase their geographic scope. This paper ends with drawing a set of concluding remarks and recommendations.

Keywords: Dynamic Capabilities, Environmental Dynamism, Level of Internationalization, SMEs, Malaysia

JEL Classification Code: M10, M16, L10, O19

1. Introduction

SMEs contribute significantly to economic growth of several nations by enhancing contribution to GDP, reducing unemployment and improving people’s living conditions (Blankson, Cowan, & Darley, 2017; Ye & Leipnik, 2013). In today’s business environment, SMEs have promising opportunities to enter international markets due to reduction in trade barriers, availability of advanced communication technology and increased number of governments’ bilateral agreements (Javalgi et al., 2003; Zaki, 2019). Extant literature acknowledged that firm internationalization is not confined only to multinational companies as SMEs are actively involved in global markets (Filatotchev, Liu, Buck, & Wright 2009; Ketkar & Acs, 2013). However, most of SME’s internationalization research focused only on high tech industries and are carried out in western and developed contexts (Lisboa, Skarmeas & Lages, 2013) with limited research on gradual internationalization of SMEs operating in traditional industries (Moretta & Formisano, 2018; Villar et al., 2013). Reduction in trade barriers, intensive competition from foreign companies, and technological advancement have paved the way for SMEs to adopt international strategy in order to survive and grow. In Malaysia, SMEs are viewed as the backbone of the economy with increasing government support to...
enhance their involvement in international market. Sanyal, Hisam, and Baawain (2020) examined the challenges facing internationalization of SMEs in Oman and reported that finance availability, market access and business environment are the main significant predictor of internationalization challenges. Generally, firm’s level of internationalization is a measure used to determine which firms are more internationalized based on some indicators like export intensity and geographic scope (Gubik & Bartha, 2014).

2. Literature Review and Hypotheses Development

Guided by the dynamism of business environment, numerous researchers criticized the RBV (Eisenhardt & Martin, 2000; Teece et al., 1997, Villar, Alegre, & Pla-Barber, 2013). In this regard, Teece, Pisano and Shuen (1997) presented the dynamic capabilities view as essential extension to RVB. Villar, Alegre, and Pla-Barber (2013) proposed dynamic capabilities view as a theoretical framework to explain firm internationalization as most of the internationalization theories did not pay attention to environmental dynamism (Al-Aali & Teece, 2013). Research acknowledges that exporting is the fundamental entry mode to international markets for SMEs (Knight & Liesch, 2016). This study tends to contribute to filling these gaps by examining the impact of environmental dynamism, dynamic capabilities and SMEs’ attributes on the level of SMEs’ internationalization.

Yi, Han and Cha (2018) argued that the fundamental components of dynamic capabilities can be summarized into sensing the environment capability, learning capability, coordinating and integrating capability, and reconfiguration capability. This research builds on the conceptualization of dynamic capabilities presented by Teece (2007). Relevant literature reveals that SMEs’ owners/managers use their export related dynamic capabilities to provide a substitute for deficiency and other resources and to enhance export performance of their SMEs (Moretta & Formisano, 2018). This research argues that sensing, seizing and reconfiguring capabilities allow owners/managers of SMEs to increase their level of firm internationalization through effective discovery and exploitation of international opportunities. SMEs’ owners/managers need to possess sensing capabilities to identify potential business opportunities in global markets.

2.1. Sensing Capabilities and SMEs’ Level of Internationalization

Sensing capabilities were defined as the abilities to scan, filter and shape opportunities, understand customers’ tastes and preferences, change in relevant markets and industries, and respond to suppliers’ and competitors’ actions (Teece, 2007). In their research on dynamic capabilities and firm internationalization, Prange and Verdier (2011) indicated that the internationalization process can be viewed as a path a firm decides to follow in order to seize worldwide opportunities. Bogodistov (2013) argued that managers who possess effective sensing capabilities can sense business opportunities and ensure firm’s growth as well enhance firm’s competitiveness.

Similarly, Zahra et al (2006) argued that SMEs are capable of perceiving current business opportunities through creating and using dynamic capabilities. At a comprehensive level, Teece (2007) indicated that sensing capability involves different activities such as scanning, learning, creating, and interpreting activities (Teece 2007), monitoring and reacting to new information in relevant markets (Schreyögg & Kliesch-Eberl, 2007). Various scholars stressed the influential role of dynamic capabilities in enhancing firms’ abilities to identify and exploit business opportunities (Zahra et al., 2006). This research focuses on sensing capabilities related to scanning capabilities related to change in foreign markets, change in customers’ demands, competitors’ and suppliers’ actions and networks required for discovering and exploiting international opportunities. Thus, the first research hypothesis can be stated as follows:

H1: Sensing capabilities have positive effect on SMEs’ level of internationalization

2.2. Seizing Capabilities and SMEs’ Level of Internationalization

After sensing an international opportunity, SMEs’ owners/managers need to possess seizing capabilities to shape and evaluate such opportunity. Seizing capabilities pertain to creating new product or services as well as new business models, which can transform recognized opportunities into valuable outcomes (Teece, 2007). In addition, seizing capabilities are associated with developing new product or services and adopting new business models to transform recognized opportunities into valuable outcomes (Harreld et al., 2007; Teece, 2007).

Further, seizing capabilities involve securing access to financial and human capital resources, which require forging new relations and networks with customers, suppliers, co-operators, and distributors (Teece, 2011). To seize opportunities, Barreto (2009) indicated that firms need to make timely as well as market-oriented decisions. Similarly, (Eisenhardt and Martin, 2000) emphasized the propensity to make timely decisions indicating that there might be some potential for competitive advantage by acting sooner than competitors. Barrales, Bustanza and Gutiérrez (2012) stressed the importance of seizing capabilities such
as decision-making abilities regarding prioritization and resource allocation as well as seizing business opportunities. Further, seizing capabilities involve securing access to capital and skilled human resources, creating new product or services as well as new business models, which can transform recognized opportunities into valuable outcomes (Harreld et.al, 2007; Teece, 2007). This often demands forging new relations with customers, co-operators, suppliers, and distributors. This research argues that internationalized SMEs’ owners/managers need to possess seizing capabilities to effectively shape and evaluate business opportunities in international markets. Hence, the second research hypothesis can be derived as follows:

\[ H2: \text{Seizing capabilities have a significant impact on SMEs’ level of internationalization.} \]

2.3. Reconfiguring Capabilities and SMEs’ Level of Internationalization

SMEs’ owners/managers need to possess reconfiguring capabilities to effectively exploit international opportunities. Basically, dynamic capabilities are needed to link organizational internal resource configurations with the surrounding environment as stated by Teece et al (1997). Reconfiguring capabilities are associated with preventing organizational inertia through managing threats and reconfiguring assets and organizational structure (Teece, 2009). Managers use their reconfiguring capabilities after sensing and seizing an opportunity in order to exploit such opportunity through reconfiguring their resources. Lee and Kelly (2008) argued that reconfiguring activities involve the integration of knowledge within and outside the organization and devising new ways to assemble and integrate organizational resources. In addition to emphasizing resource reconfiguration, Teece (2009) argued that reconfiguring capabilities demand setting procedures for integrating and sharing knowledge and proper learning in a collaborative setting. Accordingly, we may argue that dynamic capabilities may contribute to clear identification of organizational internal strengths and weaknesses that lead to anticipating external opportunities and threats.

SME’s owner/manager may involve in imitating competitors or head to a new explored market to exploit an opportunity. Teece (2007) argues that dynamic capabilities ensure long-term advantages since they allow firms to match external opportunities with internal strengths derived from reconfiguring its internal resources. SMEs can enhance their export performance by incorporating, integrating, and reconfiguring their external and internal marketing capabilities to reach and compete global markets (Moretta & Formisano, 2018). Thus, the third research hypothesis can be stated as follows:

\[ H3: \text{Reconfiguring capabilities have a significant impact on SMEs’ level of internationalization.} \]

2.4. Environmental Dynamism and SMEs’ Level of Internationalization

SMEs need to consider the dynamism of international business context. In this regard, Al-Ali and Teece (2013) argued that internationalization research need to investigate the dominant internationalization related factors that allow firm’s managers to reach global markets and build adaptive firms able to withstand advantages of internationalization in the long term. Owners and Managers of SMEs need to cope with their international business environment to enhance their operating efficiency and improve their competitive positions in international markets (Ireland, Hoskisson & Hitt, 2011). Internationalized firms can enhance their international scope through maintaining a good fit between their strategic needs, environmental factors and their resources (Onkelinx & Sleuwaegen, 2009).

The major environmental factors influencing firms in international business environment are related to customers’ demands and preferences; relevant technologies in manufacturing a product or providing a service and competitive actions related to price, features and marketing and selling strategies of a product or service as well as the introduction of a new product (Drnevich & Kriauciunas, 2011). This research argues that environmental dynamism indicators such as change in market and industry (Lumpkin & Dess, 2001; Wiklund & Shepherd 2005), legislations and regulations of international trade and technological change (Zhou, Barnes & Lu, 2009) and change in overseas customers’ demands and competitor’s (Achrol and Stern 1988) have the potential to significantly influence the number of export destinations targeted by SMEs in a given country. Teece (2007) stress the need for firms to search for and explore relevant context aspects such as the market environment or the technology in which they are involved. Internationalized firm’s exporting can be enhanced through balancing between exploring and exploiting international opportunities in turbulent market (Lisboa, Skarmeas & Lages, 2013). Nguyen and Khoa (2020) examined the factors affecting the competitiveness of seafood exporting enterprises in Vietnam and stressed the need for exporting enterprises to maintain a customer-responsive marketing capability, competitor’s reaction capability and business environment adoption capability. Owners of SMEs who operate in and aware of a dynamic business context can address and react to relevant dynamism indicators to increase their geographic scope. Accordingly, the fourth research hypothesis can be stated as:

\[ H4: \text{Environmental dynamism has a significant impact on SMEs’ level of internationalization.} \]
2.5. SMEs’ Attributes and SMEs’ Level of Internationalization

Firm’s attributes and characteristics are significantly associated with firm’s internationalization strategy (Onkelinx & Sleuwaegen, 2009). Recognizing the limited resources of SMEs, they need to decide on selecting suitable foreign markets and the right time to enter such markets while considering best entry mode (e.g. direct export or use of international trade intermediary). Due to the nature of SMEs and their limited financial and human resources, limited availability of information and capabilities, they use exporting as the fundamental entry mode to international markets (Knight & Liesch, 2016). In this regard, D’Angelo et al. (2013) argued that exporting performance of SMEs is dependent to their home regional scope or global regions scope. Research presented various characteristics and attributes associated with their exporting geographic scope. For instance, firm age was significantly associated with its geographic international scope (Love, Roper & Zhou, 2016) and export intensity of internationalized companies (D’Angelo et al 2013; Gallego & Casillas 2014). Firm age needs to be distinguished from manager’s international experience as some view firm’s age as a proxy for the duration of the experience of firm internationalization (D’Angelo et al., 2013; Majocchi et al., 2005).

Prior international experience was significantly associated with the export intensity and geographic scope of internationalized companies (D’Angelo et al., 2013). Further, Clarke, Tamaschke, and Liesch (2013) reported that international experience is a major determinant in explaining firm internationalization. Firm size is one of the driving forces for firm internationalization (Javalgi, 2011) as bigger firms have better chances to enter global markets (European Commission, 2007). This study examined the impact of SME age, size, and international experience factors on the geographic scope of internationalized SMEs and the fifth research hypothesis is stated as:

\( \text{H5: SMEs’ characteristics – age, size and international experience – have a significant impact on SMEs’ level of internationalization.} \)

3. Data and Methodology

3.1. Method and Data Collection

This study employed a quantitative research method and used survey questionnaire to collect primary data from 305 Malaysian manufacturing SMEs. Purposive sampling technique was used by which proportionate samples were taken from seven manufacturing sectors. According to Department of Statistics Malaysia (2018) furniture, textile and apparels, food and beverages, rubber and plastics products, metal and metal products, publishing, printing and reproducing of recorded media, and wood products account for 75.1 % of the total manufacturing SMEs establishments. To manage cultural differences and motivate respondents to fill in questionnaires, two local citizens were hired to help researchers in data collection process.

The analysis of variance (Anova) test was used to explore the differences in the mean values of dependent variable (Level of SMEs’ Internationalization) in relation to dynamic capabilities (sensing, seizing, and reconfiguring) and environmental dynamism. Anova test is used to identify the variance in the mean scores for three or more independent samples (Saunders et al., 2007). Chi-Square test was used to identify the association between SMEs’ characteristics (age, size and SME owner/manager’s international experience) and the level of SME level of internationalization.

3.2. Variables Measurement

This study used geographic scope represented by the number of export destinations as a measurement method for Malaysian internationalized SMEs. Gubik and Bartha (2014) identified four indicators to assess SMEs’ level of internationalization: export intensity, SME’s owner attitude, geographical scope, and complexity of strategy. Based on the data collected, this research has categorized geographic scope of internationalized SMEs into: low internationalized SME (exporting to 1-5 foreign destinations), moderate internationalized (exporting to 6-10 foreign destinations), and high internationalized SMEs (exporting to 11 and above foreign destinations). Environmental dynamism was measured using five items including 1) the vulnerability to the change in trade policies in export destinations and technological change associated with firm’s main product/industry (Zhou, Barnes, & Lu, 2009), 2) change in foreign customers’ demand and preferences, 3) competitors’ new product introduction rate, and 5) new selling strategies (Achrol & Stern 1988). Dynamic capabilities were measured based on Teece’s (2007) conceptualization: sensing, seizing and reconfiguring capabilities using 5-point Likert scale.

4. Results and Discussion

A total of 600 self-administered questionnaires were distributed to owners/managers of exporting SMEs in Selangor, Kuala Lumpur and Johor Baru states. Table 1 summarizes the profile of internationalized Malaysian SMEs. Out of the 600 questionnaires, 381 were filled and returned with only 327 questionnaires complete and valid for data analysis. Hence, the response rate was approximately 54.5%, which is considered adequate to infer conclusions and recommendations for the study. The research findings
revealed that the majority of internationalized Malaysian manufacturing SMEs is moderate internationalized, with 6-10 export destinations coverage. Table 1 shows that 30.82% of SMEs owners/managers possess 11-15 years of experience in international market, while 34.75% have 16 to 20 years of operating in overseas markets. Internationalized SMEs in furniture and food and beverage industries dominate the larger share in international operation, 23.9% and 17.7%, respectively. Additionally, the intensity of internationalized Malaysian manufacturing SMEs in Selangor was 39.3% followed by SMEs in Johor Baru and Kuala Lumpur with 35.7% and 24.9%, respectively. SMEs’ age findings revealed that the majority of internationalized SMEs are 11 to 20 years old (34.10%), followed by 21-40 years old (27.54%). Moreover, the number of export destinations of internationalized Malaysian SMEs showed that 28.2% export to 1-3 destinations, 44.9% export to 4-7 foreign destinations, and 26.9% of SMEs export to 8 and above global destinations. Finally, the findings reveal that 41% of SMEs possess 101-150 employees, followed 39% of SMEs with 51-100 employees. According to Malaysian SME corporation (2013) small manufacturing enterprises refer to firms with sales turnover of less than RM15 million or full-time employees from 5 to less than 75, while medium manufacturing enterprises refer to firms with sales turnover not exceeding RM50 million or full-time employees not exceeding 200.

Based on the adopted definition of Malaysian SMEs, approximately 35% can be considered as small enterprises and 65% can be viewed as medium enterprises. The results of the Anova test revealed a statistically significant differences between sensing capabilities and the internationalized SMEs’ geographic scope as a significance value of 0.017 and (f) value of 4.892 as shown in Table 2. Hence, the first research hypothesis is accepted, and it can be inferred that sensing capabilities have a significant impact on internationalized Malaysian SMEs’ geographic scope.

Further, reconfiguring capabilities were scientifically related to geographic scope of internationalized Malaysian SMEs at a significance level of 0.013 and (f) value of 5.132 as illustrated in Table 4. Therefore, the third research hypothesis is accepted, and it can be concluded that there are significant differences between reconfiguring capabilities possessed by SMEs’ owners/managers in Malaysia and their SMEs’ geographic scope.

Table 1: SMEs’ Profile.

| Item                    | Freq | %   |
|-------------------------|------|-----|
| Geographical scope      |      |     |
| 1-5 export destinations | 86   | 28.2|
| 6-10 export destinations| 137  | 44.9|
| More than 10 destinations| 82   | 26.9|
| Firm Age                |      |     |
| 1 - 10 years            | 15   | 4.92|
| 11 - 20 years           | 66   | 21.64|
| 21 - 30 years           | 104  | 34.10|
| 31 - 40 years           | 84   | 27.54|
| > 40 years              | 36   | 11.80|
| SME Location            |      |     |
| Selangor                | 122  | 39.3|
| Kuala Lumpur            | 95   | 35.7|
| Johor Baru              | 88   | 24.9|
| International Experience|      |     |
| 1-5                     | 18   | 5.90|
| 6-10                    | 40   | 13.10|
| 11-15                   | 94   | 30.82|
| 16-20                   | 106  | 34.75|
| =>21                    | 47   | 15.43|
| Industry Type           |      |     |
| Food and beverages      | 55   | 17.7|
| Furniture               | 69   | 23.9|
| Textile and apparels    | 35   | 11.1|
| Wood and wood products  | 36   | 11.5|
| Rubber and plastics     | 39   | 12.6|
| Publishing & printing   | 38   | 12.4|
| Metal and metal products| 33   | 10.8|
| Firm Size               |      |     |
| Less than 50 employees  | 23   | 7.6 |
| 51 - 100 employees      | 119  | 39  |
| 101 - 150 employees     | 126  | 41.3|
| 151 - 200 employees     | 37   | 12.1|

Table 2: Anova Test of Sensing Capabilities and Geographic Scope

| Factor                  | Sensing Capabilities | Sum of Squares | Df | Mean Square | F       | Sig.   |
|-------------------------|----------------------|----------------|----|-------------|---------|--------|
| Sensing Capabilities    |                      |                |    |             |         |        |
| Between Groups          | 5.236                | 4              | 1.309 | 4.892 | 0.017   |
| Within Groups           | 101.541              | 300            | 0.338 |
| Total                   | 106.777              | 304            |     |             |         |
Research findings revealed a significant relationship between indicators of environmental dynamism and internationalized SMEs’ geographic scope. The results of the Anova test revealed a significance value of 0.021, which is less than (0.05) confidence level and (f) value 2.949 as shown in Table 5. Therefore, the fourth research hypothesis is accepted, internationalized Malaysian SMEs’ geographic scope is significantly influenced by dynamism of business environment.

This study examined the association between SMEs' characteristics: age, size, and SME's owner/manager international experience; and internationalized SMEs' geographic scope using Pearson's Chi-Square test. The result of the Chi-Square test showed that there is no relationship between SME age and internationalized SMEs' geographic scope, where p value is 0.781 as illustrated in Table 6. In addition, the Pearson’s Chi-Square test showed that there is no relationship between SME’s size and internationalized SMEs’ geographic scope, where p value is 0.432 as shown in Table 6.

Further, Table 6 revealed that there was no statistically significant association between the international experiences possessed by SMEs’ owners or managers and internationalized SMEs’ geographic scope, where p value is 0.316. Therefore, the fifth research hypothesis is rejected.

The research findings showed a significant impact of sensing, seizing and reconfiguring capabilities on the internationalized SMEs' geographic scope. In a case study on the relationship of dynamic capabilities and SMEs’ internationalization, Kuuluvainen (2012) argued that dynamic capabilities are important determinant of internationalization success. Malaysian SMEs’ owners/managers possess sensing capabilities, which are relevant to their SMEs level of internationalization. Sensing capabilities are related to the perception of opportunities by SMEs’ owner/manager corresponds to the creation and use.

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**Table 3: Anova Test of Seizing Capabilities and Geographic Scope**

| Factor                | Seizing Capabilities | Sum of Squares | Df | Mean Square | F    | Sig. |
|-----------------------|----------------------|----------------|----|-------------|------|------|
| Seizing Capabilities  |                      |                |    |             |      |      |
| Between Groups        | 2.759                | 2              | 1.380 | 3.194      | 0.037|
| *Within Groups        | 130.447              | 302            | 0.432 |            |      |
| Total                 | 133.206              | 304            |      |            |      |

**Table 4: Anova Test of Reconfiguring Capabilities and Geographic Scope**

| Factor                | Reconfiguring Capabilities | Sum of Squares | Df | Mean Square | F    | Sig. |
|-----------------------|----------------------------|----------------|----|-------------|------|------|
| Reconfiguring Capabilities |                           |                |    |             |      |      |
| Between Groups        | 6.241                      | 4              | 1.560 | 5.132      | 0.013|
| Within Groups         | 98.413                     | 300            | 0.328 |            |      |
| Total                 | 104.654                    | 304            |      |            |      |

**Table 5: Anova Test of Environmental Dynamism and Geographic Scope**

| Factor               | Sum of Squares | Df | Mean Square | F    | Sig. |
|----------------------|----------------|----|-------------|------|------|
| Environmental Dynamism |               |    |             |      |      |
| Between Groups        | 4.417          | 4  | 1.104       | 2.949| 0.021|
| Within Groups         | 112.346        | 300| 0.374       |      |      |
| Total                 | 116.764        | 304|            |      |      |

**Table 6: Pearson Chi-Square Tests for SMEs Characteristics and their Geographic Scope**

| Pearson Chi-Square | Value  | Df | Asymptotic Significance (2-sided) |
|--------------------|--------|----|----------------------------------|
| SME Age            | 4.780a | 8  | 0.781                            |
| SME Size           | 8.011a | 8  | 0.432                            |
| International Experience | 4.736a | 4  | 0.316                            |

a. 0 cells (0.0%) have expected count less than 5.
N of Valid Cases : 305
of dynamic capabilities (Zahra et al., 2006; Teece, 2007). Sensing capability is linked to scanning, creating, learning, and interpreting activities (Schreyögg & Kliesch-Eberl, 2007). Hodkinson and Healey (2011) and Bogodistov (2013) advocated the importance of dynamic capabilities for managers to sense the threat, seize an opportunity, and maintain firm competitiveness. The Anova test analysis showed a significant relationship between seizing capabilities and the level of SMEs’ internationalization.

The research findings on seizing capabilities and SME internationalization were consistent with literature as it has shown that Malaysian SMEs owners/managers possess seizing capabilities to evaluate a given opportunity. Seizing capabilities are concerned with the ability of managers to frame opportunities and addressing market opportunity through products, processes, and services, making strategic choices and timely investment decision making (Teece, 2007). Further, Barreto (2009) advocated the significance of timely managerial decisions and managerial attitudes towards the market and relates such decisions to value for the customer. Yi.et.al (2018) indicated that dynamic capabilities: sensing the environment, learning, coordinating and integrating, and reconfiguration capabilities had a significant impact on technical performance of technologies-innovative Korean SMEs.

The Anova test analysis showed a significant relationship between reconfiguring capabilities and the level of SMEs’ internationalization. It was evident that internationalized Malaysian SMEs were able to reconfigure their human and financial resources to exploit an opportunity. Barreto (2009) and Teece (2007) stressed the vital role of reconfiguring capabilities in changing, extending and reconfiguring firms’ resource base to identify and exploit technological and market opportunities as well as building, maintaining and adjusting the complementarity of product offerings. Further, foreign market growth is contingent on a given portfolio of capabilities and a firm’s potential to reconfigure and deploy them for foreign market entry (D’Angelo et al., 2013). We may argue that they identify a given opportunity and emphasize how to reconfigure their resources to make it a profitable business deal.

Moreover, the Anova test analysis showed a significant association between environmental dynamism and the level of SMEs’ internationalization. Malaysian SMEs level of internationalization is associated with antecedents of environmental dynamism change in trade policies, customer demands, competitors’ practices. Previous research suggests that the effect of market orientation on business performance is positive across contexts characterized by varying levels of market turbulence, technological turbulence, and competitive intensity (Kohli, 2017). According to Easterby-Smith, Lyles and Peterafet (2009) dynamic capabilities are sought to be a major determinant in responding to the need for change required to identify new international opportunities. Authors believe that these changes can involve allocation of resources and operation, transformation of organizational processes, and development or improving customer relationship management. Further, it was argued that companies need to conduct frequent and unpredictable adjustments in resources and capabilities to compete successfully in a business environment characterized by high volatility and market dynamism (Teece, 2007).

From the Chi-Square test results, it is obvious that all respondents’ characteristics are not related to internationalized SMEs’ geographic scope at a statistically significant level (p < 0.05). The academic literature presents mixed results on the association between firm age and level of firm internationalization. According to (D’Angelo et al., 2013; Gallego & Casillas, 2014; Love et al., 2016) firm age has a robust link between with the geographical scope of international activity at both the country and regional level, and with export intensity. Firm age is positively related to export performance (Majocchi et al., 2005) whereas other found that the relationship between firm age and export performance to be insignificant (D’Angelo et al., 2013; Ganotakis & Love, 2011). Empirical research presents mixed results on the impact of firm age and its export performance. For instance, firm age has a positive impact on firm’s export performance (Majocchi et al., 2005). However, some studies revealed that relationship between firm age and its export performance is insignificant (D’Angelo et al., 2013; Ganotakis & Love, 2011). Accordingly, it can be argued that firm age is not necessary to be a determinant to firm’s level of internationalization as some aged firms might favor local markets and other firms may plan to invade international market if the local market is saturated or facing a severe competition from local or foreign competitors. On the other hand, there are many international new ventures that are involved in global market since its inception. Additionally, it is a well-established fact that the bigger the size of the business, the better chance it has to enter global markets (European Commission, 2007). Based on a study conducted by 9,480 SMEs from 33 European nations, it can be concluded that big sized companies maintain different alternatives to reach global markets (European Commission, 2010) and tend to export more intensively and have higher geographical scope (Gashi, Hashi & Pugh, 2013).

Further, research findings revealed no relationship between international experience and SME level of internationalization. These research findings are contrary to existing literature. Researchers advocated the role of previous experience of managers in enhancing both the geographical scope of SMEs’ international activity and export intensity (Ganotakis & Love, 2012; D’Angelo et al., 2013). Prior international business experience of the
entrepreneur was argued to impact on the decision to expand and the continuation of the firm’s strategy into international markets (Hutchinson, Quinn & Alexander 2006). SMEs’ owners/managers of internationalized Malaysian SMEs should focus on the processes important for recognizing, collecting and analyzing information related to changes in the global markets and use their own capabilities to recognize and exploit international opportunity.

5. Conclusions and Recommendations

This research examined the impact of dynamic capabilities and environmental dynamism on the level of SMEs internationalization in Malaysian context. The research findings revealed that the majority of internationalized Malaysian manufacturing SMEs is exporting to 6-10 destinations. The study established the existence of a significant impact of environmental dynamism and SMEs’ owners/managers sensing, seizing, and reconfiguring capabilities on the level of SME’s internationalization. Further, this study revealed no relationship between SME’s age, SME’s size and manager’s international experience, and SME’s level of internationalization. This study relied on a customized measure of SMEs’ level of internationalization and examined the level of internationalization in general without differentiating between regional and global exporting. Future research can examine the relationship between dynamic capabilities and other indicators of level of SMEs internationalization such as frequency of exporting and export intensity to international markets.

Regarding recommendations, Malaysian SMEs need to actively get involved in international markets and Matrade lauds the government’s move to encourage exports. MATRADE need to develop training programs for SMEs’ owners/managers that emphasize on how to develop the sensing, networking and reconfiguring dynamic capabilities. These training program need to pay attention to how SMEs’ owners/managers can sense and evaluate the different environmental dynamism perspectives and how to react. MATRADE overseas offices may take responsibility of providing relevant and updated foreign dynamic business environment, and effectively promote Malaysian products. Managers of SMEs must be equipped with relevant sensing, networking and reconfiguring capabilities to enhance and improve their international performance and widen their geographic scope.

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