

CHAPTER 4

THEORETICAL FRAMEWORK AND HYPOTHESES

4.0 Summary

Chapter four discusses the proposed research model for this study. The proposed research model is based on the international entrepreneurship conceptual model advanced by Antoncic and Hisrich (2001) and comprises three main constructs; determinants of internationalization (Organizational and environmental characteristics); internationalization; and firm performance. Subsequently, the research hypotheses were developed based on the proposed research model.

4.1 Proposed Research Model.

The Proposed Research Model of this study is developed from the international entrepreneurship conceptual model by Antoncic and Hisrich (2001). The model is built around the concept of internationalization that consists of internationalization properties (market and time) and internationalization performance. Other building blocks of the model are organizational and environmental characteristics and organizational performance. The characteristics of the SMEs under study are reportable by the SMEs owner, Chief Executive Officer or general manager.

The international entrepreneurship conceptual model by Antoncic and Hisrich (2001) illustrates several strengths and weaknesses. This newly developed conceptual model of international entrepreneurship represents the conceptual integration of the theory of small and medium firms' internationalization process that merges with the area of international entrepreneurship. It contributes to the theory by suggesting a re-developed theoretical, integrative, conceptual model of international entrepreneurship focusing on four internationalization properties (mode, market, product, and time) plus internationalization performance as well as environmental, firm, and entrepreneur's characteristics and outcome of internationalization (firm performance).

The model advances SMEs internationalization research by clarifying the new emerging field of international entrepreneurship and its theoretical foundation within internationalization research. International entrepreneurship placed more importance on entrepreneurship and entrepreneurs (and their characteristics), broadly considered as the key variables in SMEs internationalization research. In addition, it emphasized the time dimension, particularly with the growing number of such enterprises operating internationally from their inception and thus signifying time as one of the strategic dimensions of internationalization.

The proposed international entrepreneurship model has several limitations. The model is comprehensive but not exhaustive, and it does not specifically address

specific variables and the measurement of the constructs. This present study attempts to clarify this issue by introducing specific variables for environmental and organizational characteristics in terms of entrepreneurial orientation, global mindset, network relationships and government support whilst introducing non-financial performance as the new dimension to measure firm performance.

The proposed research model is expected to provide several contributions to the literature and addresses the issue for the development of an integrated and multidisciplinary approach to understand the internationalization of SMEs in Malaysia. Internationalization cannot be fully explained by one theory (Coviello et al., 1999), and is better explained with an integrated approach (Chetty and Campbell-Hunt, 2003). Thus, this model integrates several theories related to internationalization that were discussed in chapter two, namely incremental, rapid, network, resource-based and international entrepreneurship theory. Besides, it also focuses on the multidisciplinary field of study, international business, strategic management and international entrepreneurship with the aim to better understand, fully explain and document the internationalization of SMEs in Malaysia.

This model also takes environmental factors into consideration in terms of government support that may impact the internationalization of SMEs (Jones and Coviello, 2005; Oviatt and McDougall, 2005; Szyliowicz and Galvin, 2010).

Furthermore, it represents a unified framework that connects the antecedents, types, and outcomes of internationalization pursued by new ventures and established companies (McDougall and Oviatt 2000; Oviatt and McDougall, 1999).

Notably, the proposed research model proposes two main types of relationships. The first is the relationship between the determinants of internationalization (organizational and environmental characteristics), internationalization and firm performance, which are expected to be positive. For example, the relationships between the determinants of internationalization and internationalization constructs are hypothesized to be positively associated. From this hypothesis, specific hypotheses for individual construct then follow. To illustrate, entrepreneurial orientation is positively associated with internationalization.

The second type of relationship concerns the mediating effects of internationalization on the relationship between the determinants of internationalization (organizational and environmental characteristics) and firm performance. This study analyzes whether internationalization mediates the relationship between the determinants of internationalization and firm performance.

Specific variables and measurements of the determinants of internationalization have been identified in the proposed research model. The determinants of internationalization are studied from two perspectives; organizational characteristics (internal factors) and environmental characteristics (external factors) which are categorized into four main constructs: entrepreneurial orientation; global mindset; network relationships; and government support. These four constructs have been studied to have an influence on firm performance (Covin and Slevin, 1989; Miller, 1983; Zahra, 1993; Nummela et al., 2004; Watson, 2007; Yusuf, 1995; Kang and Park, 2012) and are hypothesized to have a positive relationship with internationalization.

Entrepreneurial orientation is subdivided into three dimensions, innovativeness, pro-activeness, and risk-taking. Similarly, global mindset is also divided into the ethnocentric, polycentric, and geocentric dimensions. For network relationships, the three dimensions are formal relationships, informal relationships, and intermediary relationships while the government support dimensions include funding, policies and incentives, and also contracts and projects.

Internationalization is examined by focusing on the three dimensions of internationalization, namely the extent, speed, and scope of internationalization. The measurements used are the percentage of company's total sales from international operations, percentage of company's profit from international operations, number of

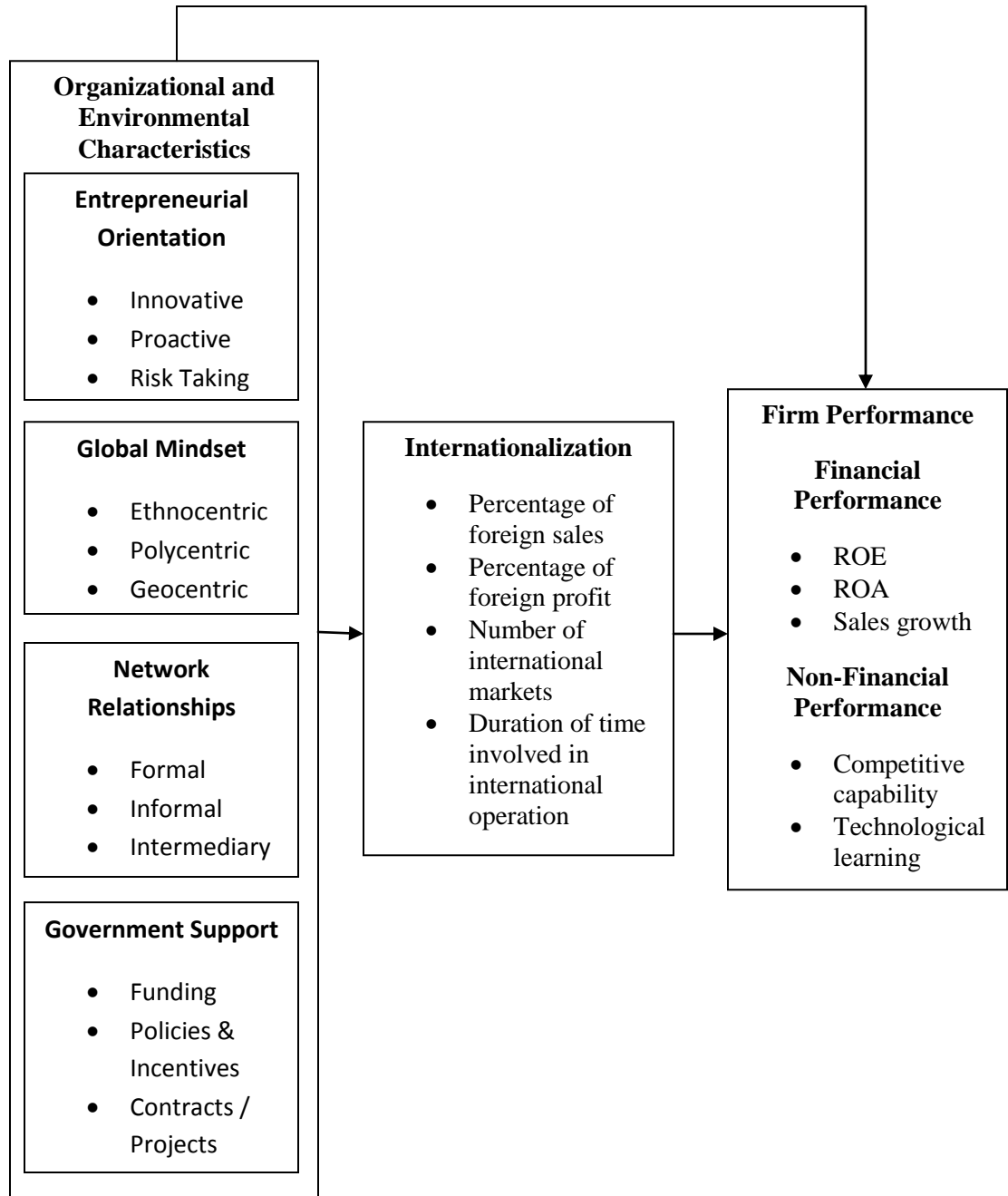
company's international markets and the duration of time the company is involved in international operations.

Firm performance is measured in terms of financial and non-financial indicators. Financial performance is measured from accounting indicators such as return on equity (ROE), return on assets (ROA) and sales growth. Non-financial performance is measured from two main constructs which are competitive capability and technological learning.

The combined use of financial and non-financial performance is another contribution to the proposed research model, with the intention to better understand the outcomes of internationalization of SMEs in Malaysia.

This research is based on the Proposed Research Model presented in Figure 4.1 below.

Figure 4.1 Proposed Research Model



Source: Developed from Antoncic and Hisrich (2001)

4.2 Definition and Operationalisation of Constructs

In pursuing this study, the primary key constructs such as entrepreneurial orientation, global mindset, network relationships, government support, and internationalization have to be defined. The conceptual definitions of the constructs are summarized in Table 4.1 below.

Table 4.1 Working Definitions of Main Constructs

Construct	Definition
Entrepreneurial Orientation	A firm's willingness to innovate to rejuvenate market offerings, takes risks to try out new and uncertain products, services and markets and be more proactive than competitors towards new marketplace opportunities (Dickson and Weaver, 2008; Kreiser et al., 2002; Covin and Slevin, 1989, 1990, 1991; Miller, 1983; Miller and Friesen, 1983).
Global Mindset	A firm's or manager's openness to and awareness of cultural and market diversity and its predisposition towards a particular way of approaching an international experience (Guy and Beaman, 2003; Gupta and Govindarajan, 2002).
Network Relationships	A firm's management team and employees' relations with formal, informal and intermediary networks that enable a firm to internationalize its business activities (Birley, 1985; Coviello and Martin, 1999; Coviello and Munro, 1995, 1997; Oviatt and McDougall, 2005; Zain and Ng, 2006).
Government Support	Funding, policies and incentives, and contract and projects in terms of financial and credit assistance, technical and training assistance, extension and advisory services, marketing and market research, and infrastructure supports that can assist individuals' entrepreneurial efforts (Smallbone and Welter, 2001; Spencer and Gomez, 2004; Doutriaux, 1998; Harrison and Mason, 1988; Phillips, 1993; Reynolds, 1997; Abdullah, 1999).
Internationalization	The process by which firms move from operating in domestic markets to foreign markets by adapting the firms' operations, strategies, structures, and resources to the foreign environment in order to achieve the firms' objectives (Calof and Beamish, 1995; Johanson and Vahlne, 1990; Lehtinen and Penttinen, 1999; Ahokangas, 1998; Javagi et al., 2003; Korsakien and Tvaronaviien, 2012).

Table 4.1 Working Definitions of Main Constructs, continued

Competitive Capability	A firm's ability to deploy resources using organizing processes and principles to achieve its strategic objectives (Kogut and Zander, 1992).
Technological Learning	The process by which a technology-driven firm creates, renews, and upgrades its latent and enacted capabilities based on its explicit and tacit stock of resources (Carayannis and Alexander, 2002).

4.3 Research Hypotheses

Several hypotheses were developed based on the proposed comprehensive conceptual research model and the literature review discussed in Chapter 2. These hypotheses focus on the influence of entrepreneurial orientation, global mindset, network relationships and government support on internationalization and firm performance. In addition, the mediating effects of internationalization on entrepreneurial orientation, global mindset, network relationships, government support and firm performance are proposed. The specific research hypotheses will answer the main four specific research questions for this study. Details of the specific research hypotheses are presented as follows:

4.3.1 The Effects of Entrepreneurial Orientation, Global Mindset, Network Relationships and Government Support on Internationalization

Scientific literature suggested that two main factors, internal and external, determine the internationalization of SMEs (Oviatt and McDougall, 1995; Zahra and George, 2002; Wright et al., 2007; Prefontaine and Bourgault, 2002; Antoncic and

Hisrich, 2001; Coombs et al., 2009; Chandra and Coviello, 2010; Naude and Rossouw, 2010; Kiss et al., 2012).

Internal factors comprise organizational characteristics that consist of firm size, strategy, international experience, international orientation, networking and other founders or managers' and firm characteristics that can be managed by the firms (Antoncic and Hisrich, 2001). Conversely, external factors comprise environmental characteristics such as country factors and industry factors which are normally beyond the firms' control (Ekeledo and Sivakumar, 1998, 2004; Koch, 2001). The four main environmental characteristics that are critically important for internationalization are domestic markets, foreign markets, market internationalization, and industry (Antoncic and Hisrich, 2001).

Hashim (2000b) posited that the success of SMEs in Malaysia was influenced by three factors, being, entrepreneurial characteristics, the organizational context and the external environment. In addition, Che-Senik et al. (2010) found that the factors influencing SMEs internationalization in Malaysia were firm characteristics, industry factors, external influence, and motivational aspects. As such, the above evidence strongly supported that the determinants of Malaysian SMEs internationalization are organizational and environmental characteristics. Thus, the present study used entrepreneurial orientation, global mindset, and network relationships as

organizational characteristics and government support as environmental characteristics that affect the internationalization of SMEs in Malaysia.

Entrepreneurial orientation has been acknowledged as a determinant of internationalization of SMEs (Melia et al., 2007; Knight and Cavusgill, 2004, Lu and Beamish, 2001, Zahra and George, 2002). The internationalization of a firm either by export or direct foreign investments is considered as an entrepreneurial act because it involves the process of identifying and exploiting new business opportunities in a new environment which requires innovative and proactive attitudes (Knight and Cavusgill, 2004; Fletcher, 2004). Furthermore, internationalization involves certain levels of risk due to the major probability of failure in an unknown foreign environment (Lu and Beamish, 2001).

Miller (1983); Covin and Miles (1999); Covin et al. (2006) suggested that the development of entrepreneurial orientation is strongly related to the existence of flexible, organic, organizational procedures that lead the way in proactive search for international business opportunities and for prompt economic exploitation. As such, the earlier the firm's internationalization process, the greater the firm's readiness to explore and develop new business opportunities and finally act in an entrepreneurial manner.

Highly entrepreneurial orientation firms identify new business opportunities earlier than their competitors and their proactive characters and readiness to take higher risks assist them in exploiting the opportunities before their competitors (Melia et al., 2007). In addition, Knight and Cavusgill (2004) suggested that entrepreneurial orientation should be an instrument for the expansion and enactment of key organizational routines to be successful in international markets. As such, the review of the literature in Chapter 2 and above arguments suggested that relationships exist between entrepreneurial orientation and internationalization. Subsequently, this study hypothesizes that entrepreneurial orientation will impact internationalization. Therefore, the following hypothesis is proposed:

H1: Entrepreneurial orientation relates positively with internationalization.

Active research has viewed global mindset, or cognitive capabilities of key decision makers, as important factors that have an influence on internationalization and organizational outcomes (Gupta and Govindarajan, 2002; Murtha et al., 1998; Harveston et al., 2000; Harveston et al., 2002; Jeannet, 2000; Levy, 2005; Nummela et al., 2004). To be a global entrepreneur requires a different mindset and to be successful, entrepreneurs must see their companies from a global perspective and must instill a global culture throughout their companies that permeates all business activities (Scarborough et al., 2012). This emerging phenomenon reflects the recognition that competitive environments today require a shift in focus from

structural and administrative mechanisms to mindset-based capabilities (Bartlett and Ghoshal, 1990).

Researchers and practitioners have recently suggested that the global mindset of managers is a prerequisite for early internationalization (Fletcher, 2000; Harveston et al., 2000; Harveston et al., 2002; Knight, 2001; Townsend and Cairns, 2003). Harveston et al. (2002) found that the positive attitude of the manager is a significant factor in comparisons conducted between exporters from non-exporters. Furthermore, Oviatt and McDougall (1995) found that new ventures managed by managers with global visions are able to internationalize speedily and successfully. Knight (2001) observed that rapidly internationalizing firms seem to be more globally oriented than others. The above discussion signifies the importance of global mindset for internationalization and leads to the following hypothesis:

H2: Global mindset relate positively with internationalization.

The importance of network relationships on the firms' internationalization process have long been recognized in several studies (Ojala, 2008). Research related to SMEs in knowledge-intensive sectors suggested that network relationships between firms or individuals were seen as determinants of internationalization (Coviello, 2006; Coviello and Martin, 1999; Coviello and Munro 1995, 1997; Moen et al., 2004; Sharma and Blomstermo, 2003; Zain and Ng, 2006). Network relationships can assist firms to gain access to resources, to improve their strategic

positions, to control transaction costs, to learn new skills, to gain legitimacy, and to cope positively with rapid technological changes (Alvarez and Barney, 2001; Bonaccorsi, 1992; Hitt and Ireland, 2000; Das and Teng, 1998; Gulati, 1995). In addition, McDougall et al. (1994) suggested that networks assisted founders of international new ventures, or born-globals, to identify international business opportunities and also influenced the founders' country choices.

Various researchers (Coviello and Martin, 1999; Coviello and Munro, 1995, 1997; Moen et al., 2004; Zain and Ng, 2006) also suggested that network relationships impacted knowledge-intensive SMEs market and entry mode choice. In addition, they found that firms' network relationships were seen as the main initiators in the internationalization process whereby firms were seen to be following their networks to foreign markets. This finding concurs with the assumption in the network internationalization model (Johanson and Mattsson, 1988) that network relationships can act as bridges to foreign markets.

Researchers also recognized the importance of networks to SMEs (Hansen et al., 1994; Hara and Kanai, 1994; Coviello and Munro, 1995; Kaufmann, 1995; Korhonen et al., 1995). Korhonen et al. (1995) discovered that nearly more than half of Finnish SMEs started their internationalization process with inward foreign operations through the import of physical goods or services. They concluded that such inward operations permit international network connections to be established.

Coviello and Munro (1995) found that successful New Zealand-based software firms were actively engaged with international networks and outsourced many market development activities to network partners. Another research by Bonaccorsi (1992) that studied Italian SMEs, suggested that access to external resources (through buyer-seller relationships) played a significant role in the firms' internationalization process. The most recent study by Ibeh and Kasem (2011) found that networks were crucial in explaining initial internationalization, market selection and internationalization speed of SMEs of Syrian software firms. Therefore, it can be expected that internationalization will be influenced by network relationships. This leads to the following hypothesis:

H3: Network relationships relate positively with internationalization.

The role of the government through its policies is vital in assisting and influencing the internationalization path of SMEs (Acs et al., 2001). Government support is crucial for SMEs that face a shortage of internal and also external resources in terms of alliances with other upstream and downstream companies abroad (Kang and park, 2012). In addition, it is the mandate of many government agencies to assist SMEs in entering foreign countries especially in countries with corrupt or inefficient legal systems that may be subject to political and other risks that are not issues in the domestic market (Acs et al., 2001).

Logically, the government can influence SMEs through direct support policies and programmes that plan to assist small firms to overcome size-related disadvantages (Smallbone and Welter, 2001). Government support programs in terms of general financial support or preferential treatment for entrepreneurial ventures (Spencer and Gomez, 2004), resources made available through government procurement programs (Doutriaux, 1998), tax incentives (Harrison and Mason, 1988), business development assistance (Phillips, 1993), and government export assistance programs (Reynolds, 1997) contribute to the regulatory environment that can assist individuals' entrepreneurial efforts. Abdullah (1999) observed that Malaysian government support programmes can be divided into five aspects, among which are: financial and credit assistance; technical and training assistance; extension and advisory services; marketing and market research; and infrastructure supports.

The importance of government support in assisting SMEs has been studied by several researchers. Yusuf (1995) found that government support was one of the contributing success factors for small business in the South Pacific. Acs et al. (2001) discovered that government policies impacted the internationalization path of SMEs in Canada while the most recent research by Kang and Park (2012) indicated that government support through project funding directly and indirectly affected the innovation outputs of small and medium biotechnology enterprises in South Korea. Thus, it is expected that government support will impact internationalization. This leads to the following hypothesis:

H4: Government support relates positively with internationalization.

4.3.2 The Effects of Entrepreneurial Orientation, Global Mindset, Network Relationships and Government Support on Firm Performance

Of late, there has been increasing interest on the relationship between the firm's strategic orientation and firm performance (Madsen, 2007). Entrepreneurial orientation has been identified as one of the most significant factors for a firm's growth and profitability (Zainol and Ayadurai, 2011). Stevenson and Jarillo (1990) indicated that high growth correlated with a firm's entrepreneurial orientation. Hence, growth can be connected with innovativeness, pro-activeness and risk-taking behavior of the firm which refers to an entrepreneurial orientation. In competitive business environments where products and business model life cycles are shortened, such characteristics are positively associated with better performance. Thus entrepreneurial orientation is considered as a key component for a firm's success (Hamel, 2000).

According to Lyon, Lumpkin and Dess (2000) entrepreneurial orientation does influence firm performance. Research in entrepreneurial orientation suggested that increasing entrepreneurial orientation of the firm was associated positively with financial performance (Covin and Slevin, 1989; Miller, 1983; Zahra, 1993). However, there was disagreement over the appropriate intensity of entrepreneurial behavior and the implications that entrepreneurial activities such as risk-taking will

have on firm performance (Zahra, 1993). Furthermore, Miller and Friesen (1983) suggested that increasing entrepreneurship beyond particular thresholds can harm a firm's financial performance.

From the perspective of small firms, researchers believed that positive relationships between entrepreneurial orientation and firm performance may be strong since smallness can assist encourage flexibility and innovation. At the same time, it limits competitiveness in other strategic dimensions such as cost leadership or differentiation strategies (Wiklund, 1999; Porter, 1985). Wiklund and Shepherd (2005) found a positive relationship between entrepreneurial orientation and small business performance in Swedish firms, with the effect being strongest in stable environments with less access to capital. Furthermore, Swierczek and Ha (2003) reported a positive correlation between innovative and proactive entrepreneurial orientations and firm performance among Thai and Vietnamese SMEs. The standardized regression coefficients ranged from 0.047 to 0.256 with significance levels ranging from $p < 0.01$ to $p < 0.05$. Therefore, entrepreneurial orientation can be positively influence firm financial performance. Thus, this study proposes that:

H5a: Entrepreneurial orientation relates positively with firm financial performance.

Since accurate and proper performance evaluation is important for determining the success or failure of a business, performance indicators that

accurately reflect the competitiveness of a company must be carefully identified. Traditionally, financial performance indicators such as firm revenue, market share and return on investment have been used in managerial decision making and perhaps extensive use of financial performance indicators encourages a focus on short-term results. In fact, in today's complex global competitive environment, the combination of non-financial performance indicators provides a clear and more relevant picture of performance (Tseng et al., 2009). Several studies have supported the introduction of non-financial performance indicators. For example, Ma and Wang (2006) found that the development of innovative technologies has played an important role in increasing the global competitive advantage of companies in China, Zahra et al. (2000) related international entrepreneurship to technological learning and acquisition of knowledge while Oviatt and McDougall (1995) connected international entrepreneurship to market share.

Zahra and George (2002) suggested that a mixture of financial and non-financial measures should be used to measure the performance outcomes of internationalization due to inconclusive results on the financial outcomes of internationalization. Therefore, this present study proposes that:

H5b: Entrepreneurial orientation relates positively with firm non-financial performance.

A growing number of researchers viewed global mindset, or cognitive capabilities of key decision makers, as important success factors that influences organizational outcomes (Gupta and Govindarajan, 2002; Murtha et al., 1998; Harveston et al., 2000; Jeannet, 2000; Levy, 2005). This emerging phenomenon reflects a recognition that competitive environments today require a shift in focus from structural and administrative mechanisms to mindset-based capabilities (Bartlett and Ghoshal, 1990).

Researchers suggested that the global mindset of a manager is a prerequisite for early internationalization (Fletcher, 2000; Harveston et al., 2000; Harveston et al., 2002; Knight, 2001; Townsend and Cairns, 2003). Harveston et al. (2002) found that the positive attitude of the manager is a significant factor in comparisons made between exporters from non-exporters. Furthermore, Oviatt and McDougall (1995) found that new ventures managed by managers with global visions were able to internationalize speedily and successfully. Knight (2001) observed that rapidly internationalizing firms seemed to be more globally oriented than others and lastly, Nummela et al. (2004) in their study of small and medium-sized Finnish companies in the field of information and communications technology indicated that there was a positive association between global mindset and international performance. Therefore, this study presents the following hypothesis:

H6a: Global mindset relate positively with firm financial performance.

The measurement of firm performance is typically complex and context-dependent (Nummela et al., 2004). Leonidou et al. (2002a) indicated that due to several difficulties in assessing export performance, quite a number of empirical research used subjective or perceptual measures. In addition, they concluded that non-financial measures, those that are market-related and product-related, as well as financial measures have been utilized to evaluate export performance. In summary, the above arguments lead to the following hypothesis:

H6b: Global mindset relate positively with firm non-financial performance.

Researchers also recognized the important and varied role that networks play in influencing the entrepreneurial processes and outcomes of SMEs (Hansen et al., 1994; Hara and Kanai, 1994; Coviello and Munro, 1995; Kaufmann, 1995; Korhonen et al., 1995; Hoang and Antoncic, 2003). Entrepreneurial processes include activities such as opportunities identification, resources mobilization, and the creation of an organization with the important outcomes being the creation of a new venture and its performance (Shane and Venkataraman, 2000).

Korhonen et al. (1995) discovered that nearly more than half of Finnish SMEs started their internationalization process with inward foreign operations through the import of physical goods or services. They concluded that such inward operations permit international network connections to be established. Coviello and Munro (1995) found that successful New Zealand-based software firms are actively

engaged with international networks and outsourced many market development activities to network partners. Another research by Bonaccorsi (1992) studied Italian SMEs and suggested that access to external resources (through buyer-seller relationships) played a significant role in the firm's internationalization process. Recent studies by Ibeh and Kasem (2011) found that networks were central in explaining initial internationalization, market selection and internationalization speed of SMEs of Syrian software firms. Lastly, Watson's (2007) research on SMEs in Australia indicated that there was a significant positive relationship between networking and firm performance. Therefore, it can be expected that a firm's financial performance will be influenced by network relationships. This leads to the following hypothesis:

H7a: Network relationships relate positively with firm financial performance.

SMEs benefit from networking not only from financial outcomes but also from non-financial outcomes. These benefits from network relationships are well documented (Etemad et al., 2001) such as helping start-ups to access information and knowledge (Prashantham, 2005), resources and legitimacy (Brass et al., 2004) and also to achieve a competitive advantage (Etemad et al., 2001; Hitt and Dacin, 2000a; Barney, 2002). Thus, it is expected that network relationships will impact a firm's non-financial performance. This study leads to the following hypothesis:

H7b: Network relationships relate positively with firm non-financial performance.

According to Muhammad et al. (2010) most of the SMEs need support and assistance from the government to be more competitive in the global business environment. The major role of the government is to support companies to rise to higher levels and achieve competitive advantage in foreign markets (Samad, 2007). The most logical way that the government can influence SMEs is through direct support policies and specific programs that assist small firms to overcome size-related disadvantages (Smallbone and Welter, 2001). Government support programs in terms of general financial support or preferential treatment for entrepreneurial ventures (Spencer and Gomez, 2004), resources made available through government procurement programs (Doutriaux, 1998), tax incentives (Harrison and Mason, 1988), business development assistance (Phillips, 1993), and government export assistance programs (Reynolds, 1997) contribute to the regulatory environment that can assist individuals' entrepreneurial efforts. Abdullah (1999) identified that the Malaysian government support programs can be divided into five aspects, among which are: financial and credit assistance; technical and training assistance; extension and advisory services; marketing and market research; and infrastructure supports.

The importance of government support in assisting SMEs has been studied by several researchers. Yusuf (1995) found that government support is one of the contributing success factors for small businesses in the South Pacific. In addition, Tahir et al. (2011) posited that the main factor leading to the success of SMEs in Malaysia was government support that contributed to improving the performance of

SMEs. Thus, this research indicates that government support will positively impact firm financial performance. This leads to the following hypothesis:

H8a: Government support relates positively with firm financial performance.

It is noted that government support also plays a significant role in improving SMEs' non-financial performance. The most recent research by Kang and Park (2012) indicated that government support through project funding directly and indirectly affected firms' innovation output by motivating internal research and development and also stimulating domestic upstream and downstream collaborations of small and medium biotechnology enterprises in South Korea. Therefore, this study tested the following hypothesis:

H8b: Government support relates positively with firm non-financial performance.

4.3.3 The Effects of Internationalization on Firm Performance

There has been increased interest amongst researchers to investigate the effects of a firm's financial status on its internationalization. They believed that successful past organizational performance creates the slack resources required to support international expansion (Zahra and George, 2002). Two important aspects of new ventures' financial status examined in past research were past returns on equity and debt leverage. Zahra et al. (2000) found that past returns on equity were not

significantly associated with firm internationalization. In terms of financial leverage, Bloodgood et al. (1996) indicated a non-significant association with the degree of internationalization but discovered that the relationship between internationalization and firm income was marginally significant. In addition, McDougall and Oviatt's (1996) study of U.S. new venture manufacturers in the computer and communications industries with increased international operations reported that higher levels of internationalization (percentage of foreign sales to total venture sales) were associated with higher relative market share. However, there was no significant direct relationship between percentage of international sales and return on investment. Moreover, they suggested that international operations cost more than expected, raising the question about the significant contribution of past financial performance to the internationalization of new ventures.

From the perspective of SMEs, Lu and Beamish (2001) found a negative and linear relationship between exporting and SMEs performance. There was also a U-shaped relationship between foreign direct investments and SMEs performance in terms of return on sales and return on assets. Another research by Chiao et al. (2004) reported an inverted U-shaped relationship between degree of internationalization and return on sales in Taiwanese SMEs. Thus, this present study proposes the following hypothesis:

H9a: Internationalization relates positively with firm financial performance.

Past research studied the performance outcomes of internationalization from both financial and non-financial perspectives. Even though financial performance indicators are more common, empirical studies yielded mixed results with respect to the relationship between internationalization and firm performance. Bloodgood et al. (1996) discovered a positive but marginally significant relationship between the extent of internationalization and firm income. McDougall and Oviatt (1996) did not find any relationship between internationalization and return on investment of the firm. In addition, Knight and Cavusgil (2004) posited that an international entrepreneurial orientation influenced the adoption of strategies that led to higher firm performance.

Due to inconclusive results on the financial outcomes of internationalization, Zahra and George (2002) suggested that a combination of financial and non-financial measures should be used to measure the performance outcomes of internationalization. Additionally, Oviatt and McDougall (1995) studied the relationship between internationalization and market share while Zahra et al. (2000) examined the effect of internationalization on technological learning and acquisition of new knowledge. The findings from these previous researches lead to the following hypothesis:

H9b: Internationalization relates positively with firm non-financial performance.

4.3.4 The Mediating Effects of Internationalization on Entrepreneurial Orientation, Global Mindset, Network Relationships, Government Support, and Firm Performance

Despite the importance of internationalization and the extensive scholarship committed to the field, empirical research examining the direct effects of organizational and environmental characteristics and internationalization on firm performance has provided inconsistent results (Zahra and George, 2002). Several studies supported the direct effects of entrepreneurial orientation, global mindset, network relationships and government support, and internationalization on firm performance (Zainol and Ayadurai, 2011; Gupta and Govindarajan, 2002; Watson, 2007; Kang and Park, 2012). However, there were also studies that found no empirical support for the direct effects of organizational characteristics and internationalization on firm performance. Aldrich and Reese (1993) found that networks involved in business start-ups had no effect on subsequent business performance. Furthermore, a study on Danish and Australia born-globals by Rasmussen et al. (2001) did not find support for the importance of the founder's network. Yet, several studies found support when investigating a sample of developed country firms (Aulakh et al., 1996) although studies investigating developing country firms (Lee and Beamish, 1995) and developed country SMEs (Sherer, 2003; Leonidou et al., 2002) indicated no support. Thus, Moreno and Casillas (2008) suggested that there was an indirect relationship via the mediating and moderating role between the variables.

Several studies have used internationalization as a mediator in the relationship between organizational and environmental characteristics and firm performance (Zahra and George, 2002; Antoncic and Hisrich, 2001; Ruzzier et al., 2006; Tanvisuth, 2007; Chelliah et al., 2010). Tavisuth (2007) who conducted a study on SMEs in Thailand revealed that internationalization tended to partially mediate the relationship between organizational characteristics and firm performance.

Therefore, this research posits that these two factors do not act independently but that the relationship between organizational and environmental characteristics and firm performance is mediated by internationalization.

Ruzzier et al. (2001) suggested that the relationship between organizational characteristics in terms of international orientation and firm financial outcomes is mediated by internationalization. This suggestion is further supported by Tanvisuth (2007) who found that internationalization partially mediated the relationship between entrepreneurial orientation and firm performance. Thus, this study proposes that:

H10a: Internationalization mediates the relationship between entrepreneurial orientation and firm financial performance.

On the relationship between organizational characteristics, internationalization and firm non-financial performance, Zahra and George (2002) posited that the relationship between organizational characteristics in terms of top management team characteristics, firm resources and firm variables and firm non-financial performance is mediated by internationalization. Thus this study proposes that:

H10b: Internationalization mediates the relationship between entrepreneurial orientation and firm non-financial performance.

Leonidou et al. (2002) in their study of the determinants of export performance suggested that internationalization mediated the relationships between managerial and organizational characteristics, and export performance. Furthermore, Tanvisuth (2007) conducted a study on SMEs in Thailand and found that internationalization mediated the relationship between global mindset and firm performance. Thus, this study proposes that:

H11a: Internationalization mediates the relationship between global mindset and firm financial performance.

The measurement of firm performance is typically complex and context-dependent (Nummela et al., 2004). Leonidou et al. (2002a) indicated that due to several difficulties in assessing export performance, quite a number of empirical

research used subjective or perceptual measures. In addition, they also concluded that non-financial measures, those that are market-related and product-related as well as financial measures have been utilized to evaluate export performance. Therefore, the above arguments lead to the following hypothesis:

H11b: Internationalization mediates the relationship between global mindset and firm non-financial performance.

Georgiou et al. (2005) adopted the Resources Based View of the firm to develop a model of internationalization and performance in SMEs. This model posits that the relationship between network relationship and firm financial performance is mediated by internationalization. The above view, supported by Zahra and George (2002) indicated that internationalization mediated the relationship between organizational factors in terms of firm resources and firm financial performance. Therefore this study suggested that:

H12a: Internationalization mediates the relationship between network relationships and firm financial performance.

In addition, Georgiou et al. (2005) also suggested that network relationships and firm non-financial performance was mediated by internationalization. The non-financial performance influence of network relationships are well documented (Etemad et al., 2001) such as helping start-ups to access information and knowledge

(Prashantham, 2005), resources and legitimacy (Brass et al., 2004) and also to achieve a competitive advantage (Etemad et al., 2001; Hitt and Dacin, 2000a; Barney, 2002). Thus, this study suggests that:

H12b: Internationalization mediates the relationship between network relationships and firm non-financial performance.

Antonicic and Hisrich (2001) proposed the international entrepreneurship conceptual model which focuses on the external environment in terms of domestic and international environments as the determinants of internationalization and performance of SMEs. The suggested internationalization mediates the relationship between domestic environment and firm financial performance. Similar studies on SMEs by Tahir et al. (2011) anticipated that there exists a moderating and mediating effect on the relationship between government support and the development and performance of SMEs. Thus, this study proposes that:

H13a: Internationalization mediates the relationship between government support and firm financial performance.

Campbell (2007) suggested that non-financial performance is difficult to measure. However, it is appropriate to consider because it complements the financial measure in determining firm performance. The most recent study by Kang and Park (2012) found that government support through project funding had direct

and indirect effects on the innovation outputs of SMEs in Korea. Thus, this study proposes that:

H13b: Internationalization mediates the relationship between government support and firm non-financial performance.