

CHAPTER 7

DISCUSSION AND CONCLUSIONS

7.0 Introduction

The previous chapter presented the results of the data analysis. This final chapter presents a discussion and summary of the hypotheses result, followed by the contribution of the study for theoretical, practical, and methodological. The limitations of the current study are also outlined and the future research suggestions that may better illuminate the relationship between corporate entrepreneurship and firm performance. This chapter ends with the concluding remarks.

7.1 Summary and Discussion of Results

This research sought to answer the guiding question: How does corporate entrepreneurship and organizational structure affect the performance of the large firm in Malaysia? Additionally, the research questions addressed to what extent environmental dynamism and hostility moderates the relationship between the independent variables and dependent variable. The details of the research questions are as follows;

1. To what extent do the dimensions of entrepreneurial orientation influence firm performance?
2. To what extent does corporate venturing influence firm performance?
3. How does the organic structure influence the firm's performance?
4. To what extent does environmental dynamism and hostility moderate

the relationship between independent variables and dependent variables?

This study was conducted among the various sectors of public listed companies, on the main board, Bursa Malaysia. The unit of analysis is at firm level and the questionnaires were addressed to the top management team of various firms. The underpinning theories of this research are the resource-based view theory, organizational learning, and contingency theory. In order to achieve the objectives of this study, the author developed three models.

Model 1 and Model 2 utilized similar samples but different sample sizes and sources of data for the dependent variables, due to the unavailability of data. Model 1 consisted of 138 sample respondents while Model 2 had 130 sample respondents. Model 3 had the lowest sample size comprising 35 firms. Models 1 and 2 employed the same theoretical framework but different data sources for the dependent variables. Model 1 used primary data for the dependent variables, whilst, secondary data were used for the dependent variables in Model 2. Model 3 utilized secondary data for both dependent and independent variables. The results show different findings for each model and are to be discussed further in the next subsections.

7.1.1 Question one: To what extent do the dimensions of entrepreneurial orientation (innovativeness, proactiveness and risk taking) influence firm performance?

The first objective in this study was to investigate the relationship between the dimensions of entrepreneurial orientation (innovativeness, proactiveness and risk taking) and performance of large firms. In accordance with the suggestions from Lumpkin and Dess (1996; 2001) that entrepreneurial orientation is a multidimensional construct, this study treated the entrepreneurial orientation dimensions as independent

constructs. This is to avoid the weaknesses of unidimensional constructs which neglect the individual influences of each dimension and assumes that all dimensions have similar effects on firm performance (Hughes & Morgan, 2007; Lumpkin & Dess, 2001). It is believed that the firms can vary in degree of innovativeness, proactiveness, and risk taking. In other words, they are not equally entrepreneurial across all dimensions. However, it is recommended that all dimensions need to be positively correlated (Lumpkin & Dess, 2001). In order to enhance firm performance, these dimensions often work together (Dess & Lumpkin 2005) and highly entrepreneurial firms should score on all the three dimensions (Covin, et al., 2006). However, even if only some of the dimensions of entrepreneurial orientation exist within a firm; the organization can still be very successful (Lumpkin & Dess 2001).

The link between entrepreneurial orientation and firm performance has remained inconsistent (Lumpkin & Dess, 1996) and a lot of questions remained unsolved (Moreno & Casillas, 2008). A possible explanation may be attributed to the diverse indicators used to assess entrepreneurial orientation and firm performance (Lumpkin & Dess, 1996). For instance, Soinen et al. (2011) found that entrepreneurial orientation has no positive effect on the small firm's profitability but was positively related to actual sales growth. Other potential reasons for this are the cultural diversity and social differences across countries (Knight, 1997; Thomas & Mueller, 2000). For example, in the USA all the entrepreneurial orientation dimensions were positively related to all performance dimensions, while in the Netherlands, entrepreneurial orientation was only positively related to some performance indicators (Kemelgor, 2002; Stam & Elfring, 2005). The study conducted amongst small Spanish firms found that entrepreneurial orientation had no positive effects on firm performance (Moreno & Casillas, 2008). However, entrepreneurial orientation was positively

related to firm performance among the Portuguese SMEs (Rodrigues & Raposo, 2011) and in German SMEs (Spillecke & Brettel, 2012; Walter et al., 2006). It also had a positive effect on business performance among the SMEs in north-east China (Zhang & Zhang, 2012).

Taking into account the various factors in considering the relationship between entrepreneurial orientation-firm performance, this study developed three models to ensure the robustness of the entrepreneurial orientation-performance research. As a result, although the study found that the three entrepreneurial orientation dimensions had a statistically significant and positive impact on large firm performance under different conditions, the entrepreneurial orientation dimensions also had either a negative or no relationship with large firms' performance when using different measurements. The impact on each dimension is explained below:

7.1.1.1 The Relationship between Innovativeness and Firm Performance

In order to answer the research questions and achieve the objectives, the direct relationship between innovativeness and firm performance was analyzed using five hypotheses. Findings from the study suggest that the innovativeness of the large firm may not necessarily have a positive effect on all firm performance measures. This research found that out of five hypotheses on innovativeness and firm performance, only two hypotheses were supported. In Model 1, innovativeness had a strong positive effect on overall firm performance and became the most important predictor for overall firm performance, which are the path coefficient of .246 and the t-value of 3.098. In Model 2-Profitability, innovativeness was also positively related to the firm's actual profitability. These findings were similar to the findings among the SMEs in Malaysia (Amran et al., 2009), Pakistan (Hameed & Ali, 2011), Korea (Yoo, 2001) and the recent study among publicly traded firms in Istanbul (Karacaoglu et al.,

2013). However, the innovativeness showed no significant relationship with the firm's actual growth in Model 2-Growth. When using secondary data to measure both innovativeness and firm profitability in Model 3-Profitability, the relationship was found to be negatively related. This negative relationship may be attributed to the fact that the indicator used for innovativeness was the research and development expenses of the firm, thus, raising the firm's overall expenses and as a consequence, reducing the firm's profitability. Finally, in Model 3-Growth, it was found that there was no relationship between innovativeness and actual firm growth.

Although not all hypotheses supported the innovativeness-performance relationship, this study provides empirical support for previous studies which revealed that innovativeness has the greatest impact on firm performance (Hashia & Stojcic, 2012; Wang & Zhan, 2009; Wiklund, 1999; Yoo, 2001). Previous studies also found that innovativeness is not necessarily positively related to firm performance all the time. For example, the study by Kraus et al. (2012) on Dutch SMEs also found that innovativeness was not positively related to firm performance.

The findings of this study are useful in extending the resource-based view theory that innovativeness is the unique intangible resource and capability of the firm that generates sustainable competitive advantage by capitalising on emerging market opportunities. This is because innovativeness has the characteristics of being valuable (especially in exploiting opportunities and neutralizing threats in business competition), rare among business competitors (always looking for newness), inimitable (innovative firms often introduce new products, services and processes), and non-substitutable (Barney, 1991). Thus, this research enriches the RBV theory as discussions of RBV in connection to innovativeness are relatively rare in the literature (Brown & Kirchof, 1997).

reason for the current developments stem from the fact that large firms face difficulties in acting fast and capitalizing on the first mover advantage due to the firm's bureaucratic structure. The complexity of the organizational structure impedes information flows, lengthens decision making and thus kills fast acting initiatives (Burns, 2008).

In this study, when secondary data were used to assess proactiveness and firm performance, the hypothesis was significant but not supported and indicated a negative relationship with the firm's actual profitability. This is may be due to the variation in measurement of proactiveness and firm performance. For example, this study measured actual proactiveness from the percentage of retained earnings in a firm. The retained earnings refer to the portion of net income which is retained by the firm rather than that distributed to its owners. It is believed that the higher the percentage of retained earnings the more proactive the firm will be. This is because the firms may use the money to invest in upcoming business plans (acting ahead of competitors).

Although only one hypothesis supports the positive association between proactiveness and firm performance, the importance of this dimension cannot be neglected. In addition, this finding is concurs with that Becherer and Maurer (1999) in various industries in the US that the proactiveness was not positively related to all performance measure. They found that, the proactiveness was only positively related to the change in sales but no relationship found in the change in profit. The large firms may find it difficult to enter new markets before others because of their size, centralize decision making and beauracritic structures. Thus, according to the study by Coulthard (2007), it is easier for the start-up companies to use proactiveness compared to established firms. The large firms may be followers that improve upon

the initial efforts of first movers (Certo et al., 2009). However, a firm can be novel, forward thinking, and fast without always being first (Lumpkin & Dess, 1996: 146).

The firm's capability to proactively search for new opportunities by acting in anticipation of future problems, needs, changes and aiming to be ahead of other competitors agrees with the RBV theory. This proactive behaviour aims to maximize the firm's returns by responding to market signals, access to scarce resources and being strongly committed to improve product and service offerings (Day & Wensley, 1998; Green, Barclay & Ryans, 1995; Wright et al., 1995). The proactive firm would benefit from its first mover advantage because they are able to capitalize on a market opportunity. As the first to introduce a new product or service, the firm can capture extraordinarily high profits and a head start on establishing brand recognition (Lumpkin & Dess, 1996). Being the first to introduce the product or service would bring advantages such as customer loyalty due to the high switching cost. With such capabilities to integrate, build and reconfigure internal and external competencies to address fierce competition, the firms will be able to strategically exploit resources to gain sustainable competitive advantage as suggested in the RBV theory (Barney, 2001b; Teece et al., 1997).

7.1.1.3 The Relationship between Risk taking and Firm Performance

In the context of entrepreneurial orientation, risk taking behaviour is the willingness of firms to make huge and risky resource commitments on venture opportunities even though they may be unsure of their success (Lumpkin & Dess, 2001; Wiklund & Shepherd, 2005). Risk taking by large firms is essential for opportunity seeking (Hills et al., 1997) and decision making (Busenitz, 1999).

This research discovered that out of the three hypotheses on risk taking and firm performance, two hypotheses were positively related to firm performance.

Firstly, risk taking of the firm was positively related to firm profitability. Secondly, risk taking was also positively related to firm growth. This positive relationship occurred in Model 2 where firm performance was measured using secondary data and risk taking was measured using primary data. The firm's risk taking was not positively related to overall firm performance in Model 1. Model 1 utilised primary data for both the independent and dependent variables. These findings show that the firms that have the courage to make significant resource commitments in high-risk projects with potentially high returns would definitely have the advantage of boosting their firms' income. This reflects previous researches that showed higher performance for firms with higher risk taking profiles (Gibb & Haar, 2010; Karacaoglu et al., 2013; Hameed & Ali, 2009; Rauch et al., 2009; Soininen et al., 2011).

These results also suggest that risk taking of the firm will lead to higher firm profitability and growth which is consistent with the VRIO framework of RBV because risk taking is seen as the firm's capability to generate competitive advantage. The risk taking activity generates the firm's competitive advantage through the organizing and allocating of resources to high risk projects with high returns. Such actions are vital to maximise the firm's performance by exploiting the firm's full potential (Barney, 2007; Newbert, 2007).

7.2 Question Two: To what extent does corporate venturing influence firm performance?

In this second question, the objective of the study is to investigate the relationship between corporate venturing and firm performance.

7.2.1 The Relationship between Corporate Venturing and Firm Performance

Corporate venturing refers to the entrepreneurial efforts of established firms to invest and/or add on new businesses (Sharma & Chiraman, 1999). It is divided into

two major types which are internal corporate venturing and external corporate venturing which are dependent on the location of the new business creation. It is termed internal corporate venturing if the new business is located within the parent company and conversely, if it is located outside the parent company, then, it is known as external corporate venturing. In this study, corporate venturing is a unidimensional construct as proposed by Zahra (1996). Therefore the corporate venturing activities include new businesses, new branches, entering new industries or new business alliances, acquisitions, joint ventures, and funding of new ventures or corporate venture capital.

The main agenda of the large firms in embarking on corporate venturing is to achieve growth for future performance (King, 2002; Lin & Lee, 2009) and it is most productive when practiced in a strategic manner (Covin et al., 2007). For example, international companies such as Intel, 3M, GE, Motorola, and Microsoft, have successfully used corporate venturing initiatives as their innovation strategies (Takashi, 2000; Ip, McWilliams & McGee, 2000).

In this study, corporate venturing is positively related to firm performance across the models. However, out of five hypotheses, three were found to have significant effects on firm performance. First, the findings revealed that when corporate venturing of the firm was higher, the perception of overall firm performance will be higher, the actual growth of the firm will also increased. This is similar to the findings in previous research in Slovenian manufacturing companies (Antoncic & Hisrich, 2003), Tehran public listed firms (Hajipour & Mas'oomi, 2011), and US manufacturing firms (Zahra & Hayton, 2008). But, corporate venturing was not positively nor significantly related to actual firm profitability. A similar finding was found in Chinese manufacturing and services industries (Wang & Zhan, 2009). This

may be attributed to the fact that the profitability of the firm may be affected in the short term due to expenses on new ventures, process of mergers and alliances and funding of new ventures. In contrast, corporate venturing is positively related to a firm's growth because the business is expanding and the additional products or services will increase the firm's sales/growth (Zahra & Garvis, 2000). This is similar to previous research conducted among 58 large and middle sized Chinese enterprises which revealed that venturing activities are positively related to overall perceptual firm performance, without a positive effect on ROI and net profit (Chen et al., 2005).

Corporate venturing activities are also essential for large firms because existing firms have bureaucratic structures or are inflexible, thus hampering the internal development of the firm's own entrepreneurial potential. Thus, by creating new ventures or buying highly entrepreneurial firms, it will instigate large firms to be faster in decision making and more responsive to market opportunities. This creation of new businesses also pushes the firm to focus on internal innovation potential that has not been fully tapped before (Burgelman, 1984; Zahra et al., 1999).

The findings in this current study also supported the notion of organizational learning theory that corporate venturing activities contribute to increased learning processes, thus leading to the long-term performance and survival of these organizations (Yukl, 2009). It is suggested in previous studies that the long-term survival of a firm is strongly influenced by organizational learning activities (Schildt et al., 2005). The firm obtains new knowledge by learning from their partners or new ventures since every firm has their own cultures, systems, technology and practices (Dess et al., 2003). The diversity widens the new knowledge sources (March, 1991). By learning from these ventures, it enables the firm to visualize and develop new ideas, systems, processes, and products (Henderson & Cockburn, 1994). It is widely

acknowledged that knowledge is one of the firm's most valuable resources due to its propensity towards organizing resources differently, determining a firm's new product offerings and executing technological development (Lai et al., 2010). These will possibly improve the firm's profitability and growth (Zahra & Hayton, 2008).

7.3 Question Three: How does the organic structure influence the firm's performance?

The third objective of this study was to examine the relationship between organic structure and firm performance. In today highly uncertain business environments, where faster decision-making is needed, in order to respond and adapt quickly to changes, it is recommended that the organizational structure must be organic (Farhanghi et al., 2013). This is to ensure survival and better firm performance.

In order to answer this research question, three hypotheses were formulated and two were found to be significant and were supported. In the first model, the organic structure showed no relationship with overall firm performance. In contrast, in Model 2, the organic structure was positively related to both actual firm growth and profitability. In other words, the less formalized, decentralized and less specialized organization structure leads to higher firm profitability and growth. This findings support previous research by Claver-Cortés et al. (2012), Covin and Slevin (1990), Farhanghi et al. (2013), Sine et al. (2006) and Sul and Khan (2006). According to Kuratko (2007), the firm structure must be always organic to enable firms to become more flexible and adaptive, aggressive, faster and better at generating novel products, services, and process improvements (Morris et al., 2009). The mechanistic structure is not suitable for today's entrepreneurial firms because of their rigidity and stifling communications (Kanter, 1983). Besides, centralized or high-level autonomy

possessed by higher levels of the organization will affect the success of the firm (Thornhill & Amit, 2000).

7.4 Question Four: To what extent does environmental dynamism and hostility moderate the relationship between independent variables and dependent variables?

In line with contingency theory, prior literatures suggest that superior firm performance can be achieved when the key variables such as the environment, industry conditions, organizational structures, and strategies are aligned. Based on this argument, this study included environment factor as a moderating variable to be clearer about the underlying factors affecting firm performance. Conducting business in stable and favorable environments is rather different from doing business in risky, unfavorable, hostile and unstable environments. Thus, using the same business strategy in both may not work and may jeopardize the survival of one's business. Using different strategies in these environments will be able to turn the risky and hostile environments into opportunities and ensure that handsome profits are gained. The dynamic and hostile environments can be either a game of survival or a golden opportunity depending on how the firm perceives the market.

Off the 15 hypotheses formulated, only 8 were found to be significant. However, one hypothesis was not supported due to the negative effect and thus, only 7 hypotheses were supported. Firstly, in Model 1, environmental hostility and dynamism were found to moderate the relationship between innovativeness and overall firm performance. Environmental hostility and dynamism also moderated the relationship between corporate venturing and firm performance. In Model 2, the relationship between the firm's risk taking, organic structure and firm profitability was also moderated by the environmental factors. The growth model in Model 2, also

found that risk taking, corporate venturing, organic structure and firm growth were moderated by environmental dynamism and hostility. The results show that only the relationship between proactiveness and firm performance was not supported.

It can be concluded that, when the environment in which the firms operate is highly uncertain with frequent changes in marketing practices, products, and service become obsolete quickly, unpredictable actions by competitors and hostile and risky customers, the firms will be more innovative, take more risks, be less formalized, specialized and decentralized. In addition, they will be conducting more venturing and this will subsequently affect firm growth positively. This is similar to the findings among the SMEs in China (Li et al. 2005; Mu & Benedetto, 2011), Spain (Martins & Rialp, 2013), and Netherlands (Kraus et al., 2012). This is also supported by cross-cultural study conducted by Kreiser et al. (2002a) among 1671 SMEs in Australia, Costa Rica. Finally, the findings of this study suggest that as a moderating variable, the environmental dynamism and hostility has a small to medium effect to the relationship.

Therefore, the use of contingency theory is favorable in the study of corporate entrepreneurship and firm performance relationship (Lumpkin & Dess, 1996; Zahra & Covin, 1995). This is because it provides a stronger prediction of a firm's performance compared to a simple direct relationship between corporate entrepreneurship and firm performance (Lumpkin & Dess, 2001). For example, the strength of the relationship between corporate venturing and firm performance has increased from $\beta = 0.199$ to $\beta = 0.310$ in Model 2-Growth.

7.5 Contribution of the Study

This section presents theoretical, practical, and methodological contributions of this study. These highlighted contributions were made based on this research findings and discussion of the results presented in the earlier section.

7.5.1 Theoretical Contribution

The study is useful in extending the theories of corporate entrepreneurship. In particular, it provides an extension of the current knowledge base in Malaysia where the study on corporate entrepreneurship is still in its infancy. This study employed a quantitative 'hypothetic-deductive' model. Hypotheses testing was based on the existing theory and then tested by the deduction of consequences from the model. This method is also known as 'theory driven research' where the hypotheses need to be validated in 'real world' situations by data used in the study (Sayer, 1992). Also known as positivism as according to Popper (1969), science is not inductive but deductive in nature. Thus, this study has some important theoretical implications which will be discussed in this subsection.

First, most studies on corporate entrepreneurship-firm performance in Malaysia have been conducted among smaller firms. Yet, large public firms are a major and critical part of the Malaysian economy. Although the establishment of the large firms only about 2.7% of the total firm establishment, but compare to other countries in Asian (e.g. Japan, Taiwan, and Korea) the Malaysian large firms contributes more to the GDP. Thus, their performance is a major concern. It is therefore important to conduct research on large firms since corporate entrepreneurship refers to the entrepreneurial activities within established and large organizations. As expected, the results of this study supported prior literatures that corporate entrepreneurship is essential in today's highly competitive business

environment. It is hoped that this research will enrich the empirical findings in this field especially for the large firm settings.

Second, this research combines three theories that are the RBV, organizational learning, and contingency theory in determining the performance of large firms. This three-theory integration is rare in previous research. This research is useful especially in addressing the fundamental question why firms are different and how firms achieve and sustain competitive advantage by deploying their resources to create superior firm performance. More importantly, the use of these theories also contributes to the theory development since there are no specific theories belonging to entrepreneurship area (Zahra, 2006). In this study, these three theories were proven to be important in achieving higher overall firm performance, profitability and growth.

Third, as agreed by many scholars and researchers, the organizational structures of large firms are formal, highly specialized with centralized decision making. In other words, large firms practice the mechanistic structure. Thus, it is difficult for them to act faster. They have less entrepreneurial spirit and as a result, this affects the performance of the firm. However, it is empirically proven in this study that the organic structure of the large firms had a positive effect on the firm's profitability and growth. This also supported that in today's uncertain business environment, the organizational structure must be flexible for faster decision making and to adapt with the changing environments (Farhanghi et al., 2013).

Fourth, this study provides 3 main models and 8 sub-models for the determinant of large firm performance in Malaysia. All the models developed were based on the literatures on corporate entrepreneurship. These models also strengthen the findings in the corporate entrepreneurship arena. Besides, this study is the first to use multiple models in corporate entrepreneurship research in the Malaysian setting. It

is hoped that this study will contribute to further development of corporate entrepreneurship research by extending the existing models. This is crucial bearing in mind that different models may produce different results.

Finally, this research contributes to identification of the different effects of corporate entrepreneurship on the multidimensional measures of firm performance. From the study, it can be concluded that the effect of corporate entrepreneurship dimensions on firm performance in Malaysia is unique and differs from that in other countries. Firstly, innovativeness was positively related to overall firm performance and firm profitability but not related to growth. Second, proactiveness was positively related to overall firm performance but not related to firm profitability and growth. Third, risk taking was positively related to profitability and growth but not with overall firm performance. Fourth, corporate venturing was positively related to overall firm performance and growth but not with the profitability of the firm. Thus, with these findings, it is contributes significantly to the literatures on corporate entrepreneurship especially in Malaysia.

7.5.2 Practical Contributions

This study will also assist large firms, investors, governmental sectors, managers and executives, researchers, and students to better understand the relationship between corporate entrepreneurship dimensions, organic structures and firm performance as well as the impact of environmental dynamism and hostility on these relationships. There are four practical impacts of this research in terms of managerial actions to be taken.

First, large firms in Malaysia, especially the public listed companies, need to recognize the importance of corporate entrepreneurship. The results of this study suggest that: (i) innovativeness is essential for overall firm performance and firm

profitability, (ii) proactiveness of the firms is crucial for overall firm performance, (iii) large firms also need to be more tolerant of risks or able to take high-risk business opportunities to increase firm profitability and growth, (iv) corporate venturing activities such as mergers, acquisitions, CVC and alliances are important to increase overall firm performance and for the firms' expansion and growth, and, (v) the organic structure of the firm which is less formalized and specialized, with decentralized decision making lead to positive firm growth and profitability.

Second, the shareholders and managers will also gain important information regarding the effects of environmental dynamism and hostility on the firm's strategies and firm performance. The findings in this study will enable the shareholders and managers to understand the role of the environment on performance of the firm because corporate entrepreneurship activities differ, depending on the type of environment a firm faces. The firms must increase their innovativeness, risk taking, corporate venturing, and organicity during uncertain and hostile business environments. This is to achieve higher firm performance in both profit and growth. Therefore, the firm must be ready to face the challenges in order to be successful. The better prepared the firm, the better they will be able to pre-empt the uncertain and hostile environments and better prepared to face impending the obstacles. In other words, the more preparation that the firms make, the more opportunities they will be able to identify and capitalize on, in dynamic and hostile environments. The managers should know that the firm must learn, adapt, improve and change to tackle the challenges faced and capitalise on the opportunities in order to survive in fiercely competitive business environments.

Third, it is hoped that this study will provide useful information for the government to formulate economic policies as part of the government's effort to

remain competitive in the global economy and future economic development. The government might consider to put more effort in encouraging the innovation among these large firms because it is found in this study that, the innovativeness was the highest contributor to firm performance ($\beta = 0.246$). Such initiatives reflect and complement the vast contributions of the large-firm sector to the Malaysian economy.

Fourth, this research has important benefits for managers and executives because it provides guidelines on how to act entrepreneurially in order to survive and improve company performance.

7.5.3 Methodological Contribution

First, to the knowledge of the author, this is the first research in Malaysia using the objective indicators of corporate entrepreneurship measures. The majority of the researches on corporate entrepreneurship have used the subjective measures of corporate entrepreneurship in its research. This research follows the recommendations made by Miller and Breton-Miller (2011) to utilise the objective measures of entrepreneurial orientation. Similarly, Zahra and Garvis (2000) made the same recommendations for corporate venturing. It is hoped that the methodology and results are replicable and cumulative as the field progresses.

Second, the majority of the studies on corporate entrepreneurship are using unidimensional construct to measure corporate entrepreneurship or entrepreneurial orientation. The drawback of the unidimensional construct is that it neglects the individual influences by each dimension and assumes that all dimensions have a similar effect on firm performance (Hughes & Morgan, 2007; Lumpkin & Dess, 2001). In addition, not all dimensions would have direct or positive effects on firm performance (Lumpkin & Dess, 1996). The firms can vary in degree of innovativeness, proactiveness and risk taking. This is true in this research where all

the corporate entrepreneurship dimensions are not positively related to all performance measure. However, even if only some dimensions of entrepreneurial orientation exist within a firm; the organization can still be very successful (Lumpkin & Dess, 2001).

Third, most of the prior studies in corporate entrepreneurship were using primary or perceptual data to measure the firm performance. The use of primary data may be biased which is based on the respondent's preferences and not the actual firm's situation. Thus, in this research, both primary and secondary data were used in this study based on the recommendation and suggestion by Miller and Breton-Miller (2011) and Zahra and Covin (1995). The findings also produced different results.

Fourth, most of the studies on corporate entrepreneurship in Malaysia have used regression analysis and hierarchical analysis in their study, as depicted in Table A-1 (Appendix A). However in this study, the Partial Least Square (PLS) approach to Structural Modeling Equation (SEM) was used to analyze the data. The PLS approach was used to test the measurement model such as the reliability and validity of the instruments and the structural model used to test the hypotheses under study. The SEM overcomes the limitations of Ordinary Least Square regression (OLS) or the first-generation techniques such as a regression-based approaches, and factor or cluster analysis (Haenlein & Kaplan, 2004). Basically, in OLS, the researcher is analyzing the mean of the respondents instead of analyzing the individual responses. Therefore, the OLS technique will abandon some data and will be theoretically inefficient and statistically less accurate (Zainudin, 2012). The SEM method, an extension of the OLS, was developed to cater to the limitations of the OLS.

7.6 Limitations of the Study and Future Research Suggestion

Although this study makes significant contributions to the body of knowledge about the determinant of large firm performance, the study was also constrained by some limitations. These limitations however open up various avenues for future research. Firstly, there were limitations in the sample size especially in Model 3. Thus, the next research could include all large firm establishments and not only be restricted to public listed companies. As at 2010, there were 17,803 large firm establishments compared to only 842 public listed companies.

Secondly, this study used cross-sectional data or one time occasion research. In the short term, entrepreneurial strategies such as innovativeness and risk taking require large resource commitments, especially in research and development and investments in high risk projects. As a result, these huge expenses may jeopardise the firm's profits. Thus, firms may need to sacrifice profits in the short term especially if they intend to stay on the cutting edge of technology for long-term innovations. In this light, future researchers can embark on longitudinal research design to effectively assess the effects of corporate entrepreneurship on firm performance in the long term, such as within 3 to 5 consecutive years. Entrepreneurial strategy investments may positively influence the financial performance of the firm in the long term.

Thirdly, this study solely employed quantitative data and methods. Future research may use triangulation methods which combine both qualitative and quantitative method such as includes face-to-face interviews with CEO. This can improve and extend the existing measurement scales.

Fourthly, although there are 3 main models in this study, they are somewhat simple and thus it may be important to consider additional variables, such as other business strategies or antecedents of corporate entrepreneurship to effectively capture

the determinant factors for firm performance. Repeating the survey with these improvements will mitigate this problem and can increase the variance explained (R^2).

7.7 Concluding Remarks

The key contribution of this research is the proposal of a model for measuring the performance of large firms in Malaysia, which comprise the publicly listed companies. Their performance is a major concern due to their vast economic contributions to the nation. Large firms are the largest contributors to the national export earnings and gross domestic product. Besides, these large firms also provide funding to new ventures. Thus, it is imperative that they implement appropriate strategies to enhance their performance and ensure their survival, especially in these turbulent economic times.

In order to overcome the problems faced by the public listed companies such as suffering from lower levels of profitability, declining survival rates and failure to present quality, balanced and meaningful strategies, they must move towards implementing corporate entrepreneurship strategies in their operations. Corporate entrepreneurship activities such as innovativeness, proactiveness, risk taking, and corporate venturing were found to be positively related to overall firm performance, profitability, and growth. The organizational structure of the firm must also be less formalized, decentralized and less specialized to facilitate and expedite decision making. Thus, in order to survive and prosper, large firms must use their resources and capabilities to create competitive advantage so that they can not only obtain higher performance but also outperform their rivals.

The willingness of the firms to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes will capture the customers' preferences that are rapidly

changing. Consequently, the firms' profitability and overall firm performance will increase due to the firm's ability to offer various lines of products and services. This also will cut costs by improving or using new systems and more sophisticated technology.

The firm must also be more proactive in bringing products or services to the markets in order to be ahead of other rivals. This is to seize available opportunities in the dynamic environments where fewer opportunities exist. The proactive firm does not only look for business opportunities but also aims to shape the environment in order to influence trends and create demands. This forward-looking perspective enables the proactive firm to anticipate future demands and become the first to introduce new product or services. Thus, being the first mover, has its own advantages because the firm can capture extraordinarily high profits and have a head start in establishing brand recognition. This study has shown the positive effects of proactiveness on overall firm performance.

In order to be more entrepreneurial and create competitive advantage, the firm must be able to take risks by committing substantial amounts of resources for high-risk projects with chances of very high returns. The large firms' willingness to take risks in introducing new technologies or processes is essential in order to capture business opportunities and create new demands. Even if the new creation may not be acclaimed by customers, large firms can take it as a learning process and improve on the products when necessary. It is empirically proven in this study that being a risk taker in business leads to higher firm growth and profitability. These strategy combinations are to enhance sustainable competitive advantage, also leading to higher performance and growth. Therefore, entrepreneurial orientation is the source of

competitive advantage that cannot be perfectly imitated, substituted, or traded, and is a valuable resource of the firm.

It is also recommended that the firm continuously encourage learning to create new knowledge about new products, services, process, technologies, markets and others. In the 21st century business, knowledge is recognised as the most salient competitive advantage. Corporate venturing activities such as CVC, alliances, joint ventures, and acquisitions do not only increase the firm's growth but also contributes significantly to the firm's profitability and overall firm performance. The firms obtain new knowledge through learning from their partners or new ventures about new technologies, system, practices, and appropriate management style. The new knowledge expedites and stimulates generation of new idea and the ability to visualize the future customers' preferences. These will possibly improve the firm's profitability and growth.

As suggested by Kuratko (2007), firms are advised to practice more organic and flexible organizational structures to enable them to be more adaptive, aggressive, faster and better at generating novel products, services, and process improvements. In a highly competitive business environment characterised by fast changing customer preferences, and rapid and unpredictable technology changes, the organization must be able to respond and adapt to the changes faster than their competitors.

Dynamic business environments are unstable and continuously changing and the survival rate of large firms is decreasing in hostile environments due to increased competition and depressing demands (Miller & Friesen, 1984). At the same time, social, political, technological, and economic changes bring about new ideas for firms to venture into new markets and broaden the firm's niche (Zahra, 1991). Thus, large firms must increase their innovativeness, risk taking, corporate venturing and practice

organic organizational structure. Failure to do so might expose these firms to massive losses or even bankruptcy.

The findings of this study extend corporate entrepreneurship literature especially for the large firms, of which there are minimal empirical researches, especially in Malaysia. It was revealed from the literature review that the majority of the studies on corporate entrepreneurship were conducted on smaller firms. Thus, it is hoped that this study will be invaluable in providing directions for future research in this evolving field. The findings of this study are also beneficial for the government in implementing future policies and providing more support and incentives to encourage large firms to be more entrepreneurial. Since the survival of the firms are highly depending on continuous growth and ability to defend against the ongoing threat from the rivals, the large firm in Malaysia must put more effort to be more entrepreneurial.

