

**THE UNIVERSITY OF HULL**

**Investigating “Born Globals” in South Korea: their  
antecedents and performance**

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by

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## ABSTRACT

Growing attention has been paid to Born Globals, which are small and medium sized firms (SMEs) that internationalise shortly after establishment. There has been a considerable volume of research on Born Global firms, but thus far there has been little research on early internationalising SMEs in the context of Asian economies such as South Korea. Moreover, there has been limited investigation, using large scale surveys, on the associations between key factors such as the international business experience of managers and the use of networks that are said to underpin the ability of SMEs to undertake international activities. To help to fill these gaps, this thesis examines the major economic and business characteristics of Born Globals in South Korea. The findings show that public policy is directed to SME internationalisation activities, but focuses on support only for export promotion. It is also found that South Korean Born Globals have a number of network relationships with customers and suppliers but have relatively few connections with government agencies. This research also investigates the associations between the international business experience of managers and the use of networks and the subsequent effect on the capacity of Born Globals to perform well in international markets. A conceptual framework is constructed which postulates a series of interactions between the international business experience of managers and the use of networks and the subsequent effect on the foreign performance of early internationalising SMEs. The model is used to derive hypotheses on how the interrelationships between the international business experience of managers and the use of networks lead to changes in the capacity of firms to perform in international markets. Hypotheses are also developed regarding the links between the capacity of firms to perform in international markets and three performance measures: satisfaction



with foreign market growth, the share of sales from international activities and the number of foreign markets supplied. These hypotheses are tested using data from a survey of early internationalising South Korean SMEs. The results provide evidence on the existence and extent of the interconnections between the international business experience of managers and the use of networks and the directions of these relationships. Evidence is also provided on the links to foreign performance capacity and to performance in three areas. The results of this research indicate that the relationships postulated in the hypotheses are all significant thereby providing support for the model. The implications of the findings for theory, managerial issues and public policy are also considered.

# CHAPTER 1: INTRODUCTION

## 1.1 Background to the Research

Over the past several decades, the internationalisation process of firms has been a focus of research in the field of international business. Mainly focused on multinational companies, attempts have been made to elaborate on firm internationalisation patterns and paths, of which the Uppsala model is a dominant theoretical explanation (Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975). This theory sees firm internationalisation as an organisational learning and incremental process involving a varying number of different stages. The process approach of internationalisation however faces the failure to account completely for the rapid internationalisation patterns found in some types of small firms. It is evident that a number of international entrepreneurial small firms do not follow the traditional internationalisation paths. Rather, they tend to enter international markets from or close to inception adopting an international entrepreneurship approach based on adopting a global vision focused on early international expansion and growth (e.g., Acedo and Jones, 2007; Bell, 1995; Freeman et al., 2006; Gabrielsson et al., 2008; Knight and Cavusgil, 1996; 2004; Madsen and Servais, 1997; McDougall et al., 2003; Moen, 2002; Oviatt and McDougall, 1994; Rennie, 1993; Zucchella et al., 2007). That is to say, a number of firms expand their operations into foreign markets in a stepwise manner as they learn and build up networks, as espoused by the conventional internationalisation process theories, whereas early internationalising firms internationalise rapidly and proactively, thereby making big leaps towards global markets. Such businesses are often named ‘Born Globals’ or ‘International New Ventures’. As the widely accepted conceptual definition, Oviatt and McDougall (1994: 49) refer to such firm as “a business organization that,

from inception, seeks to derive significant competitive advantage from the use of resources from and the sale of outputs in multiple countries”.

The seminal work of Oviatt and McDougall (1994), *Toward a Theory of International New Ventures*, has provided a theoretical basis for these rapid internationalisers. With the fresh perspective of the issue of firm internationalisation, Oviatt and McDougall (1994) stress the increasing importance of international entrepreneurial small firms in international markets. The increasing prevalence and progress of early internationalising firms are driven by key trends in today’s international business environment, primarily technological advances, the emergence of global networks and alliances, and international education and experience (Knight and Cavusgil, 1996; 2004; Madsen and Servais, 1997). As these trends become stronger, such businesses will become more important in the international business environment and will increase in number (Rialp et al., 2005a). Thus, research into international entrepreneurial small firms is currently capturing growing interest (e.g., Contractor et al., 2005; Freeman et al., 2006; Knight and Cavusgil, 1996; Mudambi and Zahra, 2007; Oviatt and McDougall, 1994; Zhou et al., 2007; Zucchella et al., 2007).

The distinguishing characteristics that enable them to internationalise quickly and create value are unique in comparison to those of gradually internationalising firms (Oviatt and McDougall, 1994; Zahra, 2005). There is agreement that Born Global managers have an international vision and orientation as a fundamental source of early adoption of internationalisation and success in multiple foreign markets. This implies that knowledge derived from the international business experience of managers is of great importance to international entrepreneurial firms (Knight and Cavusgil, 2004). When making a first engagement in an international activity, the entry mode of the rapid internationalisers is not merely limited to an ‘export activity’, which is suggested as the first stage of the internationalisation process by the Uppsala model. Rather, they use the

wide spectrum of foreign market entry modes, including exports, and even a set of multiple modes. In such an internationalisation process, networks are a key strategic resource in helping to adopt effective early internationalization strategies. These attributes of the firms pose an important new challenge to conventional views of the firm internationalisation process. Thus, for example, Knight and Cavusgil (2004) call for a systematic investigation of the unique characteristics of early internationalising small and medium-sized enterprises (hereafter, referred to as SMEs).

There is a growing body of work dedicated to understanding the distinguishing characteristics of Born Globals, in comparison with those of established firms. In particular, a bulk of literature has paid growing attention to a set of factors that drive the rapid internationalisation of SMEs and which is often centred on the importance of the international business experience of managers (e.g., Andersson and Wictor, 2003; Madsen and Servais, 1997; McDougall et al., 1994; Zucchella et al., 2007) and of networks for foreign activities (Coviello and Munro, 1995; 1997; Oviatt and McDougall, 1994; Sharma and Blomstermo, 2003; Zahra, 2005). It is clear that this literature has contributed to the development of the theory of small firm internationalisation, focusing on a new phenomenon of rapid and dedicated internationalisation. However, the key emerging issue of how evidence of the relationships and the importance of interaction between the prime factors provide knowledge of capacity enhancement and strategy development to promote international business performance remains under-researched. It might be assumed that the foreign business performance of rapid internationalisers relies to a great extent on the capacity to perform well in international markets, rather than on the international business experience of managers or networks. It is likely that the intangible resource is of greater importance to such firms with tangible resource constraints. Yet, most of the previous work appears to overlook the importance of the ability that brings superior foreign performance and sustained competitive advantage to

early internationalising firms. That is to say, there is little in the literature about the existence, extent and direction of the interactions between the international business experience of managers and networks and the subsequent impact on the capacity to perform well in international markets.

The international business experience of managers and the use of networks are regarded as important for the capacity of Born Globals to perform well in international markets (Bloodgood et al., 1996; Coviello, 2006; Coviello and Munro, 1995; 1997; Freeman et al., 2006; Gabrielsson et al., 2008; Loane and Bell, 2006; McDougall et al., 2003; Oviatt and McDougal, 1994; Reuber and Fischer, 1997; Sharma and Blomstermo, 2003; Zucchella et al., 2007). There is also agreement that such capacity has a great potential to improve international business performance (e.g., Autio et al., 2000; Jantunen et al., 2005; Knight and Cavusgil, 2004, Knight and Kim, 2009). However the associations between these factors remain under-researched. This is a gap in the literature in relation to the major drivers of the international activities of early internationalising firms. This research seeks to investigate the associations between the international business experience of managers and the use of networks and the effects on capacity of early internationalising SMEs to perform well in international markets. This is done in the context of early internationalising firms in South Korea. Using the rich data on Born Globals obtained from the existing body of literature, this research specifically builds a model of key factors that affect foreign performance capacity of early internationalising firms and the subsequent effect on performance in foreign markets. This model is tested using data from a survey of early internationalising South Korean SMEs. This allows for identification of the significance of key generic drivers of the internationalisation process by internationally-oriented SMEs. Furthermore, evidence of the existence and extent of these interconnections and the directions of the relationships help to fill the gap in research regarding Born Globals, thereby advancing

our knowledge in this area. The findings also provide a basis of theory building for further research, insights into managerial issues, and for public policies towards the early internationalising SMEs.

## **1.2 Research Context**

As a reflection of the growing attention paid to international entrepreneurial firms, plenty of research has been conducted thus far worldwide. It is evident however that most of the scientific evidence for this group of firms has been obtained from advanced western countries (Rialp et al., 2005a; Zhou, 2007)<sup>1</sup>. It is surprising, as Zhou (2007) indicates, to see the lack of knowledge about the emergence and international behaviours of Born Globals in new developing economies in that “the prospect of the “born-international” SME is particularly appealing in developing countries, where a generation of improved higher education has placed many skilled people into the workforce, but where large revenues still depend on export sales.” (Kundu and Katz, 2003: 25).

This research adopts South Korea as a research context. Located geographically in the Asian region, the country can provide a good setting for Born Global research. Specifically, SMEs play an important role in the national economy, many of which are propelled to enter foreign markets because export-driven growth has become a top priority of the country’s economic development strategy<sup>2</sup>. It is also well recognised that South Korea is one of the countries which have the world’s most advanced information and communications technology and infrastructure (Suh and Chen, 2007). This business condition raises possibility that a growing number of South Korean start-ups are located

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<sup>1</sup> More details of research contexts of Born Globals are provided in Chapter 2 - Literature Review.

<sup>2</sup> More details are provided in Chapter 5 - Overview of SMEs Sector in South Korea.

in a high-technology industry in which Born Globals mainly operate (Autio et al., 2000; Bell, 1995; Zahra et al., 2000). South Korea provides a good context for Born Global research in this regard, as oppose to other contexts.

Few studies of early internationalising SMEs have been conducted in South Korea. Specifically, the literature that has been produced to date is restricted to the timing of foreign market entry (Chang et al., 2007); foreign market expansion strategies (Lee and Bae, 2003; Lee et al., 2007); motivation for internationalisation (Cho et al., 2007); comparative studies with domestic market-oriented venture firms (Han et al., 2008; Kim and Jung, 2007) or the Uppsala internationalisation process theory (Choi and Kim, 2005); and the speed of internationalisation (Han, 2009; Kim and Ko, 2005; Kim and Song, 2009; Park, 2005; Park, 2007; Park and Ko, 2007). No studies have investigated the relationships between the international business experience of managers, the use of networks and the links to foreign performance capacity and foreign market performance.

### **1.3 Research Objectives and Questions**

Based on this research gap, this thesis develops two research objectives:

**Research Objective 1:** *To examine the major characteristics of Born Globals in South Korea in terms of the economic and business environment in which South Korean Born Globals operate and to assess the major affects on such firms.*

**Research Objective 2:** *To investigate the relationships between the international business experience of managers and the use of networks and the subsequent affect on the capacity of Born Globals to perform well in international markets, and to assess the relative strength of these key factors on international performance.*

The first research objective is considered in an overview and discussion of the key characteristics of the economic and business environments in which South Korean Born Globals operate. This is done using both primary and secondary data. The second research objective is not about ‘why’ firms internationalise at or near their founding, but on the relationships between key factors associated with the ability of Born Globals to operate in international markets. Thus the research examines key generic factors that are widely considered in the literature to be important for Born Globals to operate successfully in foreign markets. These factors are the international business experience of managers and the networks used by Born Globals for foreign activities (e.g., Bloodgood et al., 1996; Chetty and Blankenburg-Holm, 2000; Coviello and Munro, 1997; Freeman et al., 2006; Knight and Cavusgil, 1996; Loane and Bell, 2006; McDougall et al., 2003; Oviatt and McDougall, 1994). The research focuses on the effects of these factors on the capacity of Born Global firms to perform well and on the impact on the international business performance of early internationalising firms.

To attain these research objectives, the following research questions are used.

**Research Question 1:** *What are the major characteristics of the economic and business environments in which South Korean Born Globals operate?*

**Research Question 2:** *What are the views of South Korean Born Globals on the economic and business characteristics that they face in their host locations?*



**Research Question 3:** *Are there significant positive relationships between the international business experience of managers and the use of networks and what are the effects of these factors for the ability of South Korean Born Globals to enhance their foreign performance capacity?*

**Research Question 4:** *Does enhancement of the foreign performance capacity of South Korean Born Globals lead to improvements in foreign performance?*

**Research Question 5:** *Are network effects more important than the international business experience of managers for enhancing the foreign performance capacity of South Korean Born Globals?*

The first research objective is considered by the answers to Research Questions 1 and 2. The second research objective is addressed by the answers to Research Questions 3 to 5.

#### **1.4 Definitions of Born Globals**

The widely accepted conceptual definition of a Born Global is provided by Oviatt and McDougall (1994: 49) “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources from and the sale of outputs in multiple countries”. However, the majority of fast internationalising SMEs enter foreign markets within the first few years after establishment, not from inception (Knight and Cavusgil, 2005). This research seeks to define a Born Global on the basis of existing literature in this regard, with a particular focus on SMEs that enter foreign markets soon after they are established<sup>3</sup>.

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<sup>3</sup> Further explanation of the conceptual definition of Born Globals is provided in Chapter 2.

The operationalisation of Born Globals is a difficult issue because there are a variety of criteria for identifying whether a firm is Born Global or not (for more detail, see Table 2.2). As indicated by Born Global literature (e.g., Freeman et al., 2006; Gabrielsson et al., 2008; Rialp et al., 2005a), debate regarding the operational definition of early internationalising firms remains open. Although there is no universal consensus on the definitions of early internationalising SMEs, two main criteria are widely used: time frame and volume of foreign sales. Although some of literature takes account of both criteria simultaneously (e.g., Knight and Cavusgil, 2004; Nordman and Melen, 2008), it appears that the use of a time measure is of greater importance in defining early internationalising firms (Morgan-Thomas and Jones, 2009; Zucchella et al. 2007)<sup>4</sup>. Much of the literature defines early internationalising SMEs only by reference to time to internationalisation (e.g., Acedo and Jones, 2007; Madsen and Servais, 1997; Zucchella et al., 2007). For instance, Acedo and Jones (2007) define Born Globals as firms that engage in an international activity within five years or less from establishment. Zucchella et al. (2007) classify firms that start an export activity within the first three years from the outset as Born Globals. In general, most definitions of Born Globals use internationalisation within six years of their establishment as the main defining characteristic (Coviello and Munro, 1995).

Problems can emerge when attempts are made to define Born Globals by quantity definitions connected to the record of foreign sales volume because it is unlikely that many SMEs have accurate records of the share of foreign sale to total sales at a time when they began the internationalisation process. Informants in these firms might also find it very difficult to accurately remember the volume of sales. Moreover, some SMEs may be reluctant to provide details of sales (Autio et al., 2000; Haahti et al.,

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<sup>4</sup> More detailed explanations are provided in Chapter 2.

2005). In many cases there are no published records of sales by early internationalising SMEs thereby precluding the performing cross-checking for the volume of foreign sales data provided by survey participants. In these cases, there is likely to be a potential problem with measurement error. This possible limitation is likely to arise when a survey uses structured questionnaires as part of quantitative research. In consequence, the use of the foreign sales share as one of the criteria for identifying Born Globals appears to pose a potential threat to the reliability of data. Using time to internationalise however can be confirmed by calculating the time lag between the founding year and the initial year of internationalisation. Information on time to internationalise can sometimes be cross-checked by consulting firm websites and published documents, thereby helping to identify the most appropriate sample for research. Based on these lines of reasoning the best method to gather valid and reliable data is to identify Born Globals by use of time internationalisation. The time of ‘six years or less’ to internationalisation is used as a cut-off point in line with the literature (e.g., McDougall et al., 2003; Sharder et al., 2000; Zahra et al., 2000) that views the first six years as a crucial period in which the majority of new firms’ survival is determined (The State of Small Business, 1992). Therefore, in this research, Born Globals are regarded as ‘*SMEs that had entered foreign markets within six years of establishment*’<sup>5</sup>.

## **1.5 Research Methodology**

Research philosophy depends on the way that a researcher thinks about the development of knowledge and is twofold: positivistic and phenomenological (Collis and Hussey, 2003). The positivistic paradigm seeks “the facts or causes of social phenomena, with

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<sup>5</sup> Using the South Korean definition, SMEs are defined as firms that employ less than 300 employees.

little regard to the subjective state of the individual” (Collis and Hussey, 2003: 52). Saunders et al. (2003) indicate that the search to explain relationships between variables is one of the important characteristics of the deductive approach. This research takes a positivistic approach in that its objective is to empirically analyse relationships between antecedents and consequences, using data collected through questionnaires. This approach hence assumes that the researcher have sufficient knowledge about the phenomenon.

For operational purposes, Born Globals in the present study are defined as firms that entered foreign markets within six years of founding, stand-alone and are independent (that is, not subsidiaries of large companies). Early internationalising firms are limited to SMEs with fewer than 300 employees, in accordance with the South Korean definition of SMEs. A number of sources are used to identify the population of firms, as there is no unique database of all early internationalising firms in South Korea. A questionnaire means “a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample” (Collis and Hussey, 2003, p. 173). Guidance in constructing the questionnaire was obtained by consulting the questionnaires used in published studies on Born Global areas and it was piloted in selected firms. The feedback from the pilot test resulted in further modifications to some questions. Through a survey with questionnaires, data was collected across all industry sectors. Thus data for this research is cross-sectional in nature. A total of 271 samples were employed for the analysis. The sample size is acceptable given that a minimum sample size of 200 is recommended for structural equation modelling (e.g. Hair et al., 2006; Weston and Gore, 2006). This number of observations also allows for a number of robust statistical tests for reliability and validity of findings. Reliability and validity of constructs used in this study are assessed with confirmatory factor analysis in a sophisticated manner. Hypotheses are tested with

structural equation modelling, which allows for a simultaneous analysis of direct and indirect effects. To rigorously confirm the hypothesis testing, a series of nested models are compared to the research model to assess if alternative models with different associations lead to a better fit. Furthermore, another model including control variables is also taken into account.

## **1.6 Structure of the Thesis**

This thesis is composed of nine chapters. The remainder of the thesis is as follows:

### **1.6.1 Chapter 2: *Literature Review***

This chapter presents a literature review of the main theories and evidence of the internationalisation patterns and behaviours of firms, with a particular focus on small firm internationalisation. This helps to gain an understanding of the historical development of theories and evidence firm internationalisation. The major theoretical explanations include: the international product lifecycle theory; internalisation theory; the eclectic paradigm of international production; the Uppsala process theory of internationalisation; network model of internationalisation; and Born Global theory. Next, the resource-based view and the knowledge-based view are reviewed. The literature agrees, in general, that nearly all early internationalising firms are small in size and possess limited tangible resources and that a common way to help entry to and develop foreign markets is to make use of knowledge-based intangible resources. In particular, both theory and empirical evidence highlight the importance of the international business experience of managers and the use of networks as being crucial for the ability of Born Globals to prosper in foreign markets. Thus, in this chapter, the literature review helps to inform the research design.

### **1.6.2 Chapter 3: *Conceptual Framework and Hypotheses***

This chapter identifies key constructs that are crucial to exploring the international behaviours and performance of rapid internationalisers. Based on an extensive literature review, a set of factors are identified: the international business experience of managers; the value of networks; the number of networks; and foreign performance capacity. As a consequence, international business performance is measured with the three sub-factors: satisfaction with foreign market growth; the share of sales from international activities; and the number of foreign markets supplied. This chapter also outlines the nature of the research model. The model provides a conceptual framework for the key associations. Specifically, the conceptual model considers (1) the associations between the international business experience of managers, the value of networks and the number of networks, (2) the associations between these factors and foreign performance capacity, and (3) the linkage between foreign performance capacity and performance in foreign markets. Based on the conceptualised paths between the constructs, research hypotheses are developed with arguments that specify the research model.

### **1.6.3 Chapter 4: *Research Methodology***

This chapter presents and defends the methodology used in this thesis. A quantitative research approach is taken to achieve the research objectives and provide answers to the research questions. Drawing on existing literature on rapid internationalisation by SMEs, this research develops a conceptual model and derives research hypotheses that are tested using data on Born Global SMEs in South Korea. A survey method using a structured questionnaire is employed to gather data for testing the hypotheses. The main analytical technique for data analysis structural equation modelling is defended.

#### **1.6.4 Chapter 5: *Overview of the SME sector in South Korea***

This chapter provides an overview of the SME sector in South Korea. The general SME operating environment is described by using several sets of secondary data. This rich data reveals that SMEs have a vital role to play in both business activities and employment. A brief review of the major government policies towards international activities of SMEs is also presented. Overall, a variety of public policies are implemented to aid SME internationalisation activities, most of which focus on support for export activities only. This leads to the argument that the current public policy towards SME internationalisation is restricted in providing effective support for the international activities of early internationalising firms. This chapter also offers a description of the general characteristics of South Korean Born Globals and the economic and business environment in which they operate using survey data, with a focus on financial arrangements, networks and the institutional and domestic market environment. This chapter thus provides answers to Research Questions 1 and 2.

#### **1.6.5 Chapter 6: *Data Collection and Analysis***

This chapter first offers an overview of data collection procedures. As there is no unique database of all early internationalising firms in South Korea, four main sources are used to identify the population of firms. This led to a list of sample firms for this research. For data collection, a structured questionnaire is developed with guidance obtained by consulting the questionnaires in published studies in similar areas. General characteristics of samples are presented. Construct operationalisations are performed based on previous work and are measured with data obtained from information provided by managers. The chapter next presents an outline of the data analysis techniques and the results. Specifically, it begins with a review of the analytical techniques and

procedures applied. The main analytical technique for the analysis, structural equation modelling, is defined. There is agreement that this statistical method is the most powerful analytical technique for testing different relationships. Efforts are made to confirm the overall quality of the data by checking for non-response bias, common method variance, data normality, and the multicollinearity of constructs. These rigorous statistical procedures contribute to making the results from data analysis reliable and valid. Following a two-step approach suggested by Anderson and Gerbing (1988), confirmatory factor analysis is first performed to assess construct reliability and validity, and then structural equation modelling is conducted to test hypotheses. The results of hypotheses testing obtained from the analytical technique are presented. To rigorously test the research model, analyses of alternative models are also performed.

#### **1.6.6 Chapter 7: *Results and Discussion***

Based on the results from data analysis and hypotheses testing, the answers to Research Questions 3 to 5 are discussed. The results support the hypotheses and thereby provide insights on the key associations that are postulated in the conceptual model. The results thereby provide good evidence to assess the answers to RQ3 to RQ5 in the case of South Korean Born Globals. The findings show that the use of networks for foreign activities is more significant than the international business experience of managers in enhancing foreign performance capacity. It is evident however that the international business experience of managers is an underlying important source of facilitating network contacts and building foreign performance capacity and thereby to influencing performance in foreign markets. The results indicate that foreign performance capacity is an essential pre-requisite for international business performance and also plays a mediating role in the effects of the two generic variables on the foreign market outcome. The overall discussion concludes that an investigation into interactions of the generic



variables and their links with international performance of Born Globals offers a greater understanding of international activities towards growth and prosperity in a turbulent international business environment.

### **1.6.7 Chapter 8: *Conclusion***

This chapter presents a conclusion of this research. It first summarises the main issues: the unique characteristics of South Korean Born Globals; identifications of central constructs; the extent and direction of complex relationships between the factors and their subsequent impact on foreign market performance. Based on the discussion of the results, next, this chapter presents the contribution and implications for theory building, managerial issues and public policy for Born Globals. A major contribution of this research to a body of knowledge about small firm internationalisation literature is to provide empirical evidence for the interactions of the key generic concepts that were argued to be lacking. The managerial implications help firms to develop management strategies and operations to help them to secure international business success. The implications also assess how government agencies may tailor supporting policy for Born Globals. Limitations of the research are then presented and directions for future research are suggested.

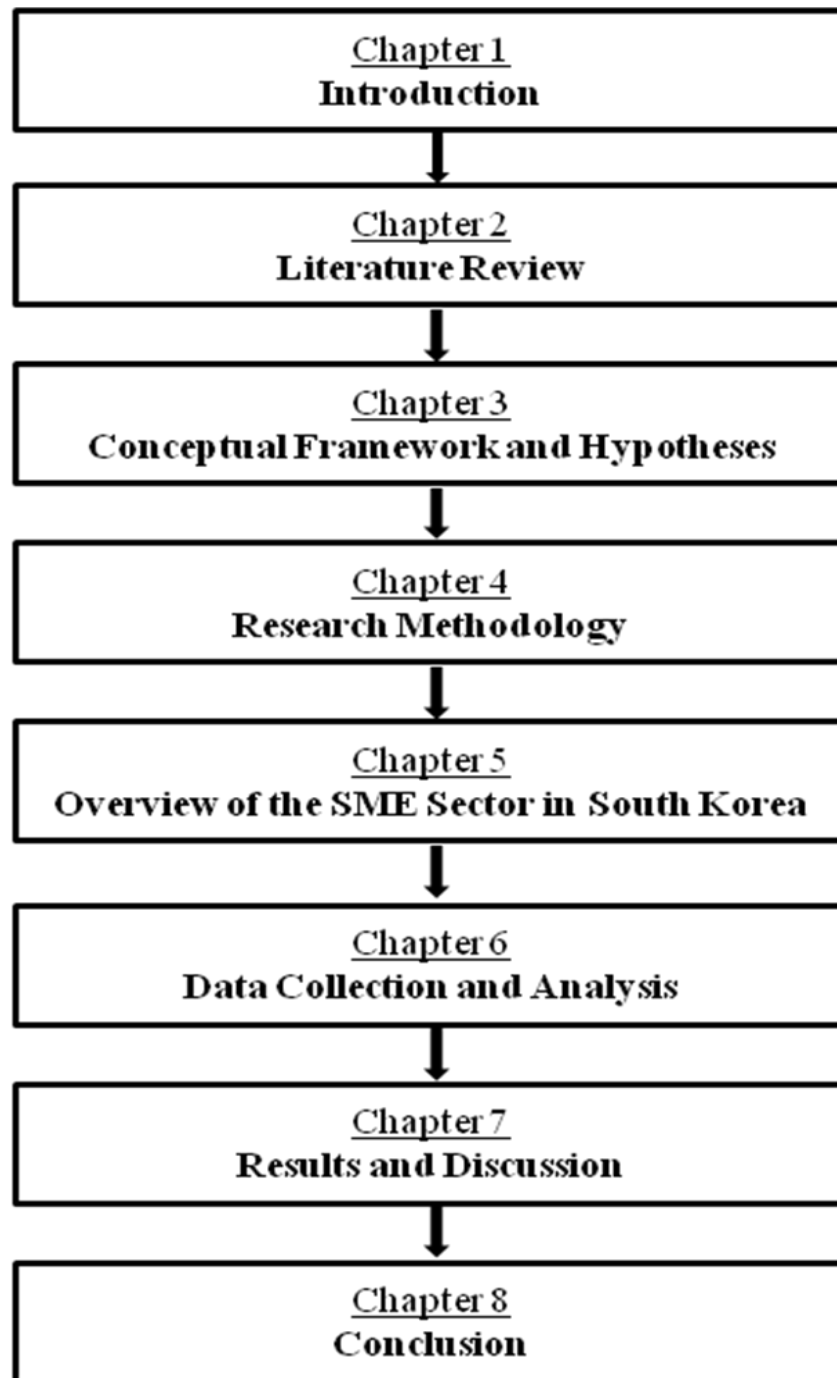


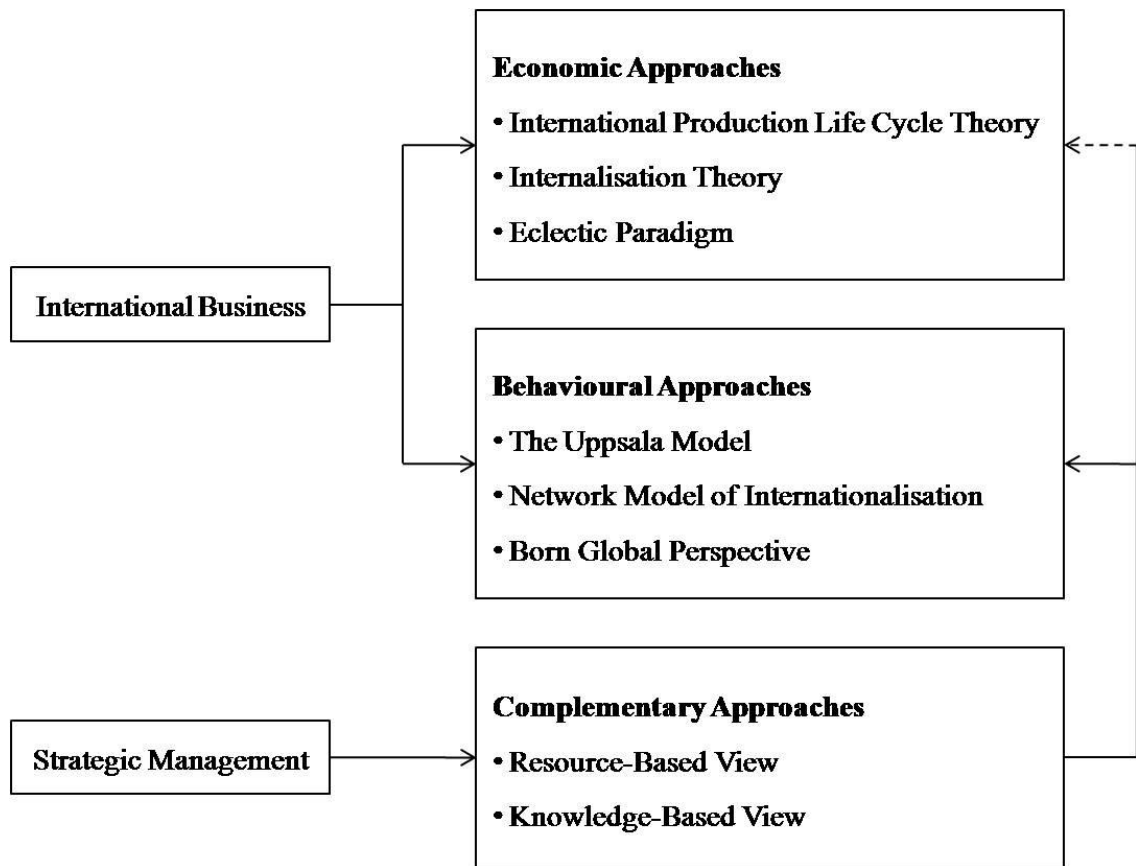
Figure 1.1: Structure of the thesis

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter aims to provide an in-depth theoretical understanding of the internationalisation patterns and behaviours of early internationalising small firms. It presents a critical reading of the main streams of literature that address questions of ‘why’ and ‘how’ firms internationalise. This literature includes international product life cycle theory, internalisation theory, the eclectic paradigm, the Uppsala model, the network model of internationalisation and the Born Global perspective. Of these mainstream approaches, the network perspective is well-established in the field of small firm internationalisation. As such, it forms a key part of the theoretical base of this research. However, in understanding early internationalising firms, reliance on the network approach alone is insufficient as the concepts of resource and knowledge are also vitally important to the international success of rapidly internationalising small firms. This directly highlights the importance of two theoretical approaches – the resource-based view and the knowledge-based view. Yet, little attention has been paid to incorporating such useful theoretical underpinnings into Born Global research as a complement to the network view (Loane and Bell, 2006). Thus, the literature review takes a holistic theoretical approach to help create a greater understanding of the international involvement of early internationalising firms by integrating the resource-based and knowledge-based views, with a particular focus on small firm internationalisation. This contributes to advancing knowledge about the rapid internationalisation of small firms. By drawing on international business and strategic management, Figure 2.1 introduces a variety of theories of firm internationalisation and complementary approaches to rapid internationalisation of small firms and illustrates

how they fit together in elaborating on the Born Global perspective.



Note: 1. The diagram assumes that both resource-based view and knowledge-based views, allied with the network approach, present complementary theoretical frameworks for Born Global perspective, though being in part useful to economic approaches.  
 2. The author has built this approach into this research.

Figure 2.1: Firm internationalisation theories and complementary approaches to small firm internationalisation

## 2.2 An Overview of Firm Internationalisation Theories

Internationalisation *per se* is becoming a strategic weapon for the firm that is eager to remain competitive. International expansion even appears to have become a matter of survival, not only for multinational enterprises (MNEs) but also for small and medium-sized enterprises (SMEs) rather than a matter of choice (e.g., Johanson and Vahlne,

1977). There are various rationales for firm internationalisation, but the overarching assumption is that firms internationalise with a view to reaping superior performance (Caves, 1980).

### **2.2.1 Definitions of firm internationalisation**

There are a variety of views regarding the definition of firm internationalisation, albeit no universal consensus. Selected definitions of internationalisation include:

“...the process of increasing involvement in international operations” (Welch and Luostarinen, 1988: 36).

“...a process in which the enterprise gradually increases its international involvement. This process evolves in the interplay between the development of knowledge about foreign markets and operations on one hand and an increasing commitment of resources to foreign markets on the other” (Johanson and Vahlne, 1990: 11).

“...the process of adopting firms’ operations (strategy, structure, resource, etc) to international environments” (Calof and Beamish, 1995: 116).

Central to those conceptualisations of firm internationalisation is a process and increasing involvement in foreign markets.

### **2.2.2 A short history of internationalisation research**

Over the last few decades, extensive research has taken place into the internationalisation of the firm. Although there is no universally accepted single model of firm internationalisation (Bilkey, 1978; Chandra and Newbury, 1997; Mtigwe, 2006), attempts to capture firm internationalisation are divided into two main streams: the economic approach and the behavioural approach.

Theories with their roots in the economic approach include the monopolistic advantage theory (Hymer, 1960), international product life cycle theory (Vernon, 1966),

internalisation theory (Buckley and Casson, 1976) and the eclectic paradigm (Dunning, 1977, 1988). Much of focus of these theories is on explanations of *how* and *when* firms perform foreign direct investment (FDI). The premise of Hymer (1960) is that MNEs exist as these firms possess firm-specific advantages such as proprietary technology and knowledge which are unavailable to local firms. This implies that firms internationalise to exploit their specific advantages under market imperfections which allow them to enjoy monopolistic rents in foreign markets. Nonetheless, the theory has the limitation of offering little explanation of why a firm chooses FDI over exports or licensing. Vernon (1966) accounts for the internationalisation process of the firm through his theory of the international product life cycle. This explanation describes the firm internationalisation process as moving from exports to FDI in stages, with a particular focus on market expansion and technological innovation. Buckley and Casson's (1976) internalisation theory states that firms internationalise by internalising their own specific assets, thus becoming MNEs, due to market imperfections. With consideration of cost, this theory moves forward transaction cost economics (Williamson, 1975) into the realm of international business. Indicating the limitations of and drawing on partial explanations of the existing theories of internationalisation, Dunning (1977, 1988) suggests the eclectic paradigm of international production in an attempt to build up a unifying analytic framework for the international behaviour and patterns of firms. This eclectic paradigm is a configuration of three sets of advantages: ownership-specific advantage, location-specific advantage, and internalisation advantage. An appropriate configuration of the three advantages can allow for the prediction of firm internationalisation patterns.

Another stream of internationalisation research comes from the behavioural approach. From the behavioural perspective, firm internationalisation research is marked by the Uppsala model (Johanson and Vahlne, 1977; Johanson and

Wiedersheim-Paul, 1975), the network model of internationalisation (Johanson and Mattsson, 1988), and Born Globals (Knight and Cavusgil, 1996; Oviatt and McDougall, 1994; Rennie, 1993). In their internationalisation process model, Johanson and Vahlne (1977) describe firm internationalisation as occurring in incremental steps. Central to the model is experiential knowledge, gradual resource commitments, and the heavy reliance of foreign market selections on psychic distance. The network approach (Johanson and Mattsson, 1988) describes the internationalisation of a firm through its interaction with various partners in networks with a particular emphasis on interdependency and the development process in international markets. This view of networks is generally regarded as complementary to the Uppsala process model. Early internationalising firms, often called Born Globals, are increasing in substantial numbers worldwide and capturing growing attention (e.g., Knight and Cavusgil, 1996; Madsen and Servais, 1997; Oviatt and McDougall, 1994; Rennie, 1993). With a global focus, the rapid internationalisers enter foreign markets at or near their formation. This new type of firm tends to skip some stages suggested by the process models, thereby posing a substantial challenge to traditional views of firm internationalisation.

## **2.3 Internationalisation Theories of the Firm**

### **2.3.1 Theory of the international product life cycle**

In 1966, Vernon developed the theory of the international product life cycle (IPLC) which explained the internationalisation patterns of U.S. manufacturing firms in the context of comparative advantage. The theoretical framework was further analysed and improved by the work of Hirsch (1967) and Wells (1972). Vernon (1966) regarded the theory of monopolistic advantage as static, thereby failing to provide a sound account of which option MNEs choose between export and FDI when investing overseas. Thus, he

attempted to form a dynamic theoretical framework pertaining to the overseas investment of MNEs, by combining monopolistic advantage with both the IPLC and location. The integrated approach of IPLC theory is regarded as the first dynamic interpretation of the critical factors for international trade and international production (Dunning, 1993).

Vernon (1966) basically questioned why firms move to foreign markets and which firms moved there. He sought to explain why the location of production of certain kinds of products moves internationally in relation to the stage in the product's life cycle. Three stages are identified - *new product*, *maturing product*, and *standardised product* - and these tend "to be accompanied by changes in the relative importance of the various factors of production – skilled and unskilled labour, scientific and engineering know-how, and capital and management ability" (Raghavan, 1995, 56).

#### 2.3.1.1 New product stage

At this stage, the IPLC attempts to satisfy the needs of high-income customers in an advanced economy. Specifically, a new product is first manufactured in a technologically advanced country (for example, the United States) which has unique resources such as management skills, scientific knowledge, engineering and other skills and international reputation. The developed product is sold primarily in the domestic market, bringing the inventor a unique opportunity to enjoy a temporary monopoly. Once established, an attempt is made by the innovating firm to export the product, albeit on a small scale, to other advanced countries with similar culture and economic conditions to its domestic market in order to expand sales and profit (Poh, 1987). This pattern occurs because such product-pioneering firms tend to be characterised by aggressive foreign expansion through exports (Knickerbocker, 1973; Vernon, 1966) and perceive foreign markets with a high degree of similarity as less risky.



#### 2.3.1.2 Maturing product stage

As a product gradually matures, it moves onto a new stage in its life cycle. Some standardisation of the product takes place and the demand for the product grows in other advanced economies. The increase in demand provides an incentive for potential foreign competitors to manufacture the produce in their home base at a cheaper cost by imitating the product's innovative technology. The more a product with proprietary technology is broadly disseminated, the faster the imitation of it takes place. Foreign firms may even enter the market place with a price advantage. This inevitably increases competition, thereby dissipating the monopoly power of the first entrant (Poh, 1987). At this stage the first-mover will reap less profit than before. In consequence, the firm may decide, or be forced, to relocate its production facilities to other economies where labour costs are lower in an effort to avoid this price-based competition.

#### 2.3.1.3 Standardised product stage

As the product is standardised, it moves onto another stage of its life cycle. With increasing competition from foreign competitors, firms in advanced countries move their production facilities to less developed countries with lower production costs and production activities in their home base decline. In other words, as advanced nations become less cost-effective, the comparative advantage of the home country disappears as a result. With the passage of time, producers in less developed countries export the standardised product back to the advanced country (Poh, 1987) where the product was originally developed.

Market expansion and technological innovation are central to this theory given its explicit focus on international trade patterns of technologically innovative products through the three stages. Proprietary technology is indispensable for developing the

innovative products and market size and structure have a critical role to play in determining trade patterns in the process of market expansion. Empirical studies, albeit a limited number, carried out shortly after the IPLC theory first emerged, empirical studies (e.g., Gruber et al., 1967) found that the international product life cycle helped explain US trade patterns, thereby indicating a strong predictive power. Mullor-Sebastian (1983) later provided further evidence that industrial product groups behave in line with the IPLC but found less support for the case of individual products.

#### 2.3.1.4 Shortcomings of the IPLC theory

A major shortcoming of IPLC theory is its ambiguity in terms of the trade-offs between the different foreign market entry modes such as licensing, joint venturing, and FDI as well as the timing of mode switches (Mtigwe, 2006). There is also plenty of evidence that a number of firms, particularly small firms, adopt the defined life cycle in their internationalisation process, but progress between stages in a haphazard fashion (Globerman, 1986; Malhotra et al., 2003).

Furthermore the life cycle model may be less valid for the modern international trade environment. In today's dynamic global business arena, a vast array of leading MNEs can derive benefits from their well-established global production networks, which allow them simultaneously to launch and sell their products (Kuada and Sorensen, 2000). Yet, the IPLC theory provides no explanation for these activities. This theory particularly appears to fail to account for the behaviour of a product when changes in technology and demand conditions occur. According to Giddy (1978), many sorts of products do not comply with the product cycle, contrary to the predictions of the IPLC theory. Despite the above-mentioned shortcomings, the IPLC theory is still regarded as an important framework for explaining international trade pattern in innovative manufacturing products.

### 2.3.2 Internalisation theory

The concept of ‘internalisation’ stems from transaction cost theory, originally suggested by Coase (1937) and taken further by Williamson (1975; 1985). Based on the logic of the theory, Buckley and Casson (1976) first attempted to elucidate why MNEs emerge and embark upon FDI, thereby extending transaction cost economics to the realm of internationalisation of the firm (Madhok, 1998; Rugman, 1986). Since their seminal work, *The Future of Multinational Enterprises*, the long-run theory of the MNEs has provided a sound analytical framework for gaining an in-depth understanding of cross-border economic activities of MNEs. Taken further by Rugman (1980), it is even regarded as ‘a general theory’ that explains the FDI activities of MNEs (Rugman, 1982). Arguing that no proper market exists, Rugman (1980) posits that MNEs deal with market imperfections created by knowledge and intermediate products by creating an internal market in response to these externalities. This, thus, gives rise to an explanation for the existence of MNEs. He states that “the MNE is driven to create an internal market of its own in order to overcome the failure of the external market to emerge for the sale of information” (Rugman, 1980: 368). The internalisation theory starts with three postulates:

- (1) Firms maximise profit in a world of imperfect markets.
- (2) When markets in intermediate products are imperfect, there is an incentive to bypass them by creating internal markets. This involves bringing under common ownership and control the activities which are linked by the market.
- (3) Internalisation of markets across national boundaries generates MNEs (Buckley and Casson, 1976: 33).

From these postulates, it is clear that the rationale for internalisation is the concept of market imperfections, which are often regarded as the key pre-condition for its analytic framework. According to Buckley and Casson (1976), there are five types of market imperfections: interdependent activities involving time-lags; economies of scale;

a bilateral concentration of market power, public goods such as knowledge; and government intervention. According to proponents of this theory, a firm regards markets in intermediate products as imperfect, thereby preventing it from making a profit by using its unique knowledge that is critical to competitive advantage-based business activities such as production and distribution in foreign markets. The internalisation of the intermediate product market however has potential to reduce the uncertainties and risks likely to arise from activities in the imperfect external market:

“...in a situation where firms are attempting to maximise profits in world of imperfect markets, there will often exist an incentive to bypass imperfect markets in intermediate products. Their activities which were previously linked by a market mechanism are brought under common ownership and control in a ‘market’ internal to the firm” (Buckley and Casson, 1976: 47).

Thus, MNEs are established by internalising markets in response to perceived market imperfections which create pecuniary opportunities for firms to enjoy “higher economic rents by internalising the transfer of factor goods and services across national boundaries with a single firm than they can by arm’s length transactions between firms” (McDougall et al., 1994: 477). Internalisation goes on until the point at which the costs and benefits of further internalisation are marginally the same (Buckley and Casson, 1976).

The decision about whether or not to engage in transactions across national boundaries depends on the degree of cost reduction, which forms the basic premise of internalisation theory. As the structure of the theory:

“...the internalization approach to modern theory of the multinational enterprise rests on two general axioms: (1) Firms choose the least cost location for each activity they perform, and (2) firms grow by internalizing markets up to the point where the benefits of further internalization are outweighed by the costs. These two propositions are not independent as the internalization of markets will interact with least cost location...” (Buckley, 1988: 181-182).

This leads to the argument that it is important to compare the costs with profits produced when internalising key business functions and assets. Specifically, the theory attempts to contrast:

“...the costs and benefits of retaining key business activities within the firm against arms-length foreign entry strategies such as exporting and licensing, in which the firm contracts with external business partners to perform certain value-chain activities” (Cavusgil et al., 2008: 114).

According to Buckley and Casson (1976), it is knowledge, which has the character of a public good, that is most critical to their theory of internalisation. This key intangible asset is characterised as hard-to-protect but easy-to-transfer. Given the inherent characteristic of knowledge, foreign competitors may easily acquire and exploit a firm’s knowledge in external markets. According to this line of reasoning, the firm attempts to internalise its key knowledge in an effort to protect it and to stay competitive, thereby preferring to use FDI as an entry mode rather than exporting or licensing. By using FDI to internationalise, the firm can fully control and take optimal advantage of its proprietary knowledge in foreign markets (Cavusgil et al, 2008). On the position of knowledge in the theory of internalisation, Buckley and Casson (1976) state:

“...there is special reason for believing that internalisation of the knowledge market will generate a high degree of multinationality among firms. Because knowledge is a public good which is easily transmitted across national boundaries, its exploitation is logically an international operation; thus unless comparative advantage or other factors restrict production to a single country, internalisation of knowledge will require each firm to operate a network of plants on a worldwide basis” (Buckley and Casson, 1976: 45).

Through producing an internal market with these knowledge characteristics, MNEs can take two approaches to profit:

“...one is to use its intellectual or proprietary knowledge, such as selling patents. The other method is through expansion of its international operations by maintaining its control on the knowledge available to it through subsidiaries and joint ventures” (Veghefi et al., 1991: 75).

Taken together with efforts to understand the transaction cost phenomenon within a firm, internalisation theory provides a critical insight into how the internalisation process is established within a MNE (Kalfadellis and Gray, 2002). The work of Buckley and Casson (1976) still appears to provide a solid explanation of how MNEs are created and of their behaviour in response to external markets. Its most outstanding contribution is to introduce the concepts of “least cost location and growth by internalisation of markets” into the internationalisation theory of the firm (Ghauri, 2000). By shifting international business literature from a limited focus on country-specific factors into an emphasis on industry-level and firm-level factors of international investment flows (Henisz, 2003), the internalisation theory has made an important contribution to international business literature. However, despite its sound explanatory power of MNE behaviour relating to cost considerations, the theory still does not give a clear answer to the question of why MNEs engage in FDI and international production and why they choose a particular foreign location in which to invest.

### **2.3.3 The eclectic paradigm**

Dunning (1977; 1980; 1988) developed the eclectic paradigm of international production, via a synthesis of monopolistic advantage theory (Hymer, 1960), internalisation theory (Buckley and Casson, 1976), and industrial location (Dunning, 1988). Indicating that existing theories of FDI only accounted in part for foreign production activities, he stressed the importance of the eclectic framework to explain “why firms from one country engage in value-added activities outside their national boundaries, where they choose to produce, and by what means” (Erdener and Shapiro, 2005: 417). Dunning stated (1988: 1) that “...the intention was to offer a holistic framework by which it was possible to indentify and evaluate the significance of the

factors influencing both the initial act of foreign production by enterprises and the growth of such production”. Although varying depending on context-specific factors, according to the eclectic paradigm, firm internationalisation to a considerable extent can be accounted for by the configuration of three sets of advantages: *ownership(O)*, *location(L)*, and *internalisation(I)*, or *OLI*. A firm is either encouraged or discouraged to serve foreign markets in accordance with the relative degree of integration of the three advantages. Dunning states that the rationale for which a firm internationalise is:

“the more a country’s enterprises possess ownership-specific advantages, the greater the incentive to internalize them; and the more these enterprises find it profitable to exploit the advantages outside their national boundaries, the more likely they are to engage in foreign direct investment... a country’s involvement in international direct investment then becomes a function of the ownership and internalization advantages of its enterprises relative to those of other nationalities and its location-specific endowments relative to those of other countries” (Dunning, 1981: 1).

#### 2.3.3.1 Ownership advantages

Ownership advantages are about possessing proprietary assets; ones that are specific to the nature of its ownership and not readily transferable across borders within the MNEs network. According to Dunning (1988: 2), ownership advantages are “advantages that stem from exclusive privileged possession of or access to particular generating income assets”. To establish production on sites that are attractive, MNEs can capitalise on such advantages (Zucchella and Scabini, 2007). These advantages arise from both tangible assets such as natural resources and capital and intangible ones such as proprietary technology and knowledge, managerial skills, and brand power. The value of *O* advantage of a firm must be greater than that of its competitors to offset the costs which may incur in international production. Dunning (1988: 2) writes:

“the ownership-specific advantages... must be sufficient to compensate for the costs of setting up and operating a foreign value-adding operation in addition to those faced by indigenous producers or potential producers”.

Ownership advantages are broken into two types: asset ownership that arises from MNE ownership of specific assets; and transactional ownership that reflects the ability of MNEs in their external markets to capture benefits or lessen costs in transactions (Dunning, 1983). The perspective of transactional ownership advantage can offer insights into small firm internationalisation given that they can benefit from networks which allow them access to intangible assets in foreign markets, even though the relevance of the eclectic paradigm itself to small firm internationalisation is limited (Rutashobya and Jaensson, 2004).

It is more likely that firms prefer to internationalise through FDI, provided they possess a substantial degree of ownership-specific advantages which allow them to enjoy monopolistic power in the foreign markets they target. From this perspective, ownership advantages also appear to influence the choice of entry mode of small firms (Brouthers et al., 1996). For example, it is likely that such small businesses tend to utilise networks in order to engage in international activities due to their relatively limited tangible assets.

#### 2.3.3.2 Location advantages

When engaging in FDI or international production, a firm needs to decide in which foreign markets to undertake the activity. Building on existing literature on the combination of location and international trade theory (e.g., Buckley and Casson, 1976), Dunning (1977, 1988) expands this idea, placing it in the eclectic paradigm. The location-specific advantages are relevant initially to showing that geographical location matters to economic outcomes. In more detail, a firm must possess ownership-specific advantages over rival firms in foreign markets. When market structure is perceived as imperfect, the firm attempts to internalise its proprietary advantages via FDI, thereby becoming a MNE. At this time, the MNE must take into account the extent to which the



locational advantages, arising from factor endowments and geographical position (Kogut, 1983), of foreign markets are sufficiently attractive to influence investment decisions. Location-specific advantages thus are critical for FDI to secure international success.

An MNE may derive specific benefits from a unique set of advantages possessed by each host country. They are classified into four categories (Dunning, 1993): natural resource advantages (e.g., raw material and energy); economic environment advantages (e.g., market size and R&D facilities); cultural and social advantages (e.g., culture and language) and political power and legal environment (e.g., political stability and legal environment). These international locations are becoming a key consideration as an additional strategic importance. For example, they can be taken into account as a target of exploitation for the supply and demand in foreign markets (Dunning and Lundan, 1998; Pak and Park, 2005).

#### 2.3.3.3 Internalisation advantages

Internalisation advantages enable the firm to create value by internalising its ownership-specific advantages (Dunning, 1977). Using the theoretical foundation of transaction cost theory, Buckley and Casson (1976) first introduced the concept of internalisation into the realm of international business activities of the firm. It accounts for why and how a firm internalise their proprietary assets such as knowledge within the organisation, with cost considerations. Dunning (1977; 1988) expands internalisation theory by integrating it with ownership advantages and location advantages. Internalisation advantages elaborate why firms prefer to internalise their foreign value-adding activities within the hierarchy rather than to rent them out to external parties in the form of licensing or franchising or exporting so that they can use their ownership-

specific advantages, in conjunction with a set of ownership-specific advantages and location advantage (Mtigwe, 2006; Pak and Beldona, 2003).

Elements of market imperfections that trigger transaction costs include two human factors, i.e. bounded rationality and opportunism; two environmental factors, i.e. transaction uncertainty and industry structure; product complexity and information asymmetry. Specific configurations of the elements force a firm to transfer its ownership-specific advantages across national boundaries, establishing its hierarchical governance structure (Kuada and Sorensen, 2000).

With a configuration of these three advantages, Dunning seeks to offer a unifying and rigorous analytical framework to predict a firm's optimum foreign market entry mode (Dunning, 1988). This framework suggests that when the three sets of advantages are high, firms will prefer to select a higher degree of integrated entry mode such as FDI (Brouthers et al., 1999). When applied to the level of industry, it may explain the directions of foreign investment and trade likely to be undertaken in particular industries.

In that the eclectic paradigm has been evolving since the publication of Dunning's seminal work in 1977, '*Trade, Location of Economic Activity and the Multinational Enterprises: A Search for an Eclectic Approach*', it appears to be a work in progress. Recently, the model is further extended in response to the advent of alliance capitalism, adding asset augmentation as a motive for FDI. By doing so, it is transformed the eclectic paradigm from a static to a dynamic framework. Dunning (2001) recognised that cooperative inter-firm networks and alliance were becoming a crucial form of international involvement of the firm, requiring some reappraisal of the configuration of the *OLI* framework to cover the relationships embodied in alliance capitalism. Dunning (2001: 184) stated:

“the content and significance of the OLI configuration affecting the determinants of international production need to be reconsidered in the light of the emergence of alliance capitalism and contemporary technological developments, all of which are pointing to the need of firms to embrace a plurality of intra- and inter-firm cooperative relationships if they are to be successful competitors in the global marketplace.”

In response to the need to adapt to strategic alliances, the concept of ownership-specific advantage was widened to reflect the benefits accruing to firms through cooperative interaction activities such as knowledge sharing in inter-firm alliances in international markets (Narula, 2006). Given that such cooperative networks have potential to provide new intangible ownership-specific assets such as business and technological knowledge, it is likely that understanding of this perspective can advance through utilisation of the resource-based and knowledge-based views. The latest version of the framework has been further extended with a particular emphasis on an institutional analysis, in an attempt to incorporate institutional advantages which influence both the determinants as well as the outcomes of MNE activities into the OLI paradigm (Dunning and Lundan, 2008). The institutional framework is:

“...critical in devising and implementing the formal and informal rules and incentives that guide the process of how knowledge generation and transfer are formed and implemented...the success of knowledge generation and transfer depends on the cognition and motivation of both the transferor and transferee, both of which are likely to be strongly influenced by the incentives that are part of the institutional matrix of a firm” (Dunning and Lundan, 2008: 577).

To sum up, Dunning’s framework is evolving in line with advances in knowledge and understanding of theories and practices regarding firm internationalisation (Ware, 2002). The eclectic paradigm hence provides a holistic analytical framework for the behaviour and patterns of international production of MNEs, incorporating *O*, *L*, and *I* advantages. There is some criticism that triggers in an attempt to cover a broad range of issues in the field of international business with a single theory (e.g., Kojima, 1982). Nonetheless, for the benefits, Dunning’s approach is

particularly often regarded as superior to a transaction cost theory or internalisation theory (Agarwal and Ramaswami, 1992; Brouthers et al., 1999; Dunning and Kundu, 1995; Tse et al., 1997), and is still remarkably widely accepted as one of the most holistic frameworks for analysing complex decisions relating to the international production of MNEs.

### **2.3.4 The Uppsala internationalisation process model**

#### 2.3.4.1 General descriptions

Research into the internationalisation process of the firm has captured substantial attention (e.g., Bilkey and Tesar, 1977; Cavusgil, 1980; Czinkota, 1982; Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975; Reid, 1981; Turnbull, 1987; Welch and Loustarinen, 1988). Among the extant literature, the Uppsala internationalisation process model (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) is often regarded as providing a sound theoretical explanation of the internationalisation process of the firm (Blomstermo and Sharma, 2003). For example, Andersen (1993) supports this standpoint, indicating that the model is more comprehensive and further developed than other models of the internationalisation process.

The Uppsala internationalisation process model was developed by the Uppsala school (Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975). The model takes its theoretical roots from two streams of theory: a theory of the growth of the firm (Penrose, 1959) and a behavioural theory of the firm (Aharoni, 1966; Cyert and March, 1963). The former is a theory which is concerned with the international growth of firms and has a particular focus on knowledge of resources. The knowledge is related closely to the appropriate use of resources and thus a firm's growth depends on its

ability to use, combine, and develop its resources (Penrose, 1959). The latter maintains that a firm's behaviour in relation to decision-making is characterised by limited knowledge and that the focus of this behaviour is mostly on augmenting that knowledge (Aharoni, 1966; Cyert and March, 1963). The Penrose's explanation and the behavioural theory both lay sound foundations for the Uppsala model given that the extent of knowledge about and commitment to resources are at the heart of the internationalisation process model.

The main premise behind the Uppsala model is that the internationalisation process of the firm takes place on a gradual basis (Johanson and Vahlne, 1997, 1990). Central to the model is cumulative experiential knowledge acquired through incremental learning in the internationalisation process. The theory postulates that knowledge is developed gradually and thus the international expansion of firms takes place incrementally (Johanson and Vahlne, 2003a). It is assumed that patterns of international involvement are explained by the extent of learning-based knowledge acquired through gradually increasing international experience. This internationalisation model thus aims to explain *how* firms internationalise rather than *why* and is thus process-oriented rather than goal-driven (Johanson and Vahlne, 1990).

The model's explanatory power appears to be invalid without some underlying assumptions. First, a major obstacle to engagement in international activity is lack of knowledge about foreign markets (Johanson and Vahlne, 1977). Due to limited or no knowledge about foreign markets, firms hesitate to embark upon internationalisation. Secondly, given the uncertainty and risks triggered by the lack of knowledge, the speed of decision-making regarding foreign investment or resource commitment is incremental. As foreign market-related knowledge increases through foreign activities, the extent of perceived market uncertainty and risks decreases. Thirdly, knowledge acquisition in the internationalisation process to a large extent takes place at the

individual level, and knowledge is not transferred easily between individuals or contexts (Forsgren, 2002).

The mechanism of the Uppsala model works through an emphasis on the interplay between knowledge development and decisions to commit in the internationalisation process. Firms acquire experiential market knowledge gradually through incremental learning from their foreign business activities. The learning plays a role in reducing uncertainty and the knowledge enables firms to identify potential business opportunities and problems. It is likely therefore that firms will increase their commitments to foreign markets. In turn, these commitments enhance learning and increase capacity to identify new opportunities and problems, thereby forming a feedback loop (Johanson and Vahlne, 1977, 1990).

The Uppsala model of internationalisation provides theoretical explanations of ‘patterns’ of internationalisation of the firm, with a focus on the establishment chain and on psychic distance (Johanson and Wiedersheim-Paul, 1975). The patterns are concerned with questions of how firms proceed sequentially in their internationalisation process, and how firms select foreign markets when first going global. In this respect, the emphasis of the internationalisation process theory appears on a dynamic framework with stages which elaborate relationships, rather than on modes of foreign market entry or on the number of foreign markets involved. Thus, the model focuses on an “understanding of the incremental nature of the internationalisation process” (Johanson and Vahlne, 1990: 17).

#### 2.3.4.2 Concepts and features

The Uppsala model elaborates the pattern of firm internationalisation through general theoretical explanations of it. The model places particular emphasis on two concepts: an establishment chain and psychic distance (Johanson and Vahlne, 1977; Johanson and

Wiedersheim-Paul, 1975). It is assumed that the patterns of internationalisation of firms rely on a sequence of stages and on the selection of psychically, rather than physically, close markets.

### Establishment chain

In the Uppsala model, as mentioned earlier, the basic assumptions are that the internationalisation process of the firm has its starting point in the domestic market and that the international involvement is the product of a series of incremental decisions. It is assumed that firms hesitate to engage in international activities, due to lack of foreign market knowledge and resources. Learning and incremental decision-making play a central role in augmenting knowledge and resources (Luostarinen, 1980). Both of these factors are thus an essential pre-requisite for embarking upon the internationalisation process (Johanson and Wiedersheim-Paul, 1975: 306).

One of the underlying assumptions in the process theory is that internationalisation of the firm proceeds by increasing the extent of experiential knowledge acquired through learning in foreign markets and by decreasing the perceived risk from uncertainty regarding market investments. In moving forward to later stages, firms become more deeply involved in foreign activities, including taking direct control of sales in specific countries as a result of the acquisition of experiential knowledge and commitment of resources (Hadjikhani, 1997; Johanson and Wiedersheim-Paul, 1975). Actions may be taken in an attempt to increase international exposure, thereby extending a firm's foreign activities. In a study by Johanson and Wiedersheim-Paul (1975: 307), internationalisation itself is portrayed as a stepwise extension of international operations composed of four sequential stages:

1. no regular export activities
2. export via independent representatives (agents)
3. sales subsidiary, and
4. production/manufacturing

This four-stage progressive development is called an ‘establishment chain’ (Johanson and Wiedersheim-Paul, 1975). While attempts are made to distinguish between the four different stages, it remains open to “identify different types of steps and a different number of stages” (Johanson and Wiedersheim-Paul, 1975: 307). The establishment chain highlights the role played by individuals in this progressive development and that the extent of international involvement of firms varies, depending on the sequence of stages.

In the establishment chain, it is posited that the establishment of various modes of international involvement into foreign markets follows a linear, sequential process. The four sequential stages denote successively larger resource commitments, which “lead to quite different market experience and information for the firm” (Johanson and Wiedersheim-Paul, 1975: 307). In the first stage, firms have no commitment of resources to the foreign market, thus generating no regular export activities. This is in line with the model’s assumption that firms develop first in the domestic market (Johanson and Wiedersheim-Paul, 1975). In the second stage, firms gradually increase their resource commitments to the market, developing market channels as regular information about foreign activities. By augmenting commitments of resources to the markets, firms proceed to the third stage in which they directly manage their information channels through their acquired capacity to control the type and amount of information relevant to the markets. In this stage, market resources are acquired by first-hand experience. The fourth stage refers to even greater resource commitment, including foreign involvements such as FDI (Johanson and Wiedersheim-Paul, 1975).



### Psychic distance

The Uppsala model posits that the internationalisation process of the firm proceeds in a linear fashion, following the establishment chain. The sequential development of international operations goes hand in hand with a larger degree of international exposure. As higher levels of internationalisation require not only foreign market entry modes but also the extension of foreign activities, the selection of foreign markets is another key issue.

In the process model, lack of knowledge is a salient explanatory factor in the foreign market entry of firms. It is likely that decision-making regarding the development of international operations is hampered by lack of knowledge about different business environments (Blomstermo and Sharma, 2003). Differences are detected in language, culture, levels of education and of industrial development, and political and legal systems, etc. If these factors differ from those of the home base of firms, they may preclude the firms from acquiring and accumulating knowledge in the market. The concept of psychic distance encompasses such factors and is defined as “factors preventing or disturbing the flows of information between firm and market” (Johanson and Wiedersheim-Paul, 1975: 308). It promotes the assumption that the process of firm internationalisation moves from activities in foreign markets that are psychically close to more distant markets (McDonald et al., 2003). In the model, psychic distance thus offers a useful account of how firms choose and enter a specific foreign market and of how the extension of activities in a market is closely related to psychic distance (Grady and Lane, 1996; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975).

Psychic distance is generally highly correlated with geographic distance - with a few exceptions (for example, the United Kingdom - Australia relationship) (Johanson

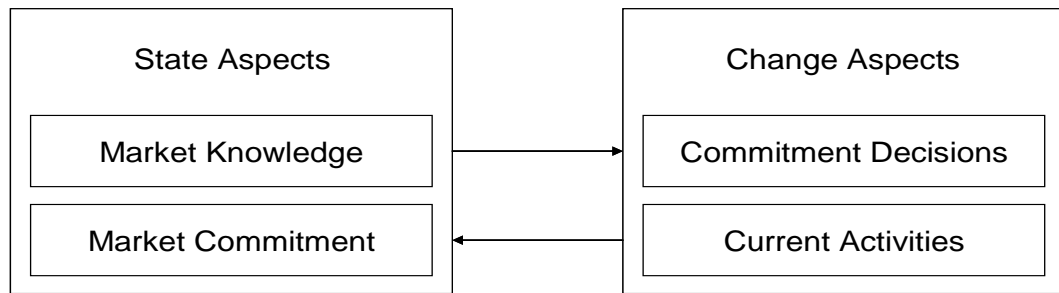
and Wiedersheim-Paul, 1975). This explains, in part, why firms set about their internationalisation by exporting to neighbouring countries. Nordstrom and Vahlne (1992) indicate that psychic distance has also, to a large extent, a bearing on cultural distance (Kogut and Singh, 1988), thereby giving rise to the interchangeable use of the two concepts (Blomstermo and Sharma, 2003; Evan et al., 2000). It may be assumed that firm internationalisation moves forward with successively greater geographical and cultural distance. It is likely therefore that making incremental commitments with knowledge from neighbouring markets where psychic distance is relatively lower than distant markets results in a firm internationalising at a gradual pace.

Psychic distance is not the factor in international expansion. Other factors may come into play over time, including developments in information and communications technology, political decisions, changes in the international trade environment, etc. (Johanson and Wiedersheim-Paul, 1975). The internet is perhaps the archetype of these factors (e.g., Bennett, 1997; Moen et al., 2004). Psychic distance appears less relevant as the global market becomes increasingly homogeneous (Czinkota and Ursic, 1991; Nordstrom, 1990).

#### Internationalisation process of the firm: mechanism

The Uppsala model basically comprises four core concepts: that is, market knowledge, market commitment, the commitment decision, and current activities, all of which are closely linked to each other. These concepts can be divided into two categories: state aspects and change aspects. The former refers to the existing situation in the internationalisation of the firm and includes market knowledge and market commitment, whereas the latter refers to changes in the process and includes commitment decisions and current activities (see Figure 2.2). The mechanism explains various stages in the process through bilateral analysis of aspects of state and change in the

internationalisation process with particular emphasis on the nature of experiential knowledge and resources.



Source: Johanson and Vahlne (1977: 26)

Figure 2.2: Basic mechanism of the internationalisation process of the firm

As shown in Figure 2.2, the model assumes that all the concepts interact with each other on a bilateral basis. Market knowledge and market commitment are assumed to influence decisions regarding commitment of resources to foreign markets and the manner in which current activities are carried out and vice versa (Johanson and Vahlne, 1990). That is, as ‘state’ regarding knowledge and commitment of markets increases, ‘change’ regarding decisions of resources and activities takes place. In turn, aspects of change enhance those of state, creating a causal cycle. As a result, this feedback loop creates a learning cycle. In the model, knowledge and commitment are viewed as key concepts because they allow the internationalisation model to be more dynamic and cumulative. In relation to the mechanism of the model, Johanson and Vahlne (2003b: 9) state:

“This mechanism is that the firm develops knowledge when it operates in the market, this knowledge enables the firm to better see and evaluate business opportunities and, consequently, to make new market commitments. In their turn, these commitments lead to learning the ability to identify new opportunities, and so on.”

*Market knowledge* is characterised as cumulative. A critical underlying assumption is that *market knowledge* can primarily be acquired through direct business

activities of firms (Hadjikhani, 1997). It is divided into objective knowledge and experiential knowledge, based on Penrose's (1959) classification of knowledge. The former can be taught and is thus easily transmittable. The latter, on the contrary, is primarily gained through first-hand experience of current business activities in a particular context, and is thereby hard for others to imitate. Experiential knowledge is a salient feature of the Uppsala model, which allows firms to perceive and formulate new business opportunities and reduce the uncertainty and risks they may face when embarking upon further business activities in foreign markets (Blomstermo and Sharma, 2003). As the underlying factors which trigger business failure decrease with the accumulated experiential knowledge, firms are expected to make incremental resource commitments. The lack of experiential knowledge thus may impinge on decision-making in the internationalisation of the firm. Johanson and Vahlne (1977: 28) state:

“... this experiential knowledge is the critical kind of knowledge... because it cannot be easily acquired as objective knowledge. In domestic operation, we can to a large extent rely on lifelong basic experiences to which we can add the specific experiences of individuals, organisations and markets. In foreign operations, however, we have no basic experiential knowledge to start with. It must be gained successively during the operations in the country”

*Current activities* have some dynamic effects on state aspects: market knowledge and market commitment and vice versa. The Uppsala model is labelled the internationalisation ‘process’ model because of the characteristic feature of the *current activities*, stressing “the strong element of continuity” (Johanson and Vahlne, 1977; 2003b). Their dynamic effects include the effect on learning and the effect on commitment. Continuous interactions with actors in markets enhance the firm's capacity to learn about what is essential to their internationalisation. Through gradual interaction activities, firms can also develop or take part in information channels, creating trust between the actors (Johanson and Vahlne, 2003b). *Current activities* thus play a crucial role in taking larger steps in the internationalisation process of the firm,

with a dynamic influence on two core concepts of the Uppsala model: learning and commitment.

*Market commitment* is composed of “the amount of resources committed and the degree of commitment abroad.” (Blomstermo and Sharma, 2003: 22). The former is related to the level of investment to foreign markets and thus is quantifiable, while the latter denotes how difficult it is to transfer the investment and resource. It is likely that the degree of commitment abroad is more central in the process model in that the concept enables firms to be involved in international operations and to further strengthen the linkages (Johanson and Vahlne, 2003b). From this point of view, the commitment may have the potential to create relationships with other actors. In the mechanism, *market commitment* is affected by new business opportunities and problems explored by market knowledge. The commitment in reverse brings about and enhances learning and a capacity to identify more attractive opportunities and potential risks.

*Commitment decisions* are related to decisions to commit resources to foreign operations. It is assumed in the mechanism of the internationalisation process that commitment decisions are “the result of the conception of business opportunities and problems, which, in turn, are a consequence of experiential knowledge” (Johanson and Vahlne, 2003b). These decisions thus tend to be made after new business opportunities and problems are identified.

#### 2.3.4.3 Shortcomings of the Uppsala model

Although still widely regarded as the most comprehensive explanation of the internationalisation process of the firm (Andersen, 1993), the relevance of the Uppsala model has been the subject of some debate. Shortcomings arising from the model can be classified into five categories: time span, approach type, deterministic sequence, internationalisation mechanism, and psychic distance.

### Time span

An underlying assumption of the Uppsala model is that firm internationalisation proceeds on a gradual basis. Its key driving force is the incremental acquisition of market knowledge. Thus, the internationalisation model assumes a 'span of time' in gaining the experience, accumulating resources, and developing the managerial capabilities which are essential requisites for international involvement (Dana, 2001). However, early internationalising firms are often characterised as those that leapfrog one or more stages in the establishment chain (e.g., Bell, 1995; Knight and Cavusgil, 1996, 2004; Oviatt and McDougall, 1994). Due to the assumption of the time span, the gradual process approach fails to explain the 'leapfrogging' activities of the entrepreneurial firms (e.g., McDougall, 1989; McDougall et al., 1994; Oviatt and McDougall, 1997). Furthermore, the Uppsala model's gradual assumption appears to be far less useful for firms that are forced to take into account 'foreign market entry timing' in today's fast-changing international environments (Dana, 2001).

### An approach type

As Johanson and Vahlne (1990) acknowledge, the model treats firms as reactive (Cavusgil, 1980), overlooking the propensity for the proactive and risk-taking behaviours which are embedded generally in small entrepreneurial firms. The model hence is limited in providing insights into proactive international expansion for the firms with extensive experience and sufficient resources in foreign markets (Melin, 1992).

### A deterministic sequence

Some criticise the Uppsala model for being partial and deterministic (Fina and Rugman, 1996; Melin, 1992; Reid, 1983; Rosson, 1987; Turnbull, 1987; Young and Wilkinson, 1989). For instance, Turnbull (1987) states that large-scale firms with substantial international experience and commitment may attempt to use a variety of entry modes in addition to exporting. This finding is supported by Root (1987) who states that high technology-based firms may utilise licensing as the mode of their first entry into international markets. This shortcoming has been acknowledged by Johanson and Vahlne (1990). The internationalisation process of the firm may take place at any stage and may even follow the sequence of the model in reverse order (Anderson, 1993; Benito and Gripsrud, 1992; Forsgren, 1990; 2002; Turnbull, 1987). Furthermore, as an underlying assumption of the internationalisation process model, the deterministic sequential progression of events understates the likelihood of leap-frogging steps. That is, firms frequently skip stages, as evidenced by the case of 'Born Globals' (Elango and Pattnaik, 2007; Knight and Cavusgil, 2004; Oviatt and McDougall, 1994; Sharma and Blomstermo, 2003).

### Internationalisation mechanism

While the Uppsala model seeks to elaborate the internationalisation process of firms using mechanism as interactions between four concepts, the process of the mechanism is criticised (Andersen, 1993). Andersen (1993) indicates that the theoretical framework offers limited or no explanations of why internationalisation begins and how experiential knowledge is built up gradually in a specific market and resources are committed to that market. Furthermore, the picture fails to describe the impact of competition in the internationalisation process (Whitelock, 2002).

### Psychic distance

By gaining international experience through becoming involved in multiple markets, firms may perceive psychic distance as shorter. Yet, the explanatory power of the Uppsala model is criticised because of ambiguities in the concept (Grady and Lane, 1996; Millington and Bayliss, 1990; Sullivan and Bauerschmidt, 1990). For example, Grady and Lane (1996) propose that psychic distance be modified, albeit in part, when measuring the concept. As international markets become more homogeneous, the psychic distance tends to be less important, thus losing its explanatory power (Czinkota and Ursic, 1991; Nordstrom, 1990).

## **2.3.5 The network model of internationalisation**

### 2.3.5.1 General descriptions

In response to the above criticism, the network approach to internationalisation has emerged in an attempt to explain better the internationalisation of industrial firms through relationships between firms and their counterparts (Johanson and Mattsson, 1988, 1992, 1995). The network perspective describes industrial markets as “networks of relationships between firms” (Johanson and Mattsson, 1988: 287), with an account of some possible interdependencies and development processes in international markets. The model postulates two requirements for the process of internationalisation: first, gradual acquisition of market experience and knowledge and, secondly, learning from counterparts in a network (Elango and Pattnaik, 2007). In this respect, the network model is often regarded as an extension of the Uppsala process model because it extends the unit of analysis to the market level. According to the network model, although firms learn about foreign markets at a gradual pace as they internationalise, the



process of learning occurs through their networks (Chetty and Campbell-Hunt, 2003).

The model defines the internationalisation as:

“...the number and strength of the relationships between the different parts of the global production network increase” (Johanson and Mattsson, 1988: 296).

“...the way in which existing relationships in the domestic and in third markets as well as those in the entry market are utilised in the entry process” (Axelsson and Johanson, 1992: 219).

The network approach aims to account for the international activities of firms with a particular focus on ‘relationships’. According to this perspective, the market is portrayed as a system of relationships among a number of actors including customers, suppliers, distributors, competitors, government organisations, etc. (Coviello and Munro, 1995). These relationships are described as a network. Thus, the underlying assumption of the industrial network model is that the pattern of firm internationalisation can be explained via the network. In this model, firm internationalisation is interpreted as how the firm develops its position and forms relationships with potential partners in foreign industrial networks (Johanson and Mattsson, 1988). In other words, the strength of the model lies in explaining how firms internationalise through forming and exploiting business networks. This appears therefore that this network model sheds light on how actors’ activities for resource acquisitions within network for successful international operations interact and affect the various dimensions (Loane and Bell, 2006).

The network approach has proved to be insightful in explaining the internationalisation patterns of smaller firms whose international involvement relies to a considerable extent on linkages with their counterparts (e.g., Andersson and Wictor, 2003; Axelsson and Easton, 1992; Bell, 1995; Coviello and Munro, 1995; Madsen and Servais, 1997; McDougall et al., 1994). One of the general assumptions is that the main beneficiaries of network arrangements are small firms (Mtigwe, 2006). For small firms,

there is general consensus that a lack of resources is a major constraint on their internationalisation and growth (Welch and Luostarinen, 1988). Forming business networks enables the firms to become larger in size and thus contribute to overcoming this limitation (Chetty and Campbell-Hunt, 2003). Although possessing limited knowledge and experience about foreign markets, firms are able to acquire these intangible assets through relationships with network actors such as suppliers, customers and competitors in international networks. Additionally, building and utilising networks is an attractive means for leveraging marketing capabilities, a generally weak point for small firms (Coviello and Munro, 1995). A body of literature supports the theoretical usefulness of network relationships to understanding the internationalisation pattern of small firms (e.g., Bell, 1995; Chetty and Blankenburg-Holm, 2000; Chetty and Campbell-Hunt, 2003; Coviello and Munro, 1995, 1997; Loane and Bell, 2006; Moen and Servais, 2002; Oviatt and McDougall, 1994). It is therefore essential for firms to build good positions in the network and the activities in it to expedite their internationalisation efforts (Coviello and McAuley, 1999). In this respect, the network is viewed as a bridging mechanism that allows for rapid and dedicated internationalisation of firms (Mtigwe, 2006).

#### 2.3.5.2 Concepts and features<sup>6</sup>

As the industrial system is the basis on which firms engage in production, distribution and use of goods and services, it is described as a network of relationships between the firms (Johanson and Mattsson, 1988). In the network, each firm can form both direct relationships with its customers, suppliers, distributors, and even competitors and

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<sup>6</sup> As aimed to gain a great understanding of the internationalisation process through business networks, this section focuses mainly on the network model of internationalisation proposed by Johanson and Mattsson (1988).

indirect ones via other firms with their partners. As firms interact with their counterparts, co-ordination may occur. Establishing relationships with other actors in the network allows firms to gain access to external resources and provides opportunities to sell their goods or services. This views the network model as having its theoretical roots in the resource dependency theory, which assumes that individual firm's activities depend on the resources controlled by others.

As transactions between firms take place within an established network, restructuring of a firm's network may occur. Johanson and Mattsson (1988: 292) state:

“to become established in a new market, that is, a network which is new to the firm, it has to build relationships which are new both to itself and its counterparts. This is sometimes done by breaking old, existing relationships, and sometimes by adding a relationship to already existing ones” (Johanson and Mattsson, 1988: 292).

These activities may occur on a long term basis because of the competitive activities of different actors in the network (Ghauri, 1992; Johanson and Mattsson, 1988). The network, albeit stable at the moment, is thus characterised as ceaselessly changing. Johanson and Mattsson (1988) introduce the concept of bonds, in an attempt to explain the extent of the relationships. The bonds are developed through inter-firm interactions and may be technical, planning, knowledge, social, economic or legal:

“...in a tightly structured network, the interdependence is high, the bonds are strong, and the positions of the firms are well defined. When the network is loosely structured however, the bonds are weak and the positions are less well defined” (Johanson and Mattsson, 1988: 294).

In the network perspective, firms internationalise their activities through networks which allow them to gain access to strategically important resources and to sell their goods and services (Johanson and Mattsson, 1988). The market position is crucial to the network-based internationalisation process, due to the cumulative nature of the activities in the network. The rationale for this is that the model of industrial markets implies:

“...the firm’s activities in industrial markets are *cumulative processes* in which relationships are continually established, maintained, developed, and broken in order to give satisfactory, short-term economic return, and to create positions in the network, securing the long-term survival and development of the firm” (Johanson and Mattsson, 1988: 292).

The position a firm takes in a network may be a result of and influenced by the activities of other firms within it. In an effort to clarify levels of relationships, two types of positions are distinguished: *micro-positions* and *macro-positions* (Johanson and Mattsson, 1988). Micro-position refers to “the relationship with a specific individual counterpart”: a macro-position is defined as “relations to a network as a whole or to a specific section of it” (Johanson and Mattsson, 1988: 293). Macro-positions are influenced by both the complementarity of the micro-positions and the interdependencies in the whole network. Thus, the extent of the macro-positions depends in part on that of the micro-positions (Johanson and Mattsson, 1988).

According to the network approach, the internationalisation of the firm builds on existing relationships and/or on creating new relationships in foreign networks (Johanson and Mattsson, 1988). This can be achieved:

“...(1) through establishment of positions in relation to counterparts in national nets that are new to the firm, i.e. *international extension*; (2) by developing the positions and increasing resource commitments in those nets abroad in which the firm already has positions, i.e. *penetration*; and (3) by increasing co-ordination between positions in different national nets, i.e. *international integration*” (Johanson and Mattsson, 1988: 296).

Those concepts are of great importance in gaining a deep understanding of the firm’s degree of internationalisation by offering an analytical framework for “the extent to which the firm occupies certain positions in different national nets, and how important and integrated are those positions” (Johanson and Mattsson, 1988: 296). The internationalisation process of the firm thus can be explained by ‘positions in the

network' and these positions can be achieved through international extension, penetration, and integration.

#### 2.3.5.3 An application of the network model to firm internationalisation

An underlying assumption of the network model of internationalisation is that actors interact with each other and utilise and develop resources in business networks in their internationalisation process. Their positions are of paramount importance to further development through the networks. According to the network model of internationalisation:

“...the firm's development is to an important extent dependent on its positions: it can use its market assets in its further development. Thus, the internationalisation characteristics of both the firm and of the market influence the process” (Johanson and Mattsson, 1988: 297).

This indicates that the effects of the international characteristics of both firms and markets on the internationalisation process should be explored to account for how firms develop in the internationalisation process, with a particular emphasis on their positions in international business networks. Johanson and Mattsson (1998) hence attempt to make a comparative analysis using four types of internationalising firms: the early starter; the lonely international; the late starter, and the international among others. These types are characterised by *the degree of internationalisation of the firm* and *the degree of internationalisation of the market (the production net)*, as set out in Figure 2.3. Furthermore, this analysis also provides an account of how three dimensions of the internationalisation processes - extension, penetration and integration - can be explained by the network model.

		Degree of internationalisation of the market	
		Low	High
Degree of internationalisation of the firm	Low	The early starter	The late starter
	High	The lonely international	The international among others

Source: Johanson and Mattsson (1988: 298)

Figure 2.3: Internationalisation and the network model: the situation to be analysed

### The early starter

The *early starter* is characterised generally by no or few important linkages with firms abroad. In this situation, its counterparts such as suppliers and distributors go international first. Thus, the firm has “little knowledge about foreign markets and it cannot count upon utilising relationships in the domestic markets to gain such knowledge” (Johanson and Mattsson, 1988: 298). With a lack of foreign market-related knowledge, the likely internationalisation pace of *the early starter* is gradual. Thus, it is knowledge development that is a driving force behind the internationalisation of this type of firm which is viewed as a reactive internationaliser whose approaches to international markets are incremental. The internationalisation process of *the early starter* is supported by the Uppsala model, indicating that firms take a stepwise internationalisation process. Although the degree of internationalisation of the markets remains unchanged, the firm becomes a *lonely international* as it becomes more internationalised (Johanson and Mattsson, 1988).

### The lonely international

When a firm gradually internationalises, it is likely to form networks with potential partners in foreign markets, thereby acquiring more knowledge about the markets. The accumulated knowledge allows *the lonely international* to gain access to tightly structured nets with fewer costs and less effort. The rationale behind this is that the firm “already possesses good knowledge about many kinds of national markets... experience and resources give the firm a repertoire which allows it to make the heavy market investments which are acquired to enter a tightly structured production net” (Johanson and Mattsson, 1988: 301). The amassed knowledge of international operations allows the firm to cope appropriately with new external environments. This also motivates the firm to go international and exploit their firm-specific assets in the international marketplace. Thus, the internationalisation speed of the *lonely international* is faster than that of *the early starter*. In this respect, the internationalisation process of the firm may be explained better by Born Global theory (see section 2.3.6) rather than by the conventional theories of internationalisation.

As *the lonely international* goes global rapidly, the firm is viewed as possessing capabilities to promote internationalisation of its production net and, in turn, to engage with it (Johanson and Mattsson, 1988). Its wide connections with and in international markets may play a mediating role, albeit not intentionally, in firmly establishing networks which include its customers, suppliers and even competitors. As a fore-runner in the internationalisation process, the internationally active firm has a comparative advantage over its competitors because the business network the firm has already developed allows it to enjoy an advantage in new foreign marketplaces (Chetty and Blankenburg-Holm, 2000; Johanson and Mattsson, 1988). For *the lonely international* to be able to exploit and maintain its advantage, the firm is required to co-ordinate activities in the different national nets. Thus, it is international integration that is the

salient feature in the development of the highly internationalised firm among three dimensions of the internationalisation process: extension, penetration, and integration (Johanson and Mattsson, 1988).

#### The late starter

*The late starter* operates in a market environment that is already internationalised (Chetty and Blankenburg-Holm, 2000). Despite the high degree of internationalisation of its markets, the firm with a low degree of internationalisation tends to take a reactive approach in the internationalisation process, in an attempt to respond to other players such as its suppliers, customers, and competitors. As its counterparts become international, interactions between them create plenty of connections, thus making the market in which they operate gradually more attractive. *The late starter* is therefore motivated, or even forced, to enter foreign markets following the forerunners. Its relationships in the domestic market can be a key bridge for entering the foreign markets (Johanson and Mattsson, 1988). As the market is already internationalised, the firm can exploit an array of indirect linkages with foreign networks through its counterparts (Chetty and Blankenburg-Holm, 2000; Johanson and Mattsson, 1988).

As the forerunners already enjoy benefits in a tightly structured net with the comparative advantage of market knowledge, it may be difficult for *the late starter* to make an entry into international markets by establishing its position in them. This internationalisation process provides a partial explanation for the extension pattern via its focus on both the international character of indirect relationships and the open opportunities of entry (Johanson and Mattsson, 1988).

It is the same as *the early starter* in that the firm is a reactive internationaliser. In this respect, the Uppsala model is valid in explaining the situation of both firms which have a lack of international experience and knowledge (Johanson and Mattsson, 1988).



However, the *late starter* appears to be less influential in observing and meeting its customer needs in business networks. Johanson and Mattsson (1988: 303-304) state that “the influence ability of a late starter is probably rather limited. The comparison between the early starter and the late starter illustrates the importance of timing as a basic issue in the analysis of strategies in networks”.

#### The international among others

In this situation, both the firm and the environment in which it operates are characterised as highly internationalised. As *the international among others* already has a high degree of international knowledge acquired from several international nets, it tends to be driven by “the strategic use of network positions” (Johanson and Mattsson, 1988: 306). Their high degree of internationalisation allows these firms to enjoy a number of advantages in their international business activities. For instance, it may take less time to establish sales subsidiaries. Johanson and Mattsson (1988: 305) state that “the many positions which the *international among others* occupies in internationally linked networks give it access to, and some influence over, external resources”. This also simultaneously gives rise to a stronger need to co-ordinate these activities in different markets. It may be difficult for *the international among others* to further exploit and maintain the benefits derived from their international business networks without an appropriate international integration of their different networks. Thus, their ability to co-ordinate and integrate well “the geographical reallocation of activities in the production net” (Johanson and Mattsson, 1988: 306) is crucial.

#### 2.3.5.4 Shortcomings of the network model

The network theory of internationalisation advances knowledge of firm internationalisation, indicating that the internationalisation process is a result of network

relationships rather than a ‘sole effect’ (Mtigwe, 2006). Nonetheless, some criticism of its shortcomings has been raised. The weaknesses are classified into four categories.

#### Dimension per se: criteria and firm shift

Chetty and Blankenburg-Holm (2000) state that a couple of the criteria - degree of internationalisation of the firm and degree of internationalisation of the market - used to categorise each dimension are not distinctive and thus, in part, overlap. They found that *international among others* also have a role to play as an introducer, which is described as a criterion for *the early starter* in Johanson and Mattsson’s (1988) network model of internationalisation. The model does not account for how firms evolve in detail and how they move their position in the matrix. For instance, there is no logical explanation of the pattern and process when *an early starter* moves forward to *international among others*.

#### Internal and external elements: decision-makers and external factors

The focus of Johanson and Mattsson’s (1988) approach is on relationships per se in the networks but it appears to overlook key elements inside and outside firms which may influence the international involvement of firms (Loane and Bell, 2006). As essential internal factors, decision-makers and firm characteristics need to be taken into consideration. These appear to be particularly crucial to small-sized firms. In small firms with limited resources, it is more likely that their internationalisation decision relies to a considerable extent on the decision-maker’s characteristics such as attitudes, vision, knowledge and propensity to internationalise (Calof and Beamish, 1995; Chetty, 1999; Chetty and Campbell-Hunt, 2003; Reid, 1981). The network model however overlooks the importance of the influences of decision-makers and a firm’s unique features in exploring and exploiting opportunities for international penetration,

extension, and integration which emerge from the networks (Chetty and Blankenburg-Holm, 2000; Loane and Bell, 2006). This shortcoming is particularly criticised by the literature of Born Globals, which regards decision-makers as an indispensable factor. Highlighting the narrow range of actors engaged in Johanson and Mattsson's (1988) model, Chetty and Blankenburg-Holm (2000) indicate that firms may be pushed to internationalise by the influence of uncontrollable external factors such as an unsolicited order, intensive domestic competition, government policies, legal and political systems, etc. The network perspective of internationalisation provides no explanation for the role that external elements play in firm internationalisation.

#### The extension of dimension: relationships through interactions and other possible routes

The network model of internationalisation fails to take some interactions into consideration as it "only considers relationships that evolve organically" (Chetty and Blankenburg-Holm, 2000: 90). On the basis of the wider relationships between actors, Chetty and Blankenburg-Holm (2000) extend knowledge of social capital into the realm of internationalisation with an emphasis on international social capital in international networks. Firms engaged in a network form social links with their various counterparts such as suppliers, customers, agents, competitors, etc. In this situation, the managerial importance of international social capital emerges. Johanson and Mattsson's (1988) perspective, however, does not encompass this point of view.

The model also offers no account of the internationalisation of firms which have no linkages at the start (Malhotra et al., 2003). Although firms seek continuously to explore, exploit, and maintain international networks for their growth and survival, there may be no fundamental network for the internationalisation of technology-intensive firms which operate in new innovative niches (Loane and Bell, 2006). While possessing proprietary technology and cutting-edge products, the firms may have great

difficulty finding relevant networks when entering foreign markets. It is assumed furthermore that many of them may have no suitable networks, due to the “leading-edge nature of their offerings that were being targeted at emerging global niches” (Loane and Bell, 2006: 479). In these circumstances, it is through establishing new networks that firms can internationalise for knowledge and resource acquisitions about and in foreign markets. Considering networks pre-existing, the network perspective fails to provide explanations of this line of thinking (Loane and Bell, 2006).

#### Network: problem-solving and predictive power

It appears that the network model provides no account of problem-solving that may arise through network activities. The interactions through network relationships with partners may go hand in hand with conflicts between actors. According to Chetty and Blankenburg-Holm (2000: 90), the international network relationship may “control which markets a firm enters and thus determine the shape of its internationalisation. These relationships can, therefore, facilitate as well as inhibit a firm’s internationalisation”. The network model does not take account of how firms deal with difficulties or problems which may arise in network activities.

The lack of predictive power of the Johanson and Mattsson (1988) model is a critical shortcoming as this power is essential to a theoretical model. Young et al. (1999) describe the international network as ‘a ground’ where firms can acquire requisite resources for serving foreign markets rather than as a driver for internationalisation. Malhotra et al. (2003: 9) also state that the “basis for internationalisation seems rather *ad hoc* in nature”, indicating that the model is not predictive.

## 2.3.6 Born Globals

### 2.3.6.1 General descriptions

#### The advent of Born Globals

In the area of firm internationalisation, most of the theories have been developed with a focus on large and established firms, whereas relatively limited attention has been devoted to an understanding of how and why small firms internationalise at a rapid pace. It has become recently that a burgeoning number of small firms are becoming international at or near their founding (e.g., Knight and Cavusgil, 1996, 2004, 2005; McDougall et al., 1994, 2003; McDougall and Oviatt, 1996, 2000; Madsen and Servais, 1997; Moen and Servais, 2002; Mudambi and Zahra, 2007; Oviatt and McDougall, 1994, 1995, 1997, 2005). These early internationalising firms have been labelled *Born Globals* (e.g., Blomqvist et al., 2008; Gabrielsson and Kirpalani, 2004; Gabrielsson et al., 2008; Knight and Cavusgil, 1996, 2004, 2005; Laanti et al., 2007; Madsen and Servais, 1997; Moen and Servais, 2002; Moen et al., 2008; Rennie, 1993; Sharma and Blomstermo, 2003; Zhou et al., 2007). Born Globals are synonymous with: *High Technology Start-ups* (Jolly et al., 1992), *Internationally Focused Knowledge-Intensive Firms* (Bell, 1995), *Instant Exporter* (McAuley, 1999), *Innate Exporters* (Ganitsky, 1989), *Born International* (Kundu and Katz, 2003), *Committed Internationalists* (Bonaccorsi, 1992), *Global Start-ups* (Baughn and Neupert, 2003; Oviatt and McDougall, 1995), and *International New Ventures* (e.g., Autio and Sapienza, 2000; Coviello, 2006; Fan and Phan, 2007; Han and Celly, 2008; McDougall et al., 1994; Mudambi and Zahra, 2007; Oviatt and McDougall, 1994). Despite the number and variety of terms, the core focus of all the concepts is on rapid and intensive internationalisation of small firms (Blomqvist et al., 2008). The term ‘Born Global’ was first mentioned by Rennie (1993) and the first theoretical foundation for the firms was

laid in Oviatt and McDougall's (1994) seminal work - *Toward A Theory of International New Ventures*. Oviatt and McDougall's (1994) work attempts to integrate international business, entrepreneurship and strategic management theory (Aspelund et al., 2007). Nonetheless, the development of a solid theoretical framework for early internationalising firms still remains a central issue in the field of international entrepreneurship (e.g., Rialp et al., 2005a; Zhou et al., 2007).

The recent upsurge of rapidly internationalising firms indicates that “the demarcation segregating international business and entrepreneurship has begun to erode” (McDougall and Oviatt, 2000: 902). As firms internationalise rapidly from the outset, with an entrepreneurial orientation, the academic boundary between the two fields is becoming blurred and is converging on one theoretical underpinning: international entrepreneurship (McDougall, 1989; McDougall and Oviatt, 2000; Oviatt and McDougall, 2005). International entrepreneurship is defined as being “the discovery, enactment, evaluation, and exploitation of opportunities – across national borders – to create future goods and services” (Oviatt and McDougall, 2005: 540). As a bridge between the two academic realms - i.e. international business and entrepreneurship - the nascent field of international entrepreneurship focuses on issues of rapid internationalisation. This is detected generally in entrepreneurial small firms such as Born Globals, with a particular emphasis on “discovering and exploiting international opportunities in pursuit of competitive advantage” (Zahra and George, 2002: 11).

Born Globals are characterised as setting about their international involvement shortly after their establishment and as entering more than one foreign market, irrespective of psychic distance involved, and using a variety of entry modes such as joint ventures or strategic alliances as well as exporting (e.g., Bell, 1995, Madsen and Servais, 1997; Rennie, 1993). The primary distinctive feature of the Born Globals, *vis-*

*à-vis* large MNEs, is that “their origins and basic orientation are strongly international, as reflected by the early commitment of specific resources to foreign activities” (Knight and Cavusgil, 2005: 16). That is, such firms internationalise at a rapid pace, as opposed to the gradual stepwise pattern suggested by earlier theoretical explanations. This phenomenon of Born Globals constitutes a challenge to the traditional process model of internationalisation. Further, Bell et al. (2001) identify Born-again Globals as firms that first were well established in their home markets and had no considerable motivation to internationalise, but that suddenly embrace accelerated internationalisation.

A body of literature contends that the conventional theories of internationalisation are inappropriate to explain why some entrepreneurial firms go global early and rapidly just after their birth (Aspelund et al., 2007; McDougall et al., 1994; Oviatt and McDougall, 1997). A focal point of Born Globals lies in ‘the rapidness’ of their internationalisation process, while the traditional theories focus on other aspects such as gradual processes (the Uppsala model), costs (internationalisation theory), etc. As a unit of analysis, the established theories focus on the level of the firm, which are often particularly large and mature, and overlook the importance of the level of individuals (McDougall et al., 1994). These views are well supported by the extant relevant literature (e.g., Autio, 2005; Bell, 1995; Freeman et al., 2006; Moen, 2002; Shrader et al., 2000). For instance, in his study of small computer software firms, Bell (1995) found that the Uppsala model provides an inappropriate account of factors of rapid internationalisation processes in those firms. McDougall et al. (1994) state that, by assuming a domestic base of operations, the stage theory fails to explain why Born Globals compete internationally soon after their decision to internationalise. Moen (2002) concludes that the process models which see firm internationalisation as gradual involvement are inadequate to explain the international behaviour of Born Global firms.

### Significance of Born Globals and external trends

Oviatt and McDougall (1994) highlight the importance of smaller and younger firms going international and the distinguishing characteristics that allow these firms to engage rapidly in international activity, create value, and secure international success, thereby creating a need for a greater understanding of these Born Globals. Further research on the widespread emergence of Born Globals (e.g. Freeman et al., 2006; Knight and Cavusgil, 1996; Madsen and Servais, 1997; Moen and Servais, 2002; Oviatt and McDougall, 1994; Rennie, 1993) agrees with this view, indicating the crucial role of these firms in international markets. Rennie (1993: 47), who first mentioned the term 'Born Globals', states that:

“Born Globals are important for two reasons. Although small, they are 1) strikingly competitive against larger established players, and their competitiveness has increased significantly in the past two decades and 2) managing profitable, fast-growing global business systems in a way that was impossible 20 or even the years ago.”

Born Globals are often regarded as “the most extreme example of the potential significance of SMEs for a nation’s export growth.” (Rennie, 1993: 47). Highly competitive small firms that internationalise quickly have the potential for rapid growth as capable of playing a central role in developing and disseminating knowledge across national boundaries. This acquired knowledge may create ongoing innovation which makes the early internationalising firms stay competitive in global markets (Jolly et al., 1992; Madsen and Servais, 1997). The importance of Born Globals in the international business arena is supported by relevant literature (e.g., Moen, 2002; Preece et al., 1999). For instance, Moen (2002) indicates that Born Globals have risen in number in international markets: more than half of the exporting firms in his study are classified as rapid and dedicated internationalisers. Preece et al.’s (1999) empirical study based on a



Canadian sample of firms explicitly shows the trend towards instant internationals or Born Globals.

There is a growing consensus that the phenomenon of Born Globals is widespread (Liesch et al., 2007). Including quantitative surveys (e.g., Fan and Phan, 2007; Knight and Cavusgil, 2004, 2005; McDougall et al., 2003; Zahra et al., 2000; Zhou et al., 2007) and case studies (e.g., Bell et al., 2003, 2004; Chetty and Campbell-Hunt, 2004; Coviello, 2006; Freeman and Cavusgil, 2007; Laanti et al., 2007; McDougall et al., 1994; Moen et al., 2004; Sharma and Blomstermo, 2003) in a variety of contexts, a growing body of work has exposed its possible universality. As presented in Table 2.1, the early internationalising firms originate in large numbers in various countries, demonstrating that this phenomenon is not country-specific.

Table 2.1: Relevant literature of Born Globals: Classifications of countries

Continent	Country	Author(s)/Year
Western Europe	Austria	Fink et al. (2008)
	Belgium	Blesa et al. (2008)
	Denmark	Gabrielsson and Kirpalani (2004), Knight et al. (2004), Moen and Servais (2002), Rasmussen et al. (2001)
	France	Moen and Servais (2002), Moen (2002)
	Germany	Al-Laham and Souitaris (2008), Gassmann and Keupp (2007)
	Ireland	Bell (1995), Loane (2006), Loane and Bell (2006)
	Italy	Zucchella et al. (2007)
	Spain	Acedo and Jones (2007), Blesa et al. (2008), Pla-Barber and Escriba-Esteve (2006), Rialp et al. (2005b)
	Switzerland	Gassmann and Keupp (2007)
	United Kingdom	Burgel and Murray (2000), Bell et al. (1998; 2001; 2003; 2004), Ibeh et al. (2004), Johanson (2004), Loane et al. (2007), Mudambi and Zahra (2007)
Eastern Europe	Czech	Fink et al. (2008)
	Slovenia	Fink et al. (2008)
	Turkey	Kocak and Abimbola (2009)
Scandinavia	Finland	Arenius et al. (2006), Autio et al. (2000), Bell (1995), Gabrielsson (2005), Gabrielsson and Kirpalani (2004), Gabrielsson and Pelkonen (2008), Gabrielsson et al. (2004), Jantunen et al. (2008), Kuivalainen et al. (2007), Laanti et al. (2007), Nummela et al. (2004), Saarenketo et al. (2008), Tuppurä et al. (2008), Yil-Renko et al. (2002)
	Norway	Aspelund and Moen (2005), Bell (1995), Moen (2002), Moen and Servais (2002), Moen et al. (2004), Moen et al. (2008)
	Sweden	Andersson and Wictor (2003), Andersson et al. (2004), Gabrielsson and Kirpalani (2004), Gabrielsson and Pelkonen (2008), Nordman and Melen (2008), Sharma and Blomstermo (2003), Wennberg and Holmquist (2008)

Table 2.1: *Continued*

Continent	Country	Author(s)/Year
Asia	China	Liu et al. (2008), Zhou (2007), Zhou et al. (2007)
	India	Contractor et al. (2005), Kundu and Katz (2003)
	Taiwan	Contractor et al. (2005), Gabriellsson and Kirpalani (2004)
	Vietnam	Thai and Chong (2008)
Middle East	Israel	Ganitsky (1989), Gbrielsson and Kirpalani (2004)
North America	Canada	Han and Celly (2008), Loane (2006), Loane and Bell (2006), Loane et al. (2007), McNaughton (2003), Preece et al. (1999), Reuber and Fisher (2002), Spence et al. (2008)
	United States	Bloodgood (2006), Bloodgood et al. (1996), Fernhaber et al. (2008), Gleason and Wiggenghorn (2007), Johanson (2004), Knight and Cavusgil (2004; 2005), Knight et al. (2004), McDougall and Oviatt (1996), McDougall et al. (2003), Oviatt and McDougall (1994), Shrader et al. (2000), Zahra et al. (2000)
Oceania	Australia	Bell et al. (2001), Chetty and Campbell-Hunt (2004), Freeman and Cavusgil (2006), Freeman et al. (2006), Gassmann and Keupp (2007), Loane (2006), Loane and Bell (2006), Loane et al. (2007), Rasmussen et al. (2001), Rennie (1993), Styles and Genua (2008), Mort and Weerawardena (2006)
	New Zealand	Bell et al. (2001), Chetty and Campbell-Hunt (2004), Coviello (2006), Coviello and Cox (2006), Loane (2006), Loane and Bell (2006), Loane et al. (2007)

The increasing prevalence and progress of early internationalising firms is driven by at least four trends in the external international business environment (Knight and Cavusgil, 1996, 2004; Madsen and Servais, 1997; Moen, 2002; Rialp et al., 2005a). First, new market conditions such as niche markets expedite process of international entrepreneurial firms engaging in foreign activities in a number of industry sectors. In a niche market, such businesses may become competitive through exploitation of their proprietary technology and cutting-edge products and by avoiding direct competition with larger firms. Secondly, technological advances in production, transportation, and communication allow Born Globals to compete internationally by reducing international trade costs. Thirdly, as markets globalise, the establishment of global networks and alliances becomes more frequent. These international business formations propel the firms to involve themselves in international activities such as production, supply, distribution, and marketing within global networks. Fourthly, as a burgeoning number of people involve international business, potential entrepreneurs with global vision and capabilities increase in substantial numbers. This facilitates more small firms to enter foreign market after establishment (Harveston et al., 2000; Johnson, 2004). All of the factors may be inter-related (Madsen and Servais, 1997). The emergence of Born Globals thus can be explained, albeit in part, as a response to the changing environment (Nummela et al., 2004). Furthermore, it is expected that, in line with the statement of Madsen and Servais (1997), “these trends will be even stronger in the years to come, thus the phenomenon of early internationalisation will undoubtedly increase in the future” (Rialp et al., 2005a: 153-154).

### 2.3.6.2 Concepts and features

#### Conceptual and operational definition

The conceptual definition is essential to the development of a concept. This is followed by definitions for capturing operational characteristics (Liesch et al., 2007). The widely accepted definition of a Born Global comes from Oviatt and McDougall (1994) that refers to the fast internationaliser as “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources from and the sale of outputs in multiple countries” (Oviatt and McDougall, 1994: 49). The conceptual explanation emphasises that the origins of the rapid internationalisers are by nature international, as demonstrated by significant commitments of resources in foreign markets, and that its focus is not on firm size but on ‘firm age’ (Oviatt and McDougall, 1994). Although the definition serves as a useful guideline when exploring Born Globals, in reality a limited number of firms are international from their ‘inception’. Rather, most embark upon foreign activities within the first few years after formation (Knight and Cavusgil, 2005). While Oviatt and McDougall (1994) seek to be specific by including resource use and the number of countries served, Madsen and Servais’s (1997: 561) conceptual definition takes a relatively broad approach, describing Born Globals as “firms that adopt an international or even global approach right from their birth or very shortly thereafter”. With a particular focus on technology-based small firms, Knight and Cavusgil (1996: 11) also conceptualise early internationalising firms as “small, technology-oriented companies that operate in international markets from the earliest days of their establishment”. For early internationalisers who are characterised as a new field of enquiry, Liesch et al. (2007: 233) state:

“...the field is now converging on an operational definition of these firms as being firms that from inception see the world as their stadium, proactively organising, innovating, positioning and managing risks and uncertainty to accelerate internationalisation, deriving manifest competitive advantage from the harnessing of their resources and those of others to make sales rapidly in multiple countries.”

Although a single well-established conceptual framework which best captures characteristics and behaviours of these firms is still necessary, all the theoretical viewpoints consistently point out that it is accelerated internationalisation that is the salient feature of Born Globals (Weerawardena et al., 2007). This supports the view that the concept of Born Global in this respect is viewed as a new type of firm that “circumvent many of the existing international business research paradigms” (Gabrielsson and Kirpalani, 2004: 556).

As the main thrust of research into the early internationalising firms is the ‘rapidness’ of the internationalisation process, the operational definition is no less important than the conceptual one. As depicted in Table 2.2, the definition of operational characteristics of Born Globals varies, depending on criteria which define the firms in the extant literature. This leads to no consistent definition of the early internationalising firm (Freeman et al., 2006, Gabrielsson et al., 2008; Karra et al., 2008). Central to the criteria is ‘time frame’ and ‘volume of foreign sales’. The former tends to be used as a proxy for a proclivity of international entrepreneurship (Acedo and Jones, 2007), while the latter denotes the degree of international performance. Given that the premise of the Born Global phenomenon is ‘rapid’ internationalisation, relatively more emphasis should be placed on the ‘time to internationalisation’.

Table 2.2: Main quantitative definitions of Born Globals

No.	Main criteria	Author(s)
1	Firms that start exporting in the first 3 years	Madsen and Servais (1997), Zucchella et al. (2007)
2	Firms that are less than 20 years old that internationalised on average within 3 years of founding and generate more than 25% of sales from abroad	Knight and Cavusgil (2004), Knight et al. (2004), Nordman and Melen (2008)
3	Geographical expansion in terms of or minimum number of countries served outside the home country	Oviatt and McDougall (1994), Han and Celly (2008)
4	Geographical expansion outside the home continent with a minimum of 50% external sales	Luostarinen and Gabrielsson (2004)
5	Firms that begin receiving revenues from international business activities while not more than 6 years old	Coviello (2006), Gleason and Wiggernhorn (2007), McDougall et al. (2003), Shrader et al. (2000)
6	Firms that achieve international sales comprising 5 % within 8 years.	McDougall (1989), McDougall et al., (1994)
7	Firms that achieve international sales in more than 40% of their overall output within 2 years.	Roberts and Senturia (1996)
8	Firms that are less than 6 years old and have 5% of their sales from abroad	Zahra et al. (2000)
9	Firms that go international within 3 years or less from domestic establishment including exporting and importing and more than 10% of sales from exporting	Zhou et al. (2007)
10	Firms that internationalise within 3 years from their foundation with a share of foreign sales of more than 25%	Kuivalainen et al. (2007), Knight and Cavusgil (1996), Moen (2002)
11	Firms that commence internationalisation within 5 or less years after founding	Acedo and Jones (2007)
12	Firms that begin exporting within less than 2 years after founding	Moen and Servais (2002)

For instance, Knight and Cavusgil (1996: 18) state that “Born Globals are firms that have reached a share of foreign sales of at least 25% after having started export activities within three years after their birth”. This quantitative definition is consistent with Knight et al. (2004) and is also used by Nordman and Melen (2008). The emphasis of the criteria is placed on two elements: internationalisation speed (within 3 years after founding) and a certain amount of sales from abroad (more than a quarter). However, in this definition, the length of years in international business is taken into less important consideration, covering all which are less than 20 years old (Knight et al., 2004). McDougall et al. (2003: 69) define a Born Global as “a firm that began receiving revenues from international business activities while not more than 6 years old”, while McDougall et al. (1994) and McDougall (1989) quantify such a firm as a business achieving international sales comprising 5 % within 8 years. The 25% cut-off may be too restrictive (Zahra et al., 2000; Zhou, 2007) in that the early internationaliser is often a ‘new’ venture when engaging in an international activity in its first years. For instance, Zahra et al. (2000) contend that even the 10% figure (McDougall, 1989) restricts the range of international sales, indicating that it may be difficult to observe the influences of types of entry mode, thus suggesting more than 5% of foreign sales.

On the other hand, some attempt to quantify Born Globals with an emphasis on ‘time span’ only (Acedo and Jones, 2007; Madsen and Servais, 1997; Zucchella et al., 2007). For instance, Acedo and Jones (2007) refer to the early internationalising firms as those commencing internationalisation within 5 or less years after founding. Consistent with Madsen and Servais (1997), Zucchella et al. (2007) classify firms which start exporting in the first 3 years as Born Globals, indicating that time intensity is receiving growing attention in international entrepreneurship research. These studies consider no specific cut-off points regarding foreign sales and the length of years in international business, with a focus only on time to internationalisation. It is suggested



generally that Born Globals start their internationalisation between 2 to 6 years after inception (Coviello and Munro, 1995).

Thus, a universally accepted empirical definition of a Born Global is still lacking (Lopez et al., 2009; Rasmussen and Madsen, 2002). Yet, both of the literature streams defining Born Globals in empirical settings are based on the premise that the salient criterion for the firms is ‘time intensity’, irrespective of age, foreign sales, etc. Of course, although Born Globals may be quantifiable to be classified, there seems to be a universal agreement that the criteria for the firms rely fundamentally on the global vision and focus of the entrepreneurs (e.g., Gleason and Wiggenhorn, 2007; Harveston et al., 2000; Knight and Cavusgil, 1996; Madsen and Servais, 1997). From a stringent perspective, this implies that Born Globals may be justified only with early internationalisation ‘driven by the international focus of founders/managers’, but not by rapid internationalisation *per se*.

#### Internal features for the rapid internationalisation

The foregoing emphasises the critical role of entrepreneurs in the internationalisation process of a Born Global. This is one of its remarkable features in comparison to established firms (e.g., Madsen and Servais, 1997; McDougall et al., 1994). As opposed to conventional internationalisation theories, Born Globals neither internationalise in incremental steps nor necessarily select the lowest cost mode of foreign entry (McDougall et al., 1994). The unit of analysis for the early internationalising firms thus lies at the level of individuals – that is, of entrepreneurs. With a global vision, the founders or managers tend to view the world as their marketplace from the outset (Andersson and Wictor, 2003; Rennie, 1993). Born Global entrepreneurs perceive internationalisation itself, not as an extension of domestic markets, but as the rationale for the firm’s existence (Harveston et al., 2000).

Given that, to a considerable extent, the quality of decisions made by a small firm is a reflection of its entrepreneur or founding team (Hambrick and Mason, 1984), it is the entrepreneur that plays the central role in the accelerated internationalisation of firms. Prior international business experience of the entrepreneurs allows them to be alert to international opportunities and thus Born Globals enter international markets at a speedy pace with a view to exploiting the opportunities which are perceived as profitable, even though they possess limited resources and experience (e.g., Bloodgood et al., 1996; Crick and Jones, 2000). It is plausible to posit that Born Global's founders or managers with international experience have a well-developed network which expedites the establishment of a rapid international presence (Kundu and Katz, 2003; Lopez et al., 2009). The entrepreneur's extensive experience and personal networks are therefore viewed as key driving forces in the existence of Born Globals (Rasmussen and Madsen, 2002).

Resource poverty at the point of entry into international markets, albeit similar in part to that of most SMEs (Weerawardena et al., 2007; Welch and Luostarinen, 1988), is another noticeable feature of Born Globals. These firms internationalise immediately after formation, despite constraints arising from limited financial, human and tangible resources (Knight and Cavusgil, 2004). This further key characteristic of the early internationalisers contradicts the Uppsala model which highlights the importance of resource commitment to foreign markets (Johanson and Vahlne, 1977, 1990). The rationale behind this characteristic is that Born Globals actively capitalise on business networks and on entrepreneurs' personal networks in their internationalisation process (Oviatt and McDougall, 1994; Zahra, 2005). Engagement in international network activities allows rapid internationalisers to leverage lack of knowledge and resources, thereby putting them ahead of the competitors in international markets (Coviello and McAuley, 1999). The personal networks of entrepreneurs in Born Globals may provide

a means to reap opportunities in international business networks, thus helping the firms achieve global reach quickly. Resource-constrained early internationalising firms thus rely heavily on strong international networks, which are often regarded as an essential pre-requisite for successful entry into international markets (Oviatt and McDougall, 1995).

Born Globals by nature are aggressively growth-oriented (Knight and Cavusgil, 1996). This feature may be exemplified by their early commitment to deriving profits from international markets. Early internationalising firms tend to serve niche markets with their own highly specialised products or services (Madsen and Servais, 1997), which may be intended mainly for industrial use (Andersson and Victor, 2003). Jolly et al., (1992) propose that Born Globals concentrate their capabilities on one market with homogeneous needs. This is plausible in that the majority of small firms rely heavily on a single product or technology and the market act as a bridgehead for further international expansion (Moen and Servais, 2002). This characteristic of early internationalisers thus may provide an explanation of why psychic distance is largely irrelevant to such firms when selecting a target market for their early internationalisation.

#### 2.3.6.3. Shortcomings of the theory of Born Globals

##### The blur between Born Globals and the process model

While growing attention is paid to Born Globals, the fundamental question remains of whether the Born Global phenomenon is completely new. The boundary between gradually internationalising firms and rapidly internationalising firms may be blurred when the international experience and exposure of entrepreneurs of the early internationalisers are taken into account (Madsen and Servais, 1997). Kandasaami and Huang (2000) indicate the similarities between the two types of firms in product

uniqueness, technological sophistication and degree of customisation. Although acknowledging that Born Globals are not explained completely by the traditional process model of internationalisation, literature (Hashai and Almor, 2004; Lopez et al., 2009) finds that Born Globals internationalise in a gradual fashion, albeit more rapidly. These findings give an answer to the above question, indicating that Born Globals may not be a unique phenomenon.

#### No single theoretical underpinning and definition

Although Oviatt and McDougall's (1994) work aims to build a theoretical underpinning that draws on the combination of existing theories including international business, entrepreneurship, and strategic management, there seems to be a lack of conceptual definition about Born Globals (Gabrielsson et al., 2008; Rialp et al., 2005a; Weerawardena et al., 2007). In empirical settings, the identification of the early internationalising firms varies, depending on a couple of primary concerns: namely, time frame and the volume of foreign sales. The heterogeneity of conceptual and operational definitions precludes direct comparisons between studies conducted in different contexts (Gabrielsson et al., 2008). Thus, further holistic theory building is needed to best capture critical aspects of Born Globals (Nordman and Melen, 2008, Rialp et al., 2005a, 2005b).

## **2.4 Complementary Framework to Born Global Theory**

### **2.4.1 Resource-based view**

#### 2.4.1.1 Background

Since the aspirations of entrepreneurs with background of international business experience and resource acquisition and utilisation are vital to small firm internationalisation, they should be treated as important (Westhead et al., 2001). Thus, building up an explanation of how to capitalise on internal resources and how to acquire and develop external unique resources is expected to provide a theoretical insight into internationalisation activities in relation to resources (Wernerfelt, 1984). With these considerations, the need for a further account of early internationalising firms is suggested, and, as a result, the resource-based view (RBV) of the firm is currently under discussion (Loane and Bell, 2006; Ruzzier et al., 2006; Zucchella and Scabini, 2007).

#### 2.4.1.2 Concept and characteristics

A resource is defined as “anything which could be thought of as a strength or weakness of a given firm” (Wernerfelt, 1984: 172). The RBV is one of the most influential theoretical perspectives in business strategy and international business research (Barney, 1991; Newbert, 2007; Peng, 2001; Wernerfelt, 1984). It takes its theoretical roots from Penrose (1959), who viewed the firm as a bundle of heterogeneous resources, and from early business strategy theories (e.g., Andrew, 1971). The underlying assumption of the theory is that resources are heterogeneous across the firm and that long-term competitive advantage depends on the acquisition and use of that heterogeneity (Barney, 1991; Penrose, 1959; West and Noel, 2009). In consequence, the RBV focuses on the sustained competitive advantage of the firm deriving from its resources and capabilities,

which are rare, inimitable, and nontradable (Barney, 1991; Grant, 1991). As the fundamental sources determining the long-term competitive advantage of the firm, the attributes of the resources and capabilities controlled by a firm can allow it to enjoy economic rents. Grant (1991) supports this view, stating that the priority of the resource-based approach is to maximise rents. This leads to the view that a firm's capacity to attain superior business performance relies on the extent to which it effectively acquires and uses the resources that are essential to its operations (Conner, 1991). Barney (1991) states that the resources for sustained competitive advantage must be valuable, rare, imperfectly imitable and not substitutable whereas Grant (1991) points towards four features: durability, transparency, transferability, and replicability. Given these different perspectives, the definition of the characteristics of the resources needed for sustained competitive advantage may be blurred (Andersen and Kheam, 1998). Some key features including valuable, difficult-to-imitate, and not substitutable appear to support this idea.

Building on Daft (1993), Barney (1991: 101) refers to a firm's resource as a comprehensive concept including "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness". From this viewpoint, one possible inference is that resources in firms are both heterogeneous and imperfectly mobile in nature (Barney, 1991; Hunt and Morgan, 1995; Penrose, 1959). In a broad sense, these elements of firm resources can be classified into three categories: physical capital resources (Williamson, 1975) regarding facilities and access to raw materials, human capital resources (Becker, 1964) regarding experience and knowledge, and organisational capital resources (Tomer, 1987) regarding organisational structure and business planning (Barney, 1991). Those resources are also either tangible or intangible in nature (Runyan et al., 2006;

Wernerfelt, 1984). In this respect, human capital resources may be seen as intangible, while the physical resources can be regarded as tangible. The remainder, the organisational resources, may fall between the two resources. The RBV pays significant attention to intangible resources as a fundamental means of providing the firm with sustained competitive advantage (DeCarolis and Deeds, 1999; Ruzzier et al., 2006). The physical resources including plants, equipment and technology and some of the organisational resources such as organisational structure and reporting systems are likely to be easy-to-imitate once recognised as valuable to business activities. On the contrary, the category of the human capital resources has relatively higher potential to become a strategic resource in that the business experience and skills of managers are really valuable to the firm, rare, hard-to-transfer to competitors and not substitutable (Barney, 1991; Wernerfelt, 1984). In small firm internationalisation, internal intangible resources may include trade secrets, talents with an international business or educational background, international marketing skills and international business experience. These hard-to-imitate resources can serve as drivers of sustained competitive advantage in overseas markets (Loane and Bell, 2006). Intangible resources therefore are likely to be of particular importance to early internationalising firms because most of them cannot afford to compete with larger companies on tangible resources (Peng, 2001). In some sense, this indicates that not all a firm's resources secure the sustained competitive advantage of the firm.

#### 2.4.1.3 Applicability to small firm internationalisation

Resources have great potential to enable Born Globals to sustain competitive advantage (Knight and Cavusgil, 2004). That is, small firms' abilities to internationalise may depend on the extent of the stock of resources they control (Bloodgood et al., 1996; Westhead et al., 2004). For example, Bloodgood et al. (1996) contend that the unique

bundles and combinations of these resources expedite firm internationalisation. Indeed, it is likely that the RBV provides insights into explanations for the rapid internationalisation process of small firms and their growth (Loane and Bell, 2006). It may be plausible to assume that the majority of small firms pursuing rapid internationalisation in their early days suffer from resource constraints that would ordinarily be a significant source of momentum in an international marketplace (Coviello and Munro, 1997; Oviatt and McDougall, 1994).

It is likely that early internationalising SMEs tend to use personal networks of managers with the international business experience to quickly and effectively engage in international business activities (Chetty and Blankenburg-Holm, 2000; Coviello, 2006; Coviello and Munro, 1995, 1997; Gabrielsson et al., 2008; Loane and Bell, 2006; McDougall et al., 1994; Sharma and Blomstermo, 2003). These social networks appear to have the potential to provide resource-constrained small firms with unique opportunities to develop firm-specific resources through the acquisition of external resources (Lee et al., 2001). Westhead et al. (2001) suggest that the quality of managers and their social networking may determine a firm's ability to acquire and exploit external resources for product-related activities such as product development and promotion. Consequently, the social capital embedded in the personal ties of managers must be taken into account as an intangible resource as it is most valuable to new small firms, difficult-to-replicate, and uniquely individual-specific, thereby contributing to competitive advantage (Mitchell et al., 2000; Peng and Luo, 2000). Wernerfelt (1984) also indicates the importance of international networks and managers with international business experience as a valuable resource and as a driving force of respectively acquiring and using competitive advantage. Within the RBV, it is the role of managers to cultivate resources and capabilities and to deploy them to achieve sustained competitive advantage (DeCarolis and Deeds, 1999). Indeed, mobilised by managers,



the resources are likely to exert a great influence on the ability to engage in international activities (Westhead et al., 2001). The RBV therefore can provide a sound theoretical explanation of how and why managers leverage their prior business experience and knowledge to identify, acquire and exploit resources (Peng, 2001) by forming international networks. From this point of view, the RBV is complementary to the network approach in small firm internationalisation (Loane and Bell, 2006; Ruzzier et al., 2006).

The RBV appears particularly to allow for explanations of how a firm's resources play a role in the international expansion of the firm. After entering the initial foreign market, small firms are able to accumulate international knowledge through learning from a variety of activities in international settings (Johanson and Vahlne, 1977, 1990). This process may be associated directly with the acquisition of intangible resources in relation to foreign markets for further international expansion. In consequence, these firm-specific resources can help firms to expand their operations into multiple markets and to select an appropriate entry mode when considering external opportunities (Conner, 1991; Ekeledo and Sivakumar, 2004). Thus, it is important for small firms not only to possess their own internal resources, but also to enhance their ability to explore and absorb the new valuable resources needed for successful international expansion (Montgomery and Wernerfelt, 1997; Ruzzier et al., 2006). Grant (1991) suggests the need to acquire the external resources as complementary to the internal ones. This helps to effectively exploit the internal resources, thereby providing a basis for enhancing competitive advantage. These views appear to complement Oviatt and McDougall's (1994: 49) conceptual definition of the rapidly internationalising firm, which refers to "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple

countries”. Therefore, it concludes that differences in resource availability determine variances in international involvement of the firm (Tseng et al., 2007).

#### 2.4.1.4 Shortcomings

Despite its explanatory power, the static nature of the RBV is its weak point. The mere existence of stocks of resources, albeit a necessary condition, may not be sufficient for sustained competitive advantage in a volatile business environment (Eisenhardt and Martin, 2000; Helfat and Peteraf, 2003). In particular, this view appears to fail to explain exhaustively the internationalisation patterns and behaviours of early internationalising firms (Crick and Spence, 2005). Furthermore, Young et al. (2003) suggest a refinement of the traditional RBV when researching the entrepreneurial behaviour of the internationalised firm and calls for greater theoretical coherence. Given that knowledge is broadly regarded as a core resource of internationalising small firms (Chetty and Wilson, 2003), the RBV may be limited in fully explaining the importance and role of the intangible resource. These considerations call for further explanations, such as the knowledge-based view, to complement the conventional RBV. Despite these shortcomings, the RBV is viewed as providing a good portrait of how firms capitalise on their internal stock of resources and develop external resources to sustain competitive advantage in the internationalisation process. This perspective is therefore still regarded as providing a useful theoretical framework for representing small firm internationalisation (Loane and Bell, 2006).

## **2.4.2 Knowledge-based view**

### 2.4.2.1 Background

As discussed in the foregoing section, intangible resources that are rare, difficult-to-imitate, and non-substitutable are often regarded as strategic resources that confer sustained competitive advantage (Barney, 1991; Grant, 1991). In internationalising small firms with limited resource heterogeneity, these intangible resources are paramount. The extant relevant literature indicates that a major constraint on small firm internationalisation is a lack of knowledge relevant to international involvement (Loane and Bell, 2006). This leads to the assumption that knowledge is at the heart of small firm internationalisation (Chetty and Wilson, 2003), and that international capability and success hinge on the extent to which the firm takes advantage of its international knowledge. It is particularly likely that the acquisition and management of knowledge is an essential pre-requisite for successful international expansion of the rapidly internationalising firm, considering that it pursues internationalisation shortly after its establishment, despite resource poverty (Knight and Cavusgil, 2004). In consequence, growing attention is being paid to the knowledge-based view of the firm (KBV) as an explanation of how the early internationalising firm engages in international business activities and further sustains competitive advantage, by taking advantage of knowledge. Given that knowledge is one of the intangible resources of the firm and that the KBV attempts to overcome limitations of the RBV, the KBV has emerged from the RBV (Gassmann and Keupp, 2007).

### 2.4.2.2 Concept and characteristics

KBV is an emerging approach in response to a deeper understanding of the linkage between firm capabilities and performance, suggesting that knowledge-based activities

may be a critical source of long-term competitive advantage of the firm (DeCarolis and Deeds, 1999). Central to the theory is that a firm's idiosyncratic knowledge and its capacity to absorb and exploit external knowledge are fundamental to long-term competitive advantage (Steensma and Lyles, 2000). Like the RBV, the conceptual foundation of the KBV also draws substantially on Penrose's seminal work (1959), positing that the growth of the firm depends on a firm's knowledge of integrating heterogeneous resources into organisational capabilities (Prashantham, 2005). The underlying assumptions of the KBV include the importance of knowledge, types of knowledge in transferability and individuals as repositories of knowledge (Grant, 1997). The set of assumptions lays a theoretical foundation for the KBV (Grant, 1997).

KBV has captured growing attention because the concept of knowledge provides firms insight into not only the predictability of business environmental change and its commercial potential, but also appropriate directions for it (Cohen and Levinthal, 1990). Knight and Cavusgil (2004: 126) note that "knowledge is the most important resource, and the integration of individuals' specialized knowledge is the essence of organizational capabilities". As a vital source of long-term competitive advantage, it is knowledge that has the greatest salience of all resources (Wiklund and Shepherd, 2003) because it is not easily imitated and transferable (Barney, 1986; McEvily and Chakravarthy, 2002) and has general applicability (Miller and Shamsie, 1996). Indeed, organisational knowledge is viewed as a significant collection of intangible resources which offer sound underpinnings for achieving superior performance (Hitt et al., 1999). As the intangible resource increases a firm's capacity to explore and exploit new opportunities, the firm may become less capable of identifying and capitalising on growth opportunities if it lacks knowledge (Wiklund and Shepherd, 2003). This is likely to be particularly crucial to small firms that seek to discover beneficial opportunities in international markets given their poverty of tangible resources.

Given their idiosyncratic nature (DeCarolis and Deeds, 1999), resources of organisational knowledge such as the business experience of managers and a firm-specific learning culture are non-tradeable (Dierickx and Cool, 1989). It is likely therefore that the unique organisational knowledge accumulates internally over time, thereby building up a sound underpinning for long-term competitive advantage. In this respect, the KBV provides a new lens of how firms achieve sustained competitive advantage: that is, through the creation, transfer, and application of knowledge (Grant, 1996; Spender, 1996).

#### 2.4.2.3 Applicability to small firm internationalisation

The KBV views strategically heterogeneous knowledge as the most important resource determining organisational performance (DeCarolis and Deeds, 1999; Grant, 1997; Hill and Deeds, 1996). Given that a lack of knowledge precludes the small firm from engaging effectively in international activities, the KBV provides a promising theoretical framework of how the firm internationalises and sustains competitive advantage in international settings (Gassmann and Keupp, 2007; Loane and Bell, 2006). In internationalisation process theories (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1995), experiential knowledge (that is, knowledge acquired through first-hand experience) is a central concept and the extent of firm internationalisation is determined by the experiential knowledge of the firm. However, it may be impossible for rapidly internationalising small firms to gain experiential knowledge because it can be accumulated in an incremental fashion (Johanson and Vahlne, 1977, 1990). Instead, they are likely to capitalise on their knowledge gained through the international business experience of their managers and their social networks to pursue dedicated and rapid internationalisation (Coviello and Munro, 1995, 1997; Reuber and Fischer, 1997). The knowledge accumulated from the managers' idiosyncratic international business

experience can help identify new opportunities (West and Noel, 2009). Consequently, the KBV is particularly useful in explaining the rapid internationalisation of the firm. Indeed, knowledge permits small firms to deal effectively with environmental uncertainties in the internationalisation process (Liesch and Knight, 1999). In the volatile international business environment in which many rapidly internationalising firms operate (Autio et al., 2000; Bell, 1995), knowledge-based resources are more important than tangible ones and thus contribute more to the international performance of firms (Miller and Shamsie, 1996; Prashantham, 2005). Internationally oriented SMEs, therefore, tend to accumulate knowledge and exploit it as a strategic source of international performance more speedily than other firms (Knudsen et al., 2002).

Gassmann and Keupp (2007) view Born Globals as firms that seek to derive superior performance from the application of knowledge-based resources in an international marketplace. In the rapid internationalisation of knowledge-intensive firms (Autio et al., 2000), it is found that they pursue more foreign market diversification and modes of entry (Zahra et al., 2000). Loane and Bell (2006: 481) note that “the acquisition, exploitation and renewal of knowledge is a key driver of rapid internationalisation and the main source of international competitive advantage”. From this perspective, it is plausible to argue that the KBV is applicable to small firm internationalisation as a conceptual foundation (Gassmann and Keupp, 2007; Loane and Bell, 2006; Prashantham, 2005).

## **2.5 Summary and Discussion**

### **2.5.1 Summary**

This chapter has reviewed some of the key theories concerning firm internationalisation. Each theory underpins research into firm internationalisation, with an emphasis on

market entry mode selection and the internationalisation process. By linking small firm internationalisation theories to complementary views resource- and knowledge-based view, this research built theoretical framework (see Figure 2.1). Vernon (1966) introduced the IPLC theory that explains how firms with innovative products go through stages from exports to FDI with a focus on the dynamics of comparative advantage. The theory however is currently becoming less valid given the changes in the international business environment arising from the emergence of a global production network. For instance, the IPLC framework fails to explain why early internationalising firms often bypass the first stage of product introduction when embarking upon international activity (Zucchella and Scabini, 2007). Buckley and Casson (1976) suggest internalisation theory, with a theoretical foundation drawn from transaction cost economics (William, 1975, 1985), in an attempt to account for why MNEs internalise their transactions which take place across national boundaries. Despite its analytical rigor, the theory fails to provide a clear explanation of motives for FDI and location choice. A more unifying analytical framework comes from Dunning's eclectic paradigm of international production. Building on existing theories such as monopolistic advantage theory (Hymer, 1960), internalisation theory, (Buckley and Casson, 1976), and industrial location (Dunning, 1988), the framework offers a comprehensive explanation of international behaviours and patterns of MNEs through a configuration of three sets of specific advantages: ownership-specific advantages, location-specific advantages and internalisation advantages. The appropriate configuration of the three sets of advantages allows firms to choose an optimal foreign market entry mode. The theory however is criticised as redundant and concerns about the effects of interrelationships of the paradigm (Itaki, 1991).

Process theories of internationalisation see internationalisation as a sequential and orderly gradual process of increasing international involvement (e.g., Bilkey and

Tesar, 1977; Cavusgil, 1980; Johanson and Vahlne, 1977, 1990). The most commonly accepted theory is the Uppsala model, which provides a theoretical explanation of ‘patterns’ of internationalisation of the firm, with an emphasis on two central concepts: experiential knowledge and resource commitment (Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975). According to the model, a firm internationalises following four stages, called an establishment chain, taking account of psychic distance. Despite providing great insights into firm internationalisation process, the process model has shortcomings of being partial and deterministic (e.g., Fina and Rugman, 1996; Melin, 1992; Reid, 1983; Turnbull, 1987) and of not explaining ‘leapfrogging’ activities, as evidenced by Born Globals (e.g., McDougall, 1989; McDougall et al., 1994). As an extension of the Uppsala process model, the network approach of internationalisation attempts to explain the international activities of firms with a particular focus on ‘relationships’, referring to industrial markets as ‘networks of relationships between firms’ (Johanson and Mattsson, 1988). This model particularly offers an insightful account of the internationalisation process of smaller firms whose internationalisation is made through relationships with other actors in international markets (e.g., Axelsson and Easton, 1992; Bell, 1995; Coviello and Munro, 1995; McDougall et al., 1994). Its shortcomings are that it understates potential factors which affect firm internationalisation (Loane and Bell, 2006), and has a lack of predictive power.

A Born Global is a firm with a global vision that goes international at or near its founding. The international entrepreneurial firm is often characterised as simultaneously attempting to enter multiple international markets with diverse foreign market entry modes, irrespective of psychic and cultural distance involved (e.g. Bell, 1995, Madsen and Servais, 1997; Rennie, 1993). The early internationalising firms tend to skip some of the stages suggested by the process internationalisation models and thus pose a



challenge to these traditional views. The Born Global phenomenon has been driven to a large extent and further expedited by the dramatic change of international business trends including advances in information and communications technology and the rise of lucrative global niche markets (Knight and Cavusgil, 1996, 2004; Madsen and Servais, 1997; Moen, 2002; Rialp et al., 2005a). Shortcomings of Born Globals include: the blurring between the theoretical underpinning of the firms and process models and a lack of unifying analytical framework and definitions. The latter particularly precludes comparative research of the early internationalising firms in different settings.

RBV elaborates upon the sustained competitive advantage of the firm deriving from its resources and capabilities, which are rare, inimitable and nontradable (Barney, 1991; Grant, 1991). Resources have great potential to enable SMEs to secure international success (e.g., Knight and Cavusgil, 2004; Loane and Bell, 2006; Westhead et al., 2001). Particularly, as an intangible resource, knowledge is often regarded as a salient resource for successful international activities of Born Globals (Autio et al., 2000; Chetty and Wilson, 2003; Gassmann and Keupp, 2007, Loane and Bell, 2006). As this research highlights the importance of the international business experience of managers and the use of networks and their subsequent impacts on capacity in foreign markets, two theoretical frameworks RBV and KBV help to gain a deeper understanding of the behaviour and patterns of early internationalising SMEs (Bloodgood et al., 1996; Dana, 2001; Loane and Bell, 2006; West and Noel, 2009; Westhead et al., 2001).

### **2.5.2 Theoretical background and unit of analysis**

Internalisation theory and the eclectic paradigm take their respectively theoretical roots in economic perspectives (Agarwal and Ramaswami, 1992; Anderson and Gatignon, 1986; Dunning, 1980), while the Uppsala model and the network approach of

internationalisation take a behavioural approach (Carlson, 1975; Johanson and Vahlne, 1977; Madsen and Servais, 1997; Oviatt and McDougall, 1994) in explaining the internationalisation of the firm. For instance, the eclectic paradigm is built up on a combination of economic theories of monopolistic competition, transaction costs and location (Whitelock, 2002), while the Uppsala model is based on the behaviour of the firm (Cyert and March, 1967) and the theory of the growth of the firm (Penrose, 1959). The international product life cycle theory focuses on firms that go through stages from exports to FDI (Vernon, 1966; Wells, 1972) and thus can be viewed as a stage theory. On the contrary, a Born Global perspective is rooted theoretically in international business and entrepreneurship (McDougall and Oviatt, 2000). Furthermore, all the existing theories use 'the firm' as their main unit of analysis, with an exception of Born Global perspective which focuses on the level of individual (McDougall et al., 1994; McDougall and Oviatt, 2000).

### **2.5.3 Comparisons between theories**

Each of the theories of internationalisation relies to a certain extent on each other. The international product life cycle theory is often viewed as a stage model like the Uppsala model. Each phase is linked in a stepwise fashion and the internationalisation process proceeds, irrespective of firm's strategic decisions (Johanson and Vahlne, 1990). Given their shortcomings of time-dependency (Anderson, 1997) and being overly deterministic (e.g., Melin, 1992; Reid, 1983; Turnbull, 1987), the stage theories have been complemented by the network theory of internationalisation (Johanson and Mattsson, 1988). As the primary concerns of these theories are with exporting and foreign production, the firm's ability to employ other types of entry modes such as collaboration is denied, making stage models less applicable to technology-based entrepreneurial firms and service firms (Bell, 1995; Bjorkman and Forsgren, 2000;

Malhotra et al., 2003). The network model also allows firms to choose alternative modes of entry such as collaboration form. The network approach is thus often regarded as an extension of the Uppsala model: central to the approach is gradual acquisition of market experience and knowledge and learning from counterparts in networks (Chetty and Campbell-Hunt, 2003; Elango and Pattnaik, 2007). However, it is more likely that the network *per se* only provides a base which allows participants to overcome their resource deficiencies, rather than being an enabler of internationalisation (Bell et al., 2004).

Dunning's eclectic paradigm can be taken into consideration as an extension of internalisation theory (Anderson, 1997); one that is theoretically rooted in monopolistic advantage theory and transaction cost economics. The transaction cost consideration is central to both theories. Although some literature (e.g., Itaki, 1991) contends that internalisation theory is more powerful, providing a clearer predictive framework of the internationalisation patterns and behaviours of the firm, much is against it, demonstrating that Dunning's approach is superior to the transaction cost-based theory (e.g., Agarwal and Ramaswami, 1992; Brouthers et al., 1999; Dunning and Kundu, 1995; Tse et al., 1997). The eclectic paradigm provides a more holistic approach which attempts to account for the complex decisions and patterns of international production, even though this raises the potential shortcoming of attempting to cover a broad range of issues with a single theory (Kojima, 1982).

Internalisation theory provides explanations of why MNEs enter foreign markets using sales subsidiaries, but not an independent agent, whereas the Uppsala model explains why agents precede sales subsidiaries (Johanson and Mattsson, 1988). The former comes from cost considerations, whereas the latter is due to a step-by-step approach. It seems that the main focus of the Uppsala model and network model is on the internationalisation 'process', while the focal point of internalisation theory lies in

the ‘drivers’ and ‘modes’ of internationalisation (Johanson and Mattsson, 1988). Statements of the internalisation theory may be viewed as similar to the highly internationalised firms, i.e. *international among others*, which utilise their “network position effectively to ‘externalise’ some of its activities, without losing control of its crucial intangible assets” (Johanson and Mattsson, 1988: 308). Internalisation theory overlooks the cumulative nature of activities, network potential and interdependence between national markets, thereby failing to account for the role of networks in the internationalisation process. Moreover, the Uppsala model does not take into account that co-operation mechanisms and global competition have become increasingly critical to a firm’s international activities (Johanson and Mattsson, 1988). Exclusively cost-based decision-making may understate or even overlook the potential to create unpredicted opportunities in foreign markets, thus undermining future growth potential. The network model of internationalisation on the contrary may allow firms to identify more opportunities in their internationalisation from learning from ongoing interaction within business networks. From this point of view, the network approach may offer more predictive power in terms of the identification of further opportunities.

The RBV regards the firm as a bundle of resources (e.g., Barney, 1991; Penrose, 1959) that can serve as a fundamental theoretical framework for understanding the unique nature and behaviours of Born Globals. For example, entrepreneurs of early internationalising firms are regarded as one of the key resources these firms possess and their importance as a core resource is emphasised in the resource-base perspective. In the RBV, networks are taken into account as an essential source of resource which aids the rapid internationalisation of small firms (Dana, 2001). Due to resource constraints, early internationalising small firms need to acquire external resources through the internationalisation process and activities, even though managers of these firms have their own previous international business experience. It is likely that the resources

needed for international activities are intangible, such as knowledge of technology, customers, and markets. This suggests that the KBV can be of great use, albeit in part, in explaining why knowledge is vitally important to small firm internationalisation and how it influences a firm's ability to discover and exploit opportunities and ultimately long-term international business performance. These lines of thinking indicate that both of the theories – i.e., RBV and KBV - and network perspective are interconnected, thereby facilitating a greater understanding of the internationalisation of the small firm (Loane and Bell, 2006).

There are two traditional approaches of process-based internationalisation (Andersen, 1993): the Uppsala model (Johanson and Vahlne, 1997, 1990; Johanson and Wiedersheim-Paul, 1975) and the innovation-related model (Cavusgil, 1980). Both analytical frameworks view firm internationalisation in a stepwise manner, whereby the models are referred to as stages models. However, it is the Uppsala model that is the most frequently referred to in the body of literature (Chetty and Campbell-Hunt, 2004). Its critical assumption is that firms enter foreign markets by taking a step-by-step approach and acquire experiential knowledge and making resource commitments incrementally (Johanson and Vahlne, 1997, 1990). In this model, the role played by entrepreneurs is not taken into account. On the contrary, the extant literature of Born Globals demonstrates that the firms internationalise at or near their foundation. With a global focus, entrepreneurs also play a central role in identifying and exploiting opportunities in international markets, thus allowing for rapid internationalisation (e.g., Andersson, 2000; Bell, 1995; Knight and Cavusgil, 1996, 2004; Kuivalainen et al., 2007; Moen and Servais, 2002; Oviatt and McDougall, 1994; Rennie, 1993). From this point of view, the Uppsala model takes a risk-averse approach, whereas Born Globals perspective follows a risk-taking pathway.

#### **2.5.4 Born Globals and the need for the links between key factors<sup>7</sup>**

The discussion above shows that the widespread emergence of Born Globals has been observed in a number of countries (for more detail, see Table 2.1), and the number of such firms is likely to increase substantially as the global international business trends which promote their internationalisation become even stronger (Rialp et al., 2005a). A Born Global approach however is still viewed as lacking conceptual and operational definitions (Gabrielsson et al., 2008; Rialp et al., 2005a; Weerawardena et al., 2007). Since this weakness may hamper the advance of knowledge of early internationalising SMEs, there is a call for a well-defined rigorous framework that encompasses both definitions (e.g., Rialp et al., 2005a). A holistic explanation should allow for both definitional rigour of the firms and direct comparisons between empirical studies in different contexts. Hence, an integrated understanding of the theories should move forward knowledge of early internationalising firms.

In contrast to many of conventional firm internationalisation theories, of particular importance to the international success of Born Globals is the entrepreneur (e.g., Knight and Cavusgil, 1996; Madsen and Servais, 1997; McDougall et al. 1994). The entrepreneur's international business experience and personal networks stimulate the firm to enter foreign markets rapidly. Although the founder or manager is undoubtedly central to internationally active firms, the importance of networks should also be taken into account on an equal basis (e.g., Bell, 1995; Coviello, 2006; Loane and Bell, 2006; Oviatt and McDougall, 1994). Strategic linkages with key partners play a crucial role in rapidly propelling a firm's internationalisation (e.g., Andersson, 2002; Sharma and Blomstermo, 2003). The networks help early internationalisers overcome resource constraints and provide good opportunities to create mutually beneficial long-

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<sup>7</sup> Reflections on recent empirical studies on rapid internationalisation of the firms (2005-2008) are provided in Appendix I .

term connections (e.g., Chetty and Blankenburg-Holm, 2000; Coviello and Munro, 1995, 1997; Knight and Cavusgil, 1996). Wright and Dana (2003, 149) suggest that “future research on entrepreneurship and international business should reflect the context of networks rather than focusing solely on the firm or individual entrepreneur.” The literature reveals the importance of the use of networks for foreign activities of Born Globals. Network theory thus should be complementary to the Born Global perspective by providing insights into the international behaviour and patterns of early internationalisers (Mtigwe, 2006). It is likely that these generic factors – i.e., the international business experience of managers and the use of networks – have potential to provide a strategic source of developing a firm’s ability to perform well in foreign markets (Bloodgood et al., 1996; Knight and Cavusgil, 2004; Loane and Bell, 2006; McDougall et al., 2003). Literature argues that the capacity of Born Globals is an important determinant of international business performance (e.g., Autio et al., 2000; Jantunen et al., 2005; Knight and Cavusgil, 2004; Knight and Kim, 2009; Young et al., 1999). This literature suggests the need for a better understanding of the associations between these factors.

There is no research of South Korean Born Globals. In an attempt to explore their general business environment and view on the environment, thus, Research Question 1 and 2 are addressed. Literature review indicates that managers’ background in international business, the use of networks and an ability to perform well in foreign markets are all crucial for securing successful international activities of Born Globals. No research however has been carried out to investigate relationships between these key factors. This research gap informs Research Question 3 and 4. As the core factors for international business success of the firms, the international business experience of managers and networks are in general emphasised on an equal basis. However, little is known empirically about which one is more influential in enhancing foreign

performance capacity. This issue addresses Research Question 5. These research gaps which are found in the literature review and research questions help to develop research hypotheses, which in turn facilitate the development of the conceptual path model. More details are explained in the next chapter.



## **CHAPTER 3: CONCEPTUAL FRAMEWORK AND HYPOTHESES**

### **3.1 Introduction**

This chapter builds a conceptual framework of the interactions between key variables affecting the capacity of firms to perform in foreign markets and the impact of this capacity on international business performance. Three key generic factors, identified from the literature, that influence foreign performance capacity are used. These are - the international business experience of managers; the value of networks and the number of networks. The impact of foreign performance capacity on international business performance is considered for three measures - satisfaction with foreign market growth, the share of sales from international activities and the number of foreign markets supplied. Using this conceptual framework, research hypotheses are constructed. A novel feature of this model is the analysis of networks in terms of the value of networks and number of networks. This approach helps to gain a better understanding of how networks contribute to the enhancing of foreign performance capacity.

### **3.2 A Conceptual Framework of Born Globals**

The internationalisation process of SMEs is a complex intertwining of strategic objectives, the resource base of firms and the development of effective networks (Bell et al., 2003; Loane and Bell, 2006). To examine key elements in the complex interactions that affect early internationalising SMEs a model was developed that centres on the links between the international business experience of managers and the use of networks (value of networks and number of networks) and the impact on the capacity of firms to engage effectively in international business activities. The

international business experience of managers and use of networks are discussed more frequently than any other factors and are thus often regarded as being at the heart of the internationalisation process of SMEs (Collinson and Houlden, 2005; Coviello, 2006; Coviello and Munro, 1995, 1997; Elango and Pattnaik, 2007; Gabrielsson et al., 2008; McDougall et al., 2003; Sharma and Blomstermo, 2003; Zucchella et al., 2007). The international business experience of managers has great potential to lead to “opportunity identification, market knowledge, and network building, all of which encourage internationalisation” (McDougall et al., 2003: 62). Much of the literature underlines the importance of the international business experience of managers and the use of networks as drivers of the foreign market performance of rapid internationalising SMEs. The international business experience of managers is likely to have a strong influence on the ways in which networks enhance the capacity of firms to perform well in foreign markets because early internationalising SMEs need to have a good understanding of the problems associated with engagement in international business activities. This requires knowledge, contacts and understanding of the types and amounts of information, assets, capabilities and routines needed to engage effectively in international business activities. The international business experience of managers provides a means of possessing such understanding, contacts and search skills that helps to assess and develop the networks necessary to provide the required information, assets, capabilities and routines.

There is, therefore, a direct link between the international business experience of managers and a good understanding of the type and number of network relationships required to enhance the capacity of SMEs to have good foreign performance. The interaction between the international business experience of managers and the use of networks is clearly complex and multifaceted (Coviello, 2006; Jones and Nummela, 2008; Loane and Bell, 2006; Ojala, 2009). To conduct a robust test for the extent and

direction of this relationship, it is necessary to construct a simple reductionist model of the complex interplay between the international business experience and the use of networks. This study postulates that the relationships between the international business experience of managers and networks is largely captured by using two concepts (the value of networks and the number of networks) to examine the major way that the use of networks is linked to the capacity of firms to perform in international markets.

These relationships build on two main theoretical bases - resource-based and knowledge-based theories. These theories regard factors such as the international business experience of managers and the use of networks as resources (Barney, 1991; Grant, 1996; Penrose, 1959; Wernerfelt, 1984). From these perspectives, resources, in particular intangible ones such as knowledge, experience and competencies are vitally important for enhancing competitive advantages, thus helping to improve the performance of fast internationalising SMEs (Autio et al., 2000; Gassmann and Keupp, 2007; Haahti et al., 2005; Loane and Bell, 2006). Resource-based and knowledge-based theories therefore provide a theoretical underpinning to explain why the international business experience of managers, the value of networks and the number of networks are helpful to boost the foreign performance capacity.

Measures of performance are an important issue in international business research (Beamish, 2006; Hitt et al., 1997; Sullivan, 1994). Although measuring foreign performance can be “complicated and controversial” (Beamish, 2006: 32), there is a growing agreement that performance is a multidimensional construct (e.g., Jantunen et al., 2005; Hitt et al., 1997; Reuber and Fischer, 1997; Ruzzier et al., 2007; Sullivan, 1994). For example, Sullivan (1994) indicates that a detailed assessment of international business performance is achieved by measures with a variety of dimensions. Hitt et al. (1997) also contend that a unidimensional measure is limited to simultaneously reflecting the internationalisation performance. Following these suggestions, the foreign

market performance of early internationalising firms is assessed with multiple constructs in this research. Through an extensive review of empirical studies of SME internationalisation to best capture the foreign outcome, three elements are identified: satisfaction with foreign market growth, the share of sales from international activities and the number of foreign markets supplied. This method has been used in similar studies (e.g., Jantunen et al., 2005; Ruzzier et al., 2007).

A summary of the key literature underpinning the factors used in this model is presented in Table 3.1.

Table 3.1: Summary of the major literature on the factors used in the model

Construct	Supporting reference
<i>Antecedents</i>	
International business experience of managers	Contractor et al. (2005), Johnson (2004), Kuivalainen et al. (2007), Mudambi and Zahra (2007), Zhou (2007)
Value of networks	Bonner et al. (2005), D’Cruz and Rugman (1992), Granovetter (1985), Gulati (1999), Gulati et al. (2000), Lane and Lubatkin (1998), Pla-Barber and Escriba-Esteve (2006), Uzzi (1996), Zucchella et al. (2007)
Number of networks	Al-Laham and Souitaris (2008), Andersson et al. (2004), BarNir and Smith (2002), Baum et al. (2000), Belso-Martnez (2006), Elango and Pattnaik (2007)
Foreign performance capacity	Autio et al. (2000), Dierckx and Cool (1989), Knight and Cavusgil (2004), Wu et al. (2007), Yli-Renko et al. (2001), Zahra et al. (2000)
<i>International performance</i>	
Satisfaction with foreign market growth	Han and Celly (2008), Knight et al. (2004), Knight and Cavusgil (2004)
Share of sales from international activities	Fernhaber et al. (2008), Gankema et al. (2000), McDougall and Oviatt (1996), Preece et al. (1999) Reuber and Fischer (1997), Robertson and Chetty (2000)
Number of foreign markets supplied	Fernhaber et al. (2008), Jantunen et al. (2005), Preece et al. (1999), Zahra et al. (2000)

### **3.3 The Model and Hypotheses**

The model defined below describes a set of relationships between generic factors considered to exercise influence on foreign performance capacity and performance in international markets. A set of hypotheses derived on the basis of the associations postulated between the various factors provide a coherent model that links the international business experience of managers and the use of networks to the performance of early internationalizing SMEs.

#### **3.3.1 International business experience of managers and foreign performance capacity**

In international entrepreneurship literature, the international business experience of managers as a key determinant for Born Global phenomenon has been discussed more frequently than any other characteristics (e.g., Crick and Spence, 2005; McDougall et al., 2003). The international business experience of managers reflects the extent of “individual[s]’ exposure to foreign markets environments” (Reuber and Fischer, 1997: 816). It is likely that managers who are more exposed to international business activities possess richer experience and knowledge about foreign business practices than those who lack such experience. Of particular importance to SMEs is the background of managers, given that decision-making relies heavily on entrepreneurs or top management teams (Begley and Body, 1987; Chandler and Jenson, 1992) and the quality of decisions are strongly influenced by managers (Hambrick and Mason, 1984). As Born Globals are mostly characterised as small-scale firms (e.g., Weerawardena et al., 2007; Welch and Luostarinen, 1988), the resources owned by managers, such as international business experience, is therefore central in making good decisions about the internationalisation strategy of SMEs.

The extent of the international engagement of managers might be a reflection of a set of international work experience, extensive experience of foreign travel, and the foreign language expertise of entrepreneurs (Acedo and Jones, 2007; Bloodgood et al., 1996; Dichtl et al., 1990; Manolova et al., 2002; McDougall et al., 2003; Rasmussen and Madsen, 2002; Reuber and Fischer, 1997; Ruzzier et al., 2007; Zucchella et al., 2007). With an international focus from the outset, based on their international business experience, the managers tend to take an aggressive approach to the global marketplace from inception (Rennie, 1993; Andersson and Wictor, 2003), perceiving internationalisation as the rationale for their business activities (Harveston et al., 2000). This literature posits that the international background and experience of managers is an essential pre-requisite for the appearance of Born Globals (e.g., Andersson, 2000; 2002; Madsen and Servais, 1997; McDougall et al., 1994) and their motivation is vital in identifying the internationalisation process pattern of the firms (Madsen and Servais, 1997).

The intangible resources arising from this international experience allow fast internationalisers to be alert to profitable business opportunities in an international context immediately after its establishment (Bloodgood et al., 1996, Crick and Jones, 2000; Oviatt and McDougall, 1994). In other words, the managers of Born Globals tend to be “more alert to the possibilities of combining resources from different national markets because of the competencies they have developed from their earlier activities” (McDougall et al., 1994: 475). The international business experience of Born Global managers also plays an important role both in minimising the time period of accumulating experience and knowledge about entering and developing foreign markets (Rasmussen et al., 2001) and in reducing the uncertainty associated with decision-making in international expansion (Fischer and Reuber, 2003). This has also been suggested by traditional internationalisation theories (Johanson and Vahlne, 1977;

1990). Managers' experience gained from frequent foreign travel and the use of foreign languages in international entrepreneurial firms may also lessen the perceived risks and complexities of international markets (Acedo and Jones, 2007; Ruzzier et al., 2007). Despite limited resources and experience, therefore the international business experience of managers serves as a core driving force which allows firms to engage in international activities rapidly (Bloodgood et al., 1996; McDougall et al., 1994; Manolova et al., 2002; McDougall et al., 2003; Preece et al., 1999).

These characteristics of the international business experience of managers appear to have potential to provide a fundamental source of developing a firm's ability to perform well in foreign markets (Bloodgood et al., 1996; Knight and Cavusgil, 2004; McDougall et al., 2003). The argument highlights that firm-specific foreign business capacity is built up through the acquisition and absorption of vital intangible resources such as technological innovation, international knowledge acquisition, and international customer satisfaction in an international setting (Belso-Martinez, 2006; Knight and Cavusgil, 2004; Yli-Renko et al., 2001). For instance, Born Globals often embark upon internationalisation by serving niche markets with their own highly specialised products or services (Madsen and Servais, 1997). In this case it is important to have a good understanding of customer needs in the niche markets (Jolly et al., 1992). Effective communications with customers can lead to enhancement of the capacity of the small firm regarding knowledge relevant to customers (Yli-Renko et al., 2001). Furthermore, a unique product and the technological capability of a firm enables that firm to be competitive in foreign markets (Hymer, 1976) and to respond to global demands (Dimitratos et al., 2003; Oviatt and McDougall, 1995). The firms' foreign performance capacity is also secured by dedicated technology development and innovation. Thus, the international business experience of managers can help early internationalising SMEs to build this foreign capacity such as scanning up-to-date technology, assimilating



customer's demands and needs, and acquiring practical knowledge about international business activities. In an example of a Born Global that operates in the software industry, if its managers have a good understanding of internationally recognised technology, learning and knowledge transfer about the cutting-edge technology may occur quickly. That is, the international work experience of managers helps to promote the acquisition of vital knowledge which may determine growth and survival of the early internationalising firm in global markets. It may be more useful for the firm in strategically serving niche markets (Madsen and Servais, 1997). This indicates that the international business background of managers in small firms may be a significant driving force enhancing their ability to perform well in foreign markets.

The literature found that the discovery and understanding of activities which allow the firms to explore potential opportunities contributing to their foreign performance capacity is helped considerably by the international business experience of managers (Bloodgood et al., 1996; McDougall et al., 2003). In research into the effects of human capital on SME internationalisation, the prior international experience of managers is found to be important for potential performance and survival, thereby contributing to a more sustainable competitive advantage (Galunic and Anderson, 2000; Greene et al., 2001; Manovola et al., 2002; Pennings et al., 1998). International business experience also helps improve the effectiveness of international knowledge transfer management; facilitates the development of capabilities and routines for engagement in international business activities (Loane and Bell, 2006) and assists in the acquisition of the human and non-human resources needed to succeed in foreign markets (Acedo and Jones, 2007). This line of reasoning leads to the following hypothesis:

***H1:** The international business experience of managers is positively associated with foreign performance capacity.*

### **3.3.2 International business experience of managers and the value of networks**

In an attempt to explain the internationalisation of SMEs, a large section of the literature has focused on the use of networks, (Bell, 1995; Chetty and Blankenburg-Holm, 2000; Chetty and Campbell-Hunt, 2003; Coviello, 2006; Coviello and Munro, 1995, 1997; Freeman et al., 2006; Johanson and Mattsson, 1988; Loane and Bell, 2006; Moen and Servais, 2002; Mort and Weerawardena, 2006; Ojala, 2009; Oviatt and McDougall, 1994; Sharma and Blomstermo, 2003; Westhead et al., 2001). Networks can help early internationalising SMEs to acquire the knowledge, capabilities and routines that help them overcome their resource limitations (e.g., Knight and Cavusgil, 2004; Loane and Bell, 2006; Westhead and Wright, 2001). Business relationships can also aid the operations and innovations required to engage in international business activities (e.g., Blomstermo et al., 2004; Chetty and Blankenburg-Holm, 2000; Coviello and Munro, 1995; 1997). Thus, although the role of managers in international entrepreneurial firms should not be underestimated in the internationalisation process, it is also necessary to understand the importance of networks as fundamental drivers of rapidly internationalising firms. Oviatt and McDougall (2005) postulate that the network approach and analysis are fundamental to international entrepreneurship research. Freeman et al. (2006: 35) even argue that “the exploitation of new and existing networks to expand early and rapidly and to penetrate global segments to protect and exploit proprietary knowledge and lock in clients as a first mover is the main objective of the small born-global firm”.

The importance of obtaining value from networks has been highlighted in the literature (Elango and Pattniak, 2007; Mudambi and Zahra, 2007; Zucchella et al., 2007). Valuable outputs in terms of the acquisition of desirable information, assets, capabilities and routines need to be obtained from network connections as the

importance of international business increases for SMEs. Hence, SMEs pursuing rapid internationalisation require access to valuable knowledge and information about the foreign markets they aim to enter and they need to develop competitive products and distribution channels which are best able to satisfy the demands and needs of customers. In the absence of networks the limited resource and competencies of SMEs in relation to international business activities might be a potential barrier to success in the international expansion process. The value of networks depends on a number of factors but trust-based network connections are often regarded as delivering high value because they facilitate willingness to exchange valuable information and knowledge (Rowley et al., 2000; Starr and MacMillan, 1993). Trust-based networks are more likely when there are frequent interactions between the members of the networks on a cooperative basis (Granovetter, 1985). This is more likely to emerge in cases where the managers of SMEs have experience of international business and an understanding of the need to have trust in networks that help with internationalisation processes. Such managers are also likely to understand that building up trust for international activities requires frequent contact between the members of networks.

To extract value from networks, use is often made of social capital (Chetty and Campbell-Hunt, 2003; Yli-Renko et al., 2002). This concept has been well-documented in the area of the rapid internationalisation of SMEs. Social capital is defined as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition” (Bourdieu, 1986: 248). As the concept of social capital evolves, Inkpen and Tsang (2005: 151) focus on the view that networks are valuable resources, referring to them as “the aggregate of resources embedded within available through, and derived from the network of relationships possessed by an individual or organisation”. From this perspective, social capital is viewed as a reflection of managers’ abilities to derive

valuable benefits from social relationships (Portes, 1998). Hence, as a firm's international activities increase, social capital has a great role to play in accessing better resources for international business opportunities, identifying and developing trust-based effective networks and in overcoming the liabilities of newness and foreignness (Agndal et al., 2008; Arenius, 2002; Chetty and Agndal, 2007; Coviello, 2006; Yli-Renko et al., 2002; Zhou et al., 2007). This also provides a fast and effective means of deciding on the type of outputs required from networks (Blomstermo et al., 2004; Zucchella et al., 2007). Freeman et al. (2006) found that international networks are mostly established on managers' personal resources on the basis of their international business experience. Zhou et al. (2007) found that managers of Born Globals with access to well-developed social networks can help capture growth opportunities for better international performance. Thus, based on their prior work experience in international business activities, managers in Born Globals are likely to have good social capital based on relationships that help them to create and develop valuable network connections to help them with the internationalization process of their firms (Chetty and Campbell-Hunt, 2004; McDougall et al., 1994; Oviatt and McDougall, 1995).

Consideration of the above discussions leads to the conclusion that managers with international business experience in early internationalising SMEs are most likely to seek to form valuable networks with key partners to engage successfully in international activities. This line of reasoning leads to the following hypothesis:

***H2:** The international business experience of managers is positively associated with the value of networks.*

### **3.3.3 Value of networks and the number of networks**

A large section of the literature argues that SMEs need networks in a number of areas to engage in international business activities (e.g., Belso-Martinez, 2006; D’Cruz and Rugman, 1992; Johanson and Mattsson, 1988; Pla-Barber and Escriba-Esteve, 2006). These business connections need to provide a wide variety of valuable resources, knowledge and competencies. As firms develop networks, they seek to establish trust-based relationships with those partners that deliver the most valuable benefits (Granovetter, 1985; Lane and Lubatkin, 1998; Uzzi, 1996). This will exert an important influence on the number of networks that are developed and retained. In other words, as SMEs increase their foreign business activities, it is likely that the need for more networks that offer valuable services grows.

Although developed network relationships, irrespective of the number of networks and the value of the networks, may be beneficial to SMEs in their internationalisation processes (Larson and Starr, 1993), the link between the value of networks and the number of networks is crucial for effective engagement in international business activities. Not all networks are necessarily beneficial to the internationalisation strategies and operations of SMEs. For instance, some network relationships may be vulnerable to changes in business environments and be less based on social capital and other means of engendering trust. Thus these networks are less valuable for a SME’s foreign activities. Thus, networks that provide valuable assets and knowledge are likely to be expanded in number as SMEs internationalise (Andersson et al., 2004; Belso-Martinez, 2006; Morgan and Hunt, 1994).

There is literature that links valuable networks to frequency of contacts within these networks. Its underlying idea is that trust-based valuable connections facilitate willingness to exchange information and knowledge (Rowley et al., 2000; Starr and MacMillan, 1993), thereby creating a more valuable context for participants. This

context allows its participants to create a positive feedback loop, with a consequent reduction in transaction costs (Williamson, 1985), contracting issues (Gualti, 1995), and commitment to the networks (Ring and Van de Ven, 1994). This line of thinking supports the view that it is with these networks perceived by the firms as valuable that SMEs are expected to develop durable relationships by making contacts in substantial numbers. However, in this research, the association between the value of networks and the number of networks does not focus on this issue, but rather centres on the argument that valuable networks will be developed in a number of areas that are necessary to provide early internationalising SMEs with the resources, knowledge and competences that they need to undertake their internationalisation strategies and operations.

Firms will expand the number of valuable network relationships in order to obtain sufficient assets to gain access to supply channels, to develop after sales service and to deal with regulations in foreign markets (Bell et al., 2004; Sujrez-Ortega, 2003). More network relationships will also be used as international activities increase to gain knowledge about matters such as technology to meet the demands of foreign markets; market intelligence about the various international markets in which the firms operate; and product development to effectively supply competitive international markets (Chetty and Campbell-Hunt, 2003). Hence, the value of networks is likely to be positively associated with the number of networks, especially as the volume of international business increases and the number of countries supplied grows. This line of reasoning leads to the following hypothesis:

*H3: The value of networks is positively associated with the number of networks.*

### **3.3.4 Number of networks and foreign performance capacity**

In an effort to take opportunities to augment the ability to perform well in foreign markets, Born Globals often take account of capitalising on networks (e.g., Coviello, 2006; Oviatt and McDougall, 1994; Sharma and Blomstermo, 2003; Zahra, 2005). In most cases, several network partners will be required to acquire and develop the information, capabilities and routines needed to supply a range of countries, particularly if the products traded involve complex technological and marketing conditions. The need for a number of rather than a focus on one or two network connections is mentioned in the literature (Mudambi and Zahra, 2007; Zhou et al., 2007). It is plausible to assume that particular types of networks are more useful than others. That is, the linkages for foreign activities such as technology development, knowledge acquisition, and customer satisfaction are most likely to be critical in developing foreign performance capacity. For example, in Born Globals, a network that is directly involved in R&D activities or technology development should be of great importance, given that a majority of the early internationalising SMEs operate in a high-technology sector (Autio et al., 2000; Bell, 1995). To absorb as much knowledge as possible from the network, SMEs are most likely to seek to make business connections with a number of partners who are regarded as beneficial to engagement in international activities.

More network partners are required to respond effectively to the challenges of developing capacity to enhance good foreign performance as the volume, spread and complexity of international business activities increases (Belso-Martinez, 2006; Chetty and Blankenburg-Holm, 2000; Chetty and Campbell-Hunt, 2003). According to Dubini and Aldrich (1991), well-built business networks enable technology-based small firms to create the conditions for growth. These conditions may be described as a firm-specific capacity, which allows firms to enjoy economic rents with competitive advantage (Buckley and Casson, 1976). Preece et al. (1999) found that business

networks were significantly associated with neither international sales volume nor the number of foreign markets supplied. These findings reinforce the idea that a network *per se*, however well-built, may not be a sufficient condition for superior performance of early internationalising SMEs (Zahra et al., 2000). It is likely therefore that a number of valuable networks provide Born Globals with access to sufficient useful resources, knowledge and competencies for enhancing the ability to perform well in foreign markets. This line of reasoning leads to the following hypothesis:

*H4: The number of networks is positively associated with foreign performance capacity.*

### **3.3.5 Foreign performance capacity and international performance**

SMEs that pursue international expansion at or near their establishment need to develop their ability to perform well in foreign markets to drive international business outcomes (Dierckx and Cool, 1989; Jantunen et al., 2005; Knight and Cavusgil, 2004; Knight and Kim, 2009, Wu et al., 2007; Zahra et al., 2000). For instance, Knight and Cavusgil (2004: 136) argue that Born Globals must possess “specific knowledge-based internal organisational capabilities that support both early internationalisation and subsequent success in foreign markets”. This posits that specific international organisational capabilities such as knowledge accumulation and proprietary technology development are critical in achieving international performance of the early internationalising SMEs. According to the RBV (Barney, 1991; Conner, 1991; Wernerfelt, 1984), a firm’s ability to gain and manage proprietary resources that are important to the firm is at the heart of sustained competitive advantage. This perspective indicates that enhanced capacity based on resources leads to improvements in business performance (Young et al., 1999).



As discussed earlier, the foreign performance capacity of Born Globals is a mixture of technology development, knowledge acquisition and customer satisfaction in international markets. To be able to internationalise rapidly, firms need to acquire and develop their foreign performance capacity. As one possible example of the importance of the foreign performance capacity of firms, a firm's technical capability may be imitated or caught up easily by their competitors in an international arena unless they possess proprietary technology and innovate it on a continuous basis. Otherwise, over time, firms may become less competitive. However, the firms' robust foreign performance capacity has potential to protect and advance their firm-specific resources, thus contributing to a sustained international competitiveness. Great emphasis is hence placed on learning and knowledge to build up foreign performance capacity (Autio et al., 2000). This leads to the assumption that the capacity to learn and gain knowledge relevant to successful international activities may be a core resource for better international outcomes. This is well supported by two dominant theories – the RBV and the KBV - which highlight knowledge as the fundamental resource of firms providing a stable basis for superior performance (e.g., Barney, 1991; Miller and Shamsie, 1996). From these perspectives, knowledge accumulated and developed by Born Globals is a critical resource (Knight and Cavusgil, 2004). It is likely therefore that, in early internationalising SMEs, knowledge acquisition through learning about foreign markets, technological capability enhancement, commitment to international customer satisfaction, and so forth will be a strategically critical resource for international business success.

There has been empirical evidence addressing the effects of foreign performance capacity on the international performance of small internationalising firms. Autio et al. (2000) found that a capacity for greater learning-based knowledge intensity was positively associated with growth in international sales. Jantunen et al. (2005) also

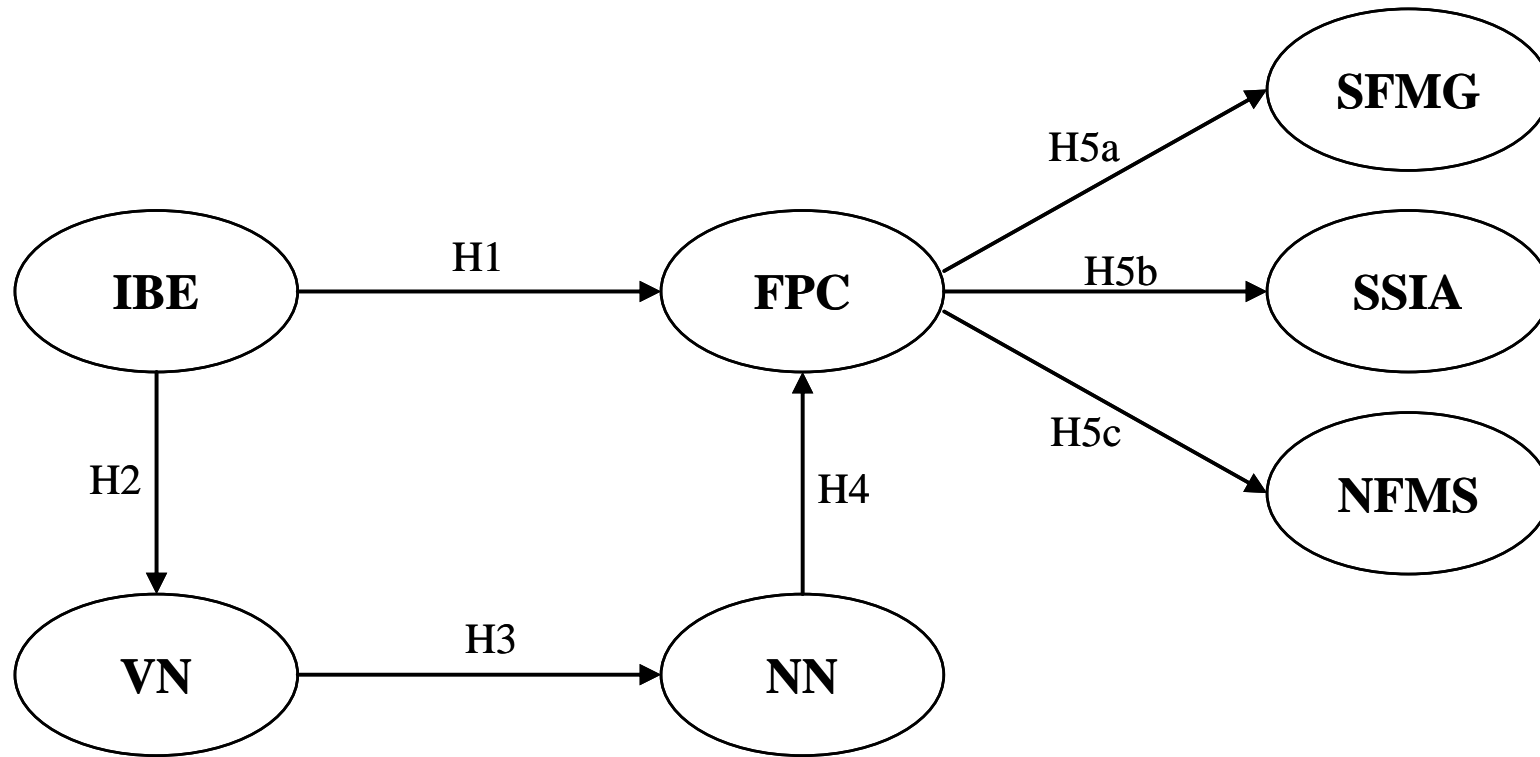
suggested that international organisational capabilities are an important determinant of the international performance of SMEs. Knight and Cavusgil (2004) found that, in order to achieve superior performance in international markets, building and leveraging capabilities is central to international entrepreneurial firms. Hence, early internationalising SMEs need a good foreign performance capacity to be able to deliver superior international performance as the share of sales from international markets increases and more countries are supplied. This line of reasoning leads to the following hypotheses:

***H5a:** Foreign performance capacity is positively associated with satisfaction with foreign market growth.*

***H5b:** Foreign performance capacity is positively associated with share of sales from international activities.*

***H5c:** Foreign performance capacity is positively associated with number of foreign markets supplied.*

The hypothesised relationships constructed above are illustrated in Figure 3.1.



Note: IBE: international business experience of managers, VN: value of networks for foreign activities, NN: number of networks for foreign activities, FPC: foreign performance capacity, SFMG: satisfaction with foreign market growth, SSIA: share of sales from international activities, NFMS: number of foreign markets supplied

Figure 3.1: Conceptual model

As depicted in Figure 3.1, the relationships between the variables are conceptualised. The conceptual model outlines several testable hypotheses, building on the following assumptions;

- It is postulated that the international business experience of managers is a fundamental source of both foreign performance capacity and the value of networks for foreign activities.
- The use of networks for foreign activities is a concept that is composed of multiple constructs: the value of networks and the number of networks. It is postulated that the value of networks is an antecedent of the number of networks.
- Only through the value of networks, does the international business experience of managers exert a positive effect on the number of networks. In the same manner, the value of networks is assumed to contribute only indirectly to enhancement of foreign performance capacity via the number of networks.
- It is postulated that foreign performance capacity is positively associated with international business performance. It is assumed thus that both the international business experience of managers and the number of networks influence the foreign market performance via foreign performance capacity.

### **3.4 Summary and Discussion**

Review of the previous literature to establish a conceptual model and to construct research hypotheses is a normal process under a positivistic paradigm (Collis and Hussey, 2003). This chapter presents a review of the body of literature on the internationalisation of SMEs and then builds a conceptual framework which elaborates

on the associations between key variables. Three generic factors are identified: the international business experience of managers, the value of networks and the number of networks. The set of variables is linked to foreign performance capacity and subsequently to international business performance. The measure of foreign market performance is captured by three elements: satisfaction with foreign market growth, share of sales from international activities and the number of foreign markets supplied. The relationships between the factors are hypothesised to be empirically tested. The international business experience of managers is likely to affect foreign performance capacity and the value of networks concurrently. Then the value of networks is linked to the number of networks. The number of networks is assumed to influence foreign performance capacity which is subsequently linked to international business performance. These relationships therefore represent the hypothesised link in the framework: international business experience of managers - value of networks - number of networks - foreign performance capacity - foreign market performance.

This model is developed, and builds especially on resource- and knowledge-based theories which provide a sound explanation of how the generic factors are helpful to boost a firm's ability to perform well in foreign markets. Drawing on a network view, this research provides a theoretical rationale for the novel use of networks, introducing the concepts of the value of networks and the number of networks. This contributes to a better understanding of how the use of networks is associated with both the international business experience of managers and foreign performance capacity. This is one of the most important innovations in this research. A central idea of the use of networks is that early internationalising SMEs need more business networks in a number of areas providing valuable resources, knowledge and competencies as their engagement in international activities increases. This research argues hence that there is likely to be a link between the value of networks and the number of networks. The model also

highlights the need for capacity building to boost performance in international markets.

The generic factors of Born Globals can help enhance the ability to perform well in international markets.

## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

This chapter presents the methodology used in this research and defends the methods used to tackle the research objectives and to find answers to the research questions. The positivistic paradigm and deductive approach used in this research are also defended as the best available methods to fulfil the research objectives. The use of a conceptual model is also defended. The chapter also defends the use of structural equation modelling as the most appropriate analytical technique to test the hypotheses.

### **4.2 Research Approach**

#### **4.2.1 Research concepts**

As all theories in the domain of social science are derived from a selected philosophical paradigm, it is important to figure out the different philosophical assumptions (Collis and Hussey, 2003). Table 4.1 summarises the different assumptions of the paradigm. Ontology represents the nature of reality (Burrell and Morgan, 1979). This standpoint provides an assumption that a researcher “must decide whether you consider the world is objective and external to the researcher, or socially constructed and only understood by examining the perceptions of the human actors” (Hussey and Hussey, 1997: 49). The overall aim of this research is to investigate the relationships between the international business experience of managers, the use of networks and foreign performance capacity and their subsequent influence on the international business performance of South Korean Born Globals. This means that the research attempts to measure and analyse the causal relationships using research methods such as surveys (Collis and Hussey, 2003).

Table 4.1: Assumptions of the two main paradigms

Assumption	Question	Quantitative	Qualitative
Ontological	What is the nature of reality?	Reality is objective and singular, apart from the researcher	Reality is subjective and multiple as seen by participants in a study
Epistemological	What is the relationship of the researcher to that researched?	Researcher is independent from that being researched	Researcher interacts with that being researched
Axiological	What is the role of values?	Value-free and unbiased	Value-laden and biased
Rhetorical	What is the language of research?	Formal Based on set definitions Impersonal voice Use of accepted quantitative words	Informal Evolving decisions Personal voice Use of accepted qualitative words
Methodological	What is the process of research?	Deductive process Cause and effect Strategic design – categories isolated before study Context-free Generalisations leading to prediction and understanding Accurate and reliable through validity and reliability	Inductive process Mutual simultaneous shaping of factors Emerging design – categories identified during research process Context-bound Patterns, theories developed for understanding Accurate and reliable through verification

Source: Creswell (1994: 5).





Table 4.3: Ontology and epistemology in social science

Ontology of Social Science	Representationalism/Realism	Nominalism
Truth	Is determined through verification of predictions.	Depends on who establishes it.
Facts	Are concrete, but cannot be accessed directly.	Are all human creations.
Epistemology of Social Science	Positivism	Anti-Positivism

Source: Easterby-Smith et al. (2002: 32).

#### 4.2.2 Research paradigms

The research philosophy or paradigm depends on the way that a researcher thinks about the development of knowledge (Collis and Hussey, 2003). The paradigm is described as the most important concept because it affects all decisions regarding the research process. Quantitative research emphasises a “systematic and methodological process” (Koch and Harrington, 1998: 884). Research driven by the positivist tradition highlights “quantification in the collection and analysis of data and... entails a deductive approach to the relationship between theory and research, in which the accent is placed on the testing of theories” (Bryman and Bell, 2007: 28). A bulk of literature has paid growing attention to a set of factors that drive the international performance of Born Globals: international business experience of managers, use of networks and capacity for foreign performance. However, the association between these factors using large samples remains under-investigated. To fill the research gap, the research seeks to test the developed theoretical model through the use of a questionnaire-based survey. The search to explain casual relationships between variables is one of the important characteristics of the deductive approach (Saunders et al., 2003), which provide a good way to develop associations that are suitable for empirical testing. The philosophical

paradigm of this research thus is that of the positivism, found in the first column of Table 4.4.

Table 4.4: The four main paradigms in social research

Item	Positivism	Postpositivism	Critical Theory et al.	Constructivism- Interpretivism
Inquiry aim	Explanation: prediction and control		Critique and transformation; restitution and emancipation	Understanding; reconstruction
Nature of knowledge	Verified hypotheses established as facts or laws	Nonfalsified hypotheses that are probably facts or laws	Structural/historical insights	Individual reconstructions coalescing around consensus
Knowledge accumulation	Accretion-“building block” adding to “edifice of knowledge”; generalizations and linkages	cause-effect	Historical revisionism; generalization by similarity	More informed and sophisticated reconstructions, vicarious experience
Goodness or quality criteria	Conventional benchmarks of “rigor”; internal and external validity, reliability, and objectivity		Historical situatedness; erosion of ignorance and misapprehension; action stimulus	Trustworthiness and authenticity
Values Ethics	Excluded – influence denied Extrinsic: tilt toward deception		Included – formative Intrinsic: moral tilt toward revelation	Intrinsic: process tilt toward revelation; special problems
Voice	“Disinterested scientist” as informer of decision makers, policy makers, and change agents		“Transformative intellectual” as advocate and activist	“Passionate participant” as facilitator of multivoice reconstruction

Source: Lincoln and Guba (2000: 166).

### 4.3 Research Strategy

Research strategy requires a research plan of how to answer the research questions (Saunders et al., 2003). Table 4.5 presents key research strategies under two main



#### **4.4 Data Collection Method**

The choice of the data collection method depends on the overall judgment on which type of data is needed for a particular research problem (Ghauri and Gronhaug, 2005). Data collection in this research focuses on early internationalising South Korean SMEs that simultaneously meet several criteria for sample firms. It means that research context is South Korea. As there is no unique database of early internationalising firms in South Korea, multiple sources are used to develop a representative sampling framework (Nummela et al., 2004). This approach allows the identification of South Korean Born Globals. A questionnaire is referred to as “a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample” (Collis and Hussey, 2003, p. 173). As a best means of survey, a questionnaire is developed based on an existing body of literature, which provides information on the key factors. To make all the constructs more valid and reliable, the draft questionnaire was sent to experienced researchers in the field of international business and entrepreneurship. For further reliability and validity, the questionnaire is piloted on a few South Korean Born Globals. Given that this research takes a quantitative approach, large samples are needed. In particular, a minimum sample size of 200 is recommended for structural equation modelling (Hair et al., 2006; Weston and Gore, 2006), the main analytical technique in this research<sup>8</sup>.

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<sup>8</sup> More details are provided in Chapter 6 - Data Gathering and Analysis.

## **4.5 Analytical Techniques**

For data analysis, this research uses quantitative techniques. This approach allows for hypothesis testing involving the associations between key factors used. This method best fits the provision of answers to Research Questions 3 to 5. One of the key concerns of testing associations is the choice of the appropriate analytical technique (Hoogland and Boomsma, 1998; Monsen and Boss, 2009). Given the main objectives of this research, structural equation modelling is most applicable. This statistical technique allows the researcher to simultaneously investigate inter-related dependence relationships between variables (Hair et al., 2006), generating both direct and indirect effects (Bollen, 1989). This technique was used for two key reasons; First, structural equation modelling allows for the simultaneous testing of multiple regression equations, including both direct and indirect effects. It is thus particularly powerful and preferred when testing mediating constructs (Frazier et al., 2004; Wu et al., 2008), which this study investigates. Secondly, the simultaneous approach of this technique in testing interdependencies of constructs also helps avoid bias which may cause by running individual regressions, by incorporating measurement errors into the model (Edelman et al., 2005; Monsen and Boss, 2009)<sup>9</sup>. Thus, in this type of research, using structural equation modelling is the best way of providing answers to Research Question 3 to 5.

## **4.6 Summary and Discussion**

It is argued that developing a conceptual model that derives research hypotheses is the best methodological manner of achieving research objectives and providing answers to

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<sup>9</sup> More details are provided in Chapter 6 - Data Collection and Analysis.

Research Question 3 to 5. In other words, a quantitative approach is most suitable for this research because its main objective is to test a conceptual model developed by following a deductive process. Although having some weaknesses of studying the social world (Bryman and Bell, 2007), it is plausible to suggest that the quantitative research approach can make a valuable contribution to this type of research (Collis and Hussey, 2003; Walker, 2005), which seeks to generalise results. As the main analytical technique for examining the conceptual model, based on a deductive process, structural equation modelling is employed. This statistical technique allows simultaneous estimations between inter-dependent variables. Consideration of alternative models using structural equation modelling also helps provide analytical rigour.

## **CHAPTER 5: OVERVIEW OF THE SME SECTOR IN SOUTH KOREA**

### **5.1 Introduction**

This chapter provides an overview of the SME sector in South Korea, with the aim of providing answers to Research Questions 1 and 2. First, the general operating environment of SMEs is described using a number of data sources. In particular, South Korean government policy towards SMEs is considered in terms of the major supporting programmes for SME internationalisation. This provides answers to Research Question 1. Next, the views of South Korean Born Globals on the economic and business environment characteristics that they face in their host locations are considered using data obtained from a survey of Born Globals, thereby providing answers to Research Question 2. The section with summary and discussion includes summaries of the major elements of the answers to these research questions.

### **5.2 General SMEs Operation Environment**

As the backbone of the Korean economy, SMEs are top policy priority of the South Korean government (Bae and Yu, 2005; OECD, 2002; SMBA Commissioned Report; 2006). In South Korea SMEs are defined in general as enterprises with fewer than 300 employees. More detailed definitions depend on the industrial sector (Table 5.1).



Table 5.1: Definition of SMEs in South Korea

Industry	SMEs	
	Number of regular employees	Paid-in-capital or sales
Manufacturing	Less than 300	8 billion won or less
Mining and Construction, Transportation	Less than 300	3 billion won or less
Retail, Hotel, etc.	Less than 300	30 billion won or less
Fishery, Film, Hospital, etc.	Less than 200	Sales of 20 billion won or less
Wholesale, Service, etc.	Less than 100	Sales of 10 billion won or less
Others	Less than 50	Sales of 5 billion won or less

Source: Article 2 of Framework Act on SMEs and Article 3 of Enforcement Decree of the Act, The Framework Act on SMEs, South Korea, 1966.

## 5.2.1 General present conditions of SMEs

### 5.2.1.1 Number of SMEs

Table 5.2 shows that in 2007 the total number of South Korean SMEs stood at 2,974,000, and accounted for 99.9% of all South Korean companies. The number of SMEs soared from about 2,650,000 in 2001 to 2,974,000 in 2007.

Table 5.2: Number of SMEs

		(Unit: 1,000)						
		2001	2002	2003	2004	2005	2006	2007
Number of companies	Total (1)	2,659	2,862	2,940	2,927	2,868	2,940	2,977
	Large company	9	5	5	5	4	4	2
	SME (2)	2,650	2,857	2,935	2,923	2,864	2,936	2,974
	(2) / (1) (%)	99.7	99.8	99.8	99.8	99.9	99.9	99.9

Source: Current status of SMEs, SMBA, 2008.

### 5.2.1.2 Number of persons employed by SMEs

The contribution of SMEs to employment is particularly crucial in the South Korean economy. SMEs provide the vast bulk of all jobs in the country. As shown in Table 5.3, the total number of employees working in SMEs in 2007 amounted to 11,149,000, representing 88.4% of total employment in comparison with that of large companies. The total number of employees continues to grow, even though being down slightly in 2004. This is evident that SMEs created more jobs than large companies in which jobs are down slightly.

Table 5.3: Number of employees in SMEs

		(Unit: 1,000)						
		2001	2002	2003	2004	2005	2006	2007
Number of employees	Total (1)	10,876	11,738	11,870	11,824	11,902	12,234	12,613
	Large company	1,700	1,584	1,562	1,613	1,453	1,556	1,464
	SME (2)	9,176	10,154	10,309	10,211	10,449	10,678	11,149
	(2) / (1) (%)	84.4	86.5	86.8	86.4	87.8	87.3	88.4

Source: Current status of SMEs, SMBA, 2008.

### 5.2.1.3 International comparison of SMEs

As shown in Table 5.4, in 2007, the number of SMEs in South Korea accounts for 99.9% of the total number of businesses. This figure is comparable to that of the UK, Japan, and Taiwan. With respect to the number of persons employed by SMEs in the same year, its weight is the largest in comparison with these other countries, representing 88.1%. This is evidence that more emphasis is needed on the activities of SMEs in the South Korean economy.

Table 5.4: International comparison of SMEs

	(% relative to total)				
	South Korea	Taiwan	Japan	US	UK
Number of company	99.9	97.8	99.2	85.7	99.9
Number of employee	88.1	76.9	79.4	50.9	58.7

Source: Overseas SMEs Statistics, Korea Federation of Small and Medium Business, 2008.

#### 5.2.1.4 Creation of SMEs

The total number of newly established SMEs stood at 53,483 in 2007 (see Table 5.5). The number was up slightly from 2004, but still significantly down, relative to that in 2001. The number of SMEs that went out of business continued to shrink from 2001, with the exception of 2003.

Table 5.5: Current status of newly established SMEs

	(Unit: No.)						
	2001	2002	2003	2004	2005	2006	2007
Newly established SMEs	62,168	61,852	52,739	48,585	52,587	50,512	53,483
SMEs going out of business	3,220	2,710	3,214	2,747	2,200	1,630	1,507

Source: Survey on Status of newly established SMEs, SMBA, 2008.

## 5.2.2 Innovative SMEs

### 5.2.2.1 Current status of innovative SMEs

As today's business environment changes rapidly and competition becomes more cut-throat, technology development through continuous innovation becomes of particular importance to SMEs. Proprietary technology can help businesses to build a competitive edge in both the domestic and global markets. With the aim of supporting the attainment

of superior technology capabilities by SMEs, South Korean public policy centres on firms called 'innovative SMEs'. Innovative SMEs are defined as "small and medium enterprises which create value through innovating, or seek innovative activities continuously" (SMBA Commissioned Report, 2006: 9). They are firms that have potential to contribute to job creation and economic development as well as profitability through technological innovation. Innovative SMEs are in general classified into three types: venture companies, Inno-biz and management-innovative companies. In South Korea, venture companies are referred to as SMEs certified by the SMBA under 'the 1997 Special Measures Law for Fostering Venture Businesses' (Bae and Yu, 2005; Korea Information Society Development Institute, 2003). Particularly, the venture firms with a high degree of technological competitiveness are certificated as Inno-biz companies. They pursue 'high-risk and high-return', which means that investments having a very high risk tend to gain a lot more, by nature (SMBA Commissioned Report, 2006: 9). Management-innovative SMEs are small firms that create value through innovation in management practices, operational know-how and marketing skills (SMBA Commissioned Report, 2006). In this sense, innovative SMEs are expected to create value-added outcomes in comparison with conventional SMEs. The SMBA are thus currently fully dedicated to support this group of SMEs so that they can grow into world-class innovative businesses. Established in 1996, the Small and Medium Business Administration (SMBA) is a South Korean central government agency for SME policies. Since 1996, the body has been seeking to accelerate the activities and competitiveness of SMEs by developing appropriate support programmes in line with SME types and growth phases. This supporting organisation has also executed a variety of SME-related activities: encouraging technological development and innovation by SMEs; creating and SME-friendly business environment; fostering start-ups; financing; aiding SME internationalisation, etc. (OECD, 2002). These SMBA-led policies have substantially

helped to enhance SME competitiveness and economic development in the country. In particular, current policies implemented by the SMBA are geared to support SME internationalisation activities (OECD, 2002) by offering various programmes such as export incubator (More details are provided in Section 5.3).

Table 5.6 represents the current status of the innovative SMEs. As shown in Table 5.6, the total number of venture companies stood at 14,015 in 2007, while Inno-biz was 11,526. Technological innovation and capability are at the heart of the two kinds of businesses. Focused on managerial and operational innovation, the total number of management-innovative SMEs was 6,510 in 2007. The total number of innovative SMEs soared to 32,051 in 2007 from 12,482 in 2001. Among the 32,051 companies, 7,650 companies were double counted because they were awarded more than two certificates, thereby yielding the net total number of the innovative SMEs of 24,401 in 2007. Overall, the total number of innovative SMEs dropped to 2003 from 2001, but it dramatically soared from 2005 because of the government's will and investment in fostering these businesses.

Table 5.6: Current status of SMEs by business type

	(Unit: No.)						
	2001	2002	2003	2004	2005	2006	2007
Venture	11,392	8,778	7,702	7,967	9,732	12,218	14,015
Inno-biz	1,090	1,856	2,375	2,762	3,454	7,183	11,526
management-innovative SMEs	0	0	0	0	0	2,619	6,510
Total	12,482	10,634	10,077	10,729	13,186	22,020	32,051
Double counted	699	1,134	1,519	1,890	2,455	5,006	7,650
Total (excluding double counted)	11,783	9,500	8,558	8,839	10,731	17,014	24,401

Source: Report on basic statistical survey of establishments, National Statistical Office, 2008.

Note: A certificate of venture businesses was introduced in 1998, Inno-biz in 2001, and management-innovative businesses in 2006.

#### 5.2.2.2 Comparison between conventional SMEs and innovative SMEs

Table 5.7 reveals that innovative SMEs outperformed conventional ones in employment, sales, and R&D investment. In more detail, in 2005 the number of persons employed by innovative SMEs was double or more than that of conventional ones. Sales of innovative SMEs on average were nearly triple those of more conventional SMEs. In terms of R&D investment, the innovative SMEs on average were triple or more than the conventional ones. These results indicate that innovative SMEs have great potential to play a leading role in improving productivity and profitability and enhancing technological capabilities of all SMEs, thereby contributing to their competitiveness. They are also expected to significantly contribute to job creation.

Table 5.7: SMEs by business type: Comparison

	(Unit: No., KRW 1bn.)		
	Number of employees (average)	Sales (average)	R&D investment (average)
Conventional SMEs	18.4	2.75	0.13
Venture	33.5	7.90	0.43
Inno-biz	46.0	9.90	0.46

Source: Survey on SMEs, Korea Small Business Institute (KOSBI), 2005.

Note: Data of management-innovative SMEs were not available because a certificate of the businesses was first introduced in 2006.

#### 5.2.3 Export status of SMEs

As shown in Table 5.8, the known total value of exports of South Korean companies rose from \$150.44bn. in 2001 to \$371.49bn. in 2007, an increase of 150%. The

contribution of SMEs relative to larger companies is also shown in Table 5.8. As Table 5.8 reveals, the export revenue of SMEs soared to \$118.77bn. in 2007 from \$8.41bn. in 1985, the first year the export value of SMEs was officially calculated. It is estimated that this continuous growth came from policies supporting exports, dramatic growth in the IT industry sector, and the emergence of the Chinese market. However, the SME share of South Korean exports dropped to 32.0% in 2007 from 42.9% in 2001. It could be interpreted that the export-centred strategies are likely to be vulnerable to today's fast-changing international business environments.

Table 5.8: Export value of SMEs

	(Unit: US \$ 1bn., %)						
	2001	2002	2003	2004	2005	2006	2007
Total value of exports (1)	150.44	162.47	193.82	253.84	284.42	325.46	371.49
Large companies	85.74	94.05	112.02	163.20	192.06	220.94	252.72
SMEs (2)	64.60	68.31	81.70	90.38	92.13	104.18	118.77
(2) / (1)	42.9	42.0	42.2	35.6	32.4	32.0	32.0
Increase rate of export	1.7	5.7	19.6	10.6	1.9	13.1	14.0

Source: Export statistics of SMEs, SMBA, 2008.

#### 5.2.4 Financial support for SMEs

There are two types of financial support for SMEs: policy funds and credit guarantees. The majority of SMEs are able to gain access to the policy fund, which allows companies to borrow funds at low interest rates. The fund focuses on facility investment, automation, and commercialisation of new technologies. As shown in Table 5.9, in 2007 the total amount of the policy funds amounted to about \$2.5bn. Both the amount and the number of SMEs supported fell from 2006 due to a change in the direction of the policy funds. That is to say, in 2006 the fund was redesigned and executed in a more efficient manner, with a particular focus on innovative SMEs.

Table 5.9: Financial support status of SMEs: Policy funds

(Unit: KRW 1bn.)

		2001	2002	2003	2004	2005	2006	2007
Policy fund	Amount	2,219.7	2,132.4	2,660.3	2,626.5	3,138.7	2,832.8	2,843.2
	Number of SMEs	2,020.4	1,787.7	2,001.1	1,945.8	2,477.5	2,206.9	1,744.3
	Micro businesses <sup>10</sup>	1,431.3	1,264.3	1,391.4	1,419.9	1,853.5	1,630.0	1,175.4

Source: Financial support statistics of SMEs, SMBA, 2008.

Credit guarantee services, the other major programmes of financial support for SMEs, are provided by credit guarantee organisations supported by the government, such as KCGF (Korea Credit Guarantee Fund), KOTEC (Korea Technology Credit Guarantee Fund), and local KCGF offices. Under a credit guarantee scheme, the services help SMEs that lack collateral and the technological capabilities to gain access to funds needed for their operations. As presented in Table 5.10, the public fund provided by KCGF dropped to KRW 28.5 trillion in 2007 from KRW 30.5 trillion in 2004. Over the same period, the fund from KOTEC also fell to KRW 11.3 trillion in 2007 from KRW 14.4 trillion in 2003.

Table 5.10: Financial support status of SMEs: Credit guarantee

(Unit: KRW 1 trillion)

		2001	2002	2003	2004	2005	2006	2007
Credit guarantee	KCGF	23.3	25.7	28.4	30.5	29.2	28.5	28.5
	KOTEC	13.7	14.1	14.4	13.4	11.5	11.2	11.3
	Local KCGF offices	1.5	1.9	2.3	2.6	3.4	4.0	4.6

Source: Reports from KCGF, KOTEC, and Korea Federation of Credit Guarantee Foundations, National Statistical Office, 2008.

<sup>10</sup> Firms that have less than 10 employees (Article 2 of the Act of Special Measures on Assisting Small Business and Micro-enterprises).



### **5.3 Government Policies towards the Internationalisation of SMEs**

In an effort to increase the global presence of SMEs, the South Korean government is currently dedicated to the development of public policies in support of the internationalisation of SMEs. The main streams of the support programme lie in financial support and capability building. The former focuses on bank loans and funds from commercial banks and government-led trade finance banks with the credit guarantee by the government for the international operations of SMEs. Insurance programmes such as exchange rate fluctuation insurance also support the exports of SMEs. These financial supporting programmes are similar to those of other countries. Particular attention is paid to capability building which helps SMEs engage in international activities. Although there are a variety of programmes run by many SME-related government agencies and institutions, the major programmes for building the foreign activity capacities of these businesses come from the SMBA. Some of these programmes are presented in brief below (for more detail, see SME export support centre website).

*Supporting SMEs with Finding New Overseas Markets:* This programme aims to foster SMEs that operate only in the domestic market or are at the initial phase of the lifecycle of export-driven firms, by helping them to open up new foreign markets. Government agencies support their internationalisation in a variety of ways, with a particular focus on 'export'. These supportive efforts include trade-related education and training, surveys of overseas markets, support for participation in conventions, exploring new buyers, etc. More than 1,000 SMEs are annually supported by this programme.

*Trade Promotion Delegation:* As part of a programme to obtain key information such as cutting-edge technology trends and customer needs in overseas markets, the government agencies support trade promotion delegation in overseas exhibitions on a regular basis. This programme is particularly helpful as participation in overseas exhibitions appears to be most effective in identifying clients, suppliers, or competitors and in conducting export marketing activities. According to the SMBA, about 2,000 SMEs are provided with this support on an annual basis.

*Fostering Specialists to Expand Overseas Markets:* This programme aims to nurture trade specialists through educating trade business practices and practical experience overseas. The SMBA first selects those qualified with proficiencies in foreign languages in SMEs and then dispatches them to overseas trade centres or branches after 6-weeks of training in South Korea. While staying in the overseas markets for 4 months, they are nurtured as trade professionals by carrying out practical activities that aid SMEs to promote their exports. As a result, these specialists are expected to play a central role in developing business strategies that best fit the foreign markets targeted by SMEs, thereby leading to an increased possibility of internationalisation success.

*Support in Attaining International Standards:* This programme intends to help SMEs to promote exports by assisting them to acquire internationally recognised certificates such as ISO (International Organisation for Standardisation) Certificates. The international standard certificates can serve to improve product credibility and help to eliminate non-tariff barriers when SMEs attempt to export their goods to foreign countries. This programme also provides consulting services and up-to-date information relevant to international standard certification systems.

*Support for Global Brand Development:* Due to their weak brand power, a number of SMEs have difficulty selling their products in overseas markets. Yet, it is likely that nearly all SMEs have a lack of resource in establishing the brand power of their own products. As part of an effort to aid the businesses to enhance their international marketing capability, this programme is designed to support SMEs developing global brands in cooperation with domestic and overseas brand marketing consulting institutions or firms.

*Support for Prospective SME Exporters:* In South Korea there are a number of SMEs with high-quality product and superior technology, but which lack their own capacity to export. This programme is designed to support such businesses so that they can engage in international activities. Of the fledgling SMEs that have export revenues of less than \$5 million, only 1,000 companies are annually selected for this support which includes export know-how transfer, negotiation skills with foreign partners, educations of export contract procedures, etc.

*Export Incubator:* This programme aims to provide support for SMEs that seek to enter major overseas markets such as the US, Europe, Japan, and China. Offering firms a variety of services regarding foreign market entry, export incubators are set up in these countries and the SMEs can access services such as export marketing, accounting, law consulting, offices, etc. Those services can help reduce the risks of entering foreign markets. It is likely that these programmes enable businesses to enhance their ability to perform well in international markets and to encourage more SMEs to internationalise.

## **5.4 Summary of the Business Environment for South Korean Born Globals**

This section summarises the key characteristics of the economic and business environment for SMEs and what these characteristics mean for South Korean Born Globals. Overall, SMEs are dominant in number and volume and contribute substantially to job creation in the country's economy. As such firms play a vitally important role in the South Korean economy, government policy is directed to enhancement of SME competitiveness, with a particular emphasis on innovative SMEs. As an effort to provide tailor-made support, innovative small firms are classified into three types: venture firms, Inno-biz and management-innovative firms. More financial support such as policy funds is open to innovative SMEs.

It was found that the export revenue of South Korean SMEs continues to grow. Currently, government policy towards SMEs focuses support for SME internationalisation. As a majority of SMEs are small in size and possess limited resources such as information about foreign markets, a variety of support programmes are being developed and implemented in order to help SMEs internationalise, often from or close to inception. The main focus of the support programmes is on both financial support and capability building, which provides SMEs with a basis for successful internationalisation. Internationalising SMEs can access financial sources with credit guarantees provided by government agencies. Although the total quantity of government financial support for SMEs has recently tended to fall slightly, innovative SMEs are allowed to access more public funds due to the change of direction in the policy of financial support. In other words, more financial assistance is directed to SMEs with technological capabilities and growth potential in international markets. There are diverse programmes providing support for the internationalisation of SMEs. For example, one programme provides internationalising SMEs with consulting service

on the discovery of and entry into foreign markets. Another programme aims to nurture skilled labour which may be helpful to SME internationalisation. It appears therefore that public policy emphasises encouraging SMEs to have a strong technology base which raises the potential for international market success. This discussion about the key characteristics of the general economic and business environment in which South Korean Born Globals operate provides an answer to Research Question 1.

### **5.5 Views of South Korean Born Globals on the Business Environment**

This research seeks to explore how South Korean Born Globals view the characteristics of the economic and business environment in which they face in their host locations in order to have an answer to Research Question 2. These characteristics include: financial arrangements, contact frequencies with network partners, and the domestic and institutional market environment. First, financial means can provide an understanding of which affects firms that invest for international business activities. Secondly, examination of the number of networks for foreign activities can help to understand how much they are important to international expansion of the firms. Lastly, it is expected that the views of the domestic and institutional market environment help to understand how such an environment affects rapid internationalisation of SMEs in South Korea. However, it is a difficult task to gain information relevant to the views. It is most unlikely that any secondary sources, albeit available, are of use to gaining an understanding of the perception-based attitudes. In an effort to explore the views of early internationalising South Korean SMEs on such business environments, in this study, a survey using a questionnaire was carried out<sup>11</sup>. Since a minor number of

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<sup>11</sup> Details of questionnaire development are provided in Section 6.2.1.

missing values in a few questions were detected, they were replaced with median value of the response. All the questions were developed with a 5-point Likert scale, ranging from 1 (low) to 5 (high). The questionnaire used is located in Appendix VII.

### 5.5.1 Financial arrangement

Question: “*To what extent does your firm raise finance for investment for international business activities by the following means?*”

#### 5.5.1.1 Retained profits

As shown in Table 5.11, 62.4% indicated that the extent to which they use retained profits is ‘high (5) or close to high (4)’, with a frequency of 169; 24.7% were neutral.

Table 5.11: Retained profits

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	10	25	67	94	75
Percent	3.7	9.2	24.7	34.7	27.7

#### 5.5.1.2 Bank loans

Table 5.12 reveals that a total of 31.7% agreed that bank loans are important (5 and 4) in financing for international business activities, while 35.8% rated them at a relatively low level (1 and 2) and 32.5% were neutral (3).

Table 5.12: Bank loans

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	62	35	88	73	13
Percent	22.9	12.9	32.5	26.9	4.8

### 5.5.1.3 Financial support by government

Nearly half of the participants (45.3%) indicated that a relatively low use of financial support by government is taken into account as a means of finance for their international business activities (1 and 2). Only 3.7% agreed that the government's financial support is a key source of their foreign activities (5) (Table 5.13).

Table 5.13: Financial support by government

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	76	47	73	65	10
Percent	28.0	17.3	26.9	24.0	3.7

### 5.5.2 Network relationships

Question: “*Approximately how many relationships to develop foreign markets does your firm have with the following?*”

#### 5.5.2.1 Customers

Based on the answers to survey question (Table 5.14), 39.9% were close to high (4) and 31.4% were high (5) in terms of the number of relationships with customers. Only 5.6% were less than close to low (2) and 23.2% were neutral (3).

Table 5.14: Customers

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	7	8	63	108	85
Percent	2.6	3.0	23.2	39.9	31.4

### 5.5.2.2 Suppliers

According to Table 5.15, a total of 71.2% answered that they have many business contacts with suppliers for international activities (5 and 4). Only 5.1 had a relatively low relationship with them (1 and 2) and 23.6% were neutral (3).

Table 5.15: Suppliers

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	5	9	64	126	67
Percent	1.8	3.3	23.6	46.5	24.7

### 2.5.2.3 Competitors

As presented in Table 5.16, 60.6% responded that making many relationships with competitors was not important in developing foreign markets (1 and 2). Only 10.7% answered that they have a relatively large number of networks with competitors (5 and 4).

Table 5.16: Competitors

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	66	98	78	25	4
Percent	24.4	36.2	28.8	9.2	1.5

### 5.5.2.4 Government research centres

According to Table 5.17, many of South Korean Born Globals (59.8%) had low numbers of networks with government research centres for international operations (1 and 2). 15.1% reported that they had many relationships with the government research centres (5 and 4) and 25.1 were neutral (3).



Table 5.17: Government research centres

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	93	69	68	35	6
Percent	34.3	25.5	25.1	12.9	2.2

#### 5.5.2.5 University research centres

Table 5.18 shows that 57.9% of the participants have few relationships with university research centres for internationalisation (1 and 2); 26.9% were neutral (3).

Table 5.18: University research centres

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	92	65	73	34	7
Percent	33.9	24.0	26.9	12.5	2.6

#### 5.5.2.6 Government policy makers

As shown in Table 5.19, many (69.7%) indicated that making many relationships with government policy makers is relatively unimportant in developing foreign markets (1 and 2), while only 5.6% have many contacts with them (5 and 4); 24.7% were neutral (3).

Table 5.19: Government policy makers

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	121	68	67	14	1
Percent	44.6	25.1	24.7	5.2	0.4

### 5.5.2. 7 Associations/agencies

Table 5.20 illustrates that 24.3% have many relationships with industry-related associations and/or agencies for international operations (5 and 4), whereas 42.1% have relatively few number of contacts with them (1 and 2); 33.6% were neutral (3).

Table 5.20: Industry based associations/agencies

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	65	49	91	54	12
Percent	24.0	18.1	33.6	19.9	4.4

### 5.5.2.8 Trade associations/agencies

As exhibited in Table 5.21, 42.8% of the participants responded that they have few relationships with trade associations and/or agencies (1 and 2). 22.9% responded that they have relatively more relationships with them (5 and 4); 34.3 were neutral (3).

Table 5.21: Trade associations/agencies

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	58	58	93	49	13
Percent	21.4	21.4	34.3	18.1	4.8

### 5.5.3 Domestic institutional/Market factors

Question: “Please tick the option that best describes your view on the following.”

#### 5.5.3.1 Size of the domestic market

Table 5.22 shows that 64.6% saw that the domestic market is becoming large and growing (5 and 4). This may be because the majority of the sampled firms are operating in a high-technology sector, which is growing rapidly.

Table 5.22: Size of the domestic market

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	4	29	63	114	61
Percent	1.5	10.7	23.2	42.1	22.5

#### 5.5.3.2 Degree of competition in the domestic market

As shown in Table 5.23, 53.9% of the participants responded that competition in the domestic market where they sell products is fierce (5 and 4). 22.1% regarded the competition as relatively weak (1 and 2) and 24% were neutral (3).

Table: 5.23: Degree of competition in the domestic market

	1 (low)	2	3 (neutral)	4	5 (high)
Frequency	9	51	65	96	50
Percent	3.3	18.8	24.0	35.4	18.5

#### 5.5.3.3 Competition in price in the domestic market

As shown in Table 5.24, over half of the participants responded that the competition in the domestic market is based primarily on price (5 and 4); 28% were neutral (3).

Table 5.24: Competition in price in the domestic market

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	9	44	76	101	41
Percent	3.3	16.2	28.0	37.3	15.1

#### 5.5.3.4 Financial support environments

According to Table 5.25, 36.5% responded that financial support from banks and financial institutions is unsatisfactory (1 and 2), while 28.1% regard it as satisfactory (5 and 4). 35.4% were neutral (3). This indicates that the financial support environment for the international involvement of SMEs needs to be improved.

Table 5.25: Financial support environments

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	31	68	96	69	7
Percent	11.4	25.1	35.4	25.5	2.6

#### 5.5.3.5 Support from government agencies

Table 5.26 shows that 29.5% of the participants agreed that the government agencies offer good consulting service and help SMEs to access financial resources (5 and 4). However, 35.8% were less satisfied with the role and programmes provided by government agencies (1 and 2); 34.7% were neutral (3).

Table 5.26: Support from government agencies

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	22	75	94	71	9
Percent	8.1	27.7	34.7	26.2	3.3

### 5.5.3.6 Costs of regulations

As shown in Table 5.27, over half of the participants (51.3%) agreed that there are high costs of complying with regulations in the domestic market (5 and 4). Only 9.6% evaluated that the costs of the regulations are low (1 and 2); 39.1% were neutral (3).

Table 5.27: Costs of regulations

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	1	25	106	111	28
Percent	0.4	9.2	39.1	41.0	10.3

### 5.5.3.7 Skill shortages in the labour market

Table 5.28 indicates that there is a serious shortage of skilled labour in the industries in which SMEs operate. 51.3% agreed there was a shortage in their domestic market (1 and 2), while only 7.0% disagreed with the question (5 and 4).

Table 5.28: Skill shortages in the labour market

	1	2	3	4	5
	(low)		(neutral)		(high)
Frequency	42	97	113	18	1
Percent	15.5	35.8	41.7	6.6	0.4

## 5.6 Discussion of the Results

This section presents a summary of how South Korean Born Globals view the characteristics of their economic and business environment in terms of financial arrangements, network relationships and the domestic and institutional business environment. It also discusses the meaning of the survey results. This provides an

answer to Research Question 2. The results revealed that a large number of early internationalising South Korean SMEs see financial support by government as less of a vital source in performing foreign activities. Rather, it was found that many of them tend to raise finance for investment in international business activities by using retained profits (see Table 5.11). With respect to the number of business relationships formed by South Korean Born Globals, the survey results showed that they had a number of networks with key counterparts including customers and suppliers. The firms tend to make fewer business contacts with competitors, government research centres, university research centres and trade associations. In particular, it revealed that they had relatively fewer networks with government agencies in relation to SME internationalisation promotion. This result implies that South Korean Born Globals see most of the support programmes run by the government agencies as not being very beneficial in helping them to engage in international activities. Government policy towards SME internationalisation is, to a large extent, connected to export promotion and to helping develop potential foreign markets. In consequence, existing policy oriented to SMEs export promotion fails to appeal to early internationalising South Korean SMEs that already compete in international markets.

Regarding the domestic institutional and market environment, the survey results revealed that many South Korean Born Globals face growing domestic markets. This may be because the majority of the firms operate in a high-technology sector. It is likely however that the SMEs focus on foreign markets because rapid growth in these sectors is a worldwide phenomenon. A number of South Korean Born Globals perceived that competition in the domestic market in which they operate is very strong. They also see that this fierce competition comes with price. This market condition might force start-ups to go global rapidly. However, it is also likely that the boundary between domestic and foreign markets may be blurred or irrelevant in that a large number of these firms

are located in high-technology industries. The results showed that early internationalising South Korean SMEs see support from government agencies as less satisfactory in terms of both finance and the consulting services provided by the agencies. This implies that South Korean Born Globals tend to have difficulty gaining access to the available financial resources. This may help explain why a number of early internationalising South Korean SMEs rely heavily on their retained profits when engaging in international activities. The results also indicated that a number of the firms perceive high costs of complying with regulations in the domestic business environment. South Korean Born Globals were also found to suffer skilled labour shortages in the domestic market. Table 5.29 presents a summary of these results. The results and discussions about the views of South Korean Born Globals on the key characteristics of the economic and business environment in which they face in their host locations provide an answer to Research Question 2.

Table 5.29: Summaries of the views of South Korean Born Globals

Factors	Summary
Financial arrangement	A number of South Korean Born Globals use their own retained profits as the major financial source for international business activities.
Network relationships	The main network connections of South Korean Born Globals centre on customers and suppliers.  They had fewer relationships with government agencies for internationalisation.
Domestic institutional and market factors	A number of South Korean Born Globals see their domestic market growing and competition in the market fierce.  They see financial support provided by government agencies as helpful, whereas consulting service regarding international activities were less satisfactory  They perceive high costs of complying with regulations and a shortage of skilled labours in the domestic market.

## **5.7 Summary and Discussion**

This section has presented the key characteristics of the economic and business environment in which South Korean Born Globals operate and their views on the major impact on their companies of these economic and business characteristics. The overview of the characteristics of the general business environment gives an answer to Research Question 1.

In an effort to answer Research Question 2, survey data with a focus on financial arrangements, network relationships, and domestic institutional and market factors was used. The results provided a rough picture of the key characteristics of the economic and business environment experienced by South Korean Born Globals. These results and discussions provide an answer to Research Question 2.



## **CHAPTER 6: DATA COLLECTION AND ANALYSIS**

### **6.1 Introduction**

This chapter presents the methods used to gather and analyse data for the research. First, the data collection methods, sample selection and questionnaire development procedures are outlined and the sample characteristics are elaborated on. Second, an explanation of the construct measurements is provided. Third, the analytical procedures and techniques are outlined. Fourth, the results of the data screening, including examinations of normality and missing values, are reported and descriptive statistics regarding the constructs are presented. Fifth, correlation analyses among constructs are conducted and common method bias is assessed. Sixth, construct validity and reliability are assessed with confirmatory factor analysis that generates a measurement model.

### **6.2 Data Collection Methods**

The choice of data collection depends on an overall judgment of which type of data is needed for a particular research problem (Ghauri and Gronhaug, 2005). Detailed information and in-depth knowledge about the characteristics of early internationalising firms is limited in South Korea and therefore a cross-sectional survey using a structured questionnaire was conducted. Cross-industry data is suitable for this type of research (Cloninger and Oviatt, 2007), providing empirical support for the proposed conceptual framework. Hence, to enable robust statistical tests to be carried out it was necessary to maximise the prospects of obtaining a large number of responses and so it was decided to survey all the population identified. The data for this research was obtained from information provided by key individuals. A single key informant in each firm was a

CEO or general manager who is most knowledgeable about the issues of SME internationalisation (McDougall, 1989). This method is subject to the possibility of bias, but this type of measurement has been widely used in similar studies (e.g., Han and Celly, 2008; Knight et al., 2004; Wu et al., 2007). Moreover, this approach has been found to be, in general, a reliable and valid method to obtain information about factors affecting firm performance (Venkatraman and Ramanujam, 1986).

### **6.2.1 Questionnaire development**

Since it is likely that the majority of Born Globals operated in a high-technology industry sector (Autio et al., 2000; Bell, 1995; Zahra et al., 2000), firm CEOs and managers were expected to have easy access to the internet and to use e-mail frequently. A web-based survey therefore was regarded as an appropriate tool for data collection (Nummela et al., 2004; Saarenketo et al., 2008) rather than mailing and telephone survey. The availability of e-mail addresses allowed for the adoption of this method. E-mail with a hyper-link to an online questionnaire was sent out to all the sampled firms, as shown in Table 6.2, partly using mailing survey simultaneously so as to raise a response rate.

The questionnaire was developed in four stages. First, the conceptual definition of each construct was specified by undertaking an extensive review of the relevant literature on Born Globals. Second, guidance in constructing the questionnaire was gained by using published studies in similar areas to help construct relevant and appropriate questions (e.g., Acedo and Jones, 2007; Andersson et al., 2004; Contractor et al., 2005; Elango and Pattnaik, 2007; Ellis, 2007; Knight et al., 2004; Zucchella et al., 2007). Third, the questionnaire was drafted in English, translated into Korean and sent to two Korean academics with a high level of competence in the English language and also experience in conducting questionnaires in business and management research.

They were asked to identify questions that had inappropriate translations and that were likely to be misunderstood by respondents. Fourth, the questionnaire was then carefully pilot-tested on 10 firms. The results of these exercises led to modifications to some of the questions to improve their clarity.

### **6.2.2 Sample selection and data collection procedures**

The population of interest to this study is South Korean SMEs that had entered foreign markets at or near their founding: Born Globals. Defining early internationalising firms is a difficult task (Oivatt and McDougall, 1997; Zahra et al., 2000). To develop a representative sample that conforms to the major criteria of Born Globals (for more detail, see Section 2.3.6), the following three criteria were employed. First, firms should have less than 300 employees, which conforms to the South Korean definition of an SME in terms of number of employees (The Framework Act on SMEs, 1966). Second, firms should be engaged in international activities within 6 years from establishment (e.g., McDougall et al., 2003; Sharder et al., 2000; Zahra et al., 2000). Third, firms should be independent (private) operations, but not subsidiaries of other firms. Since there was no unique database available that fulfilled these criteria following Nummela et al. (2004) multiple sources were used. Located in advanced technology industries, 4 databases of firms were selected as appropriate to identify Born Globals because it is reported that the majority of such firms are likely to operate in high technology sectors (Autio et al., 2000; Bell, 1995; Zahra et al., 2000): a survey conducted by the Small and Medium Business Administration (SMBA) in 2006, the membership lists of Inno-biz firms ([www.innobiz.net](http://www.innobiz.net)), Korea Venture Industry Association ([www.venture.or.kr](http://www.venture.or.kr)) and Bio Venture Association ([www.kobioven.or.kr](http://www.kobioven.or.kr)). These database provided contact details of the sample firms (e.g., e-mail addresses, location addresses, web site

addresses, and telephone numbers). The sampling frame is cross-sectional in nature in this regard.

Since 2001, the SMBA survey has been carried out on an annual basis. The SMBA database is the most comprehensive source that contains detailed information of venture companies, including company names, year of establishment, contact details and operational information as to whether firms are engaged in international activities. For this research, only rudimentary data including the contact details from the SMBA survey data were obtained from Korea Venture Industry Institute which carried out the survey with permission. In 2006, 2,991 venture firms in total participated in the survey, of which a sample of 1,379 was identified as having international operations. As the database contains no information of the time lag between the initial year of a firm's international involvement and the legal year of its founding, not all firms in this list meet the key criteria: international exposure within 6 years from inception. However, the extracted sample of 1,379 was employed to collect as many responses as possible. The other sources were judged to be appropriate to maximise the likelihood of finding Born Globals because the majority of such firms are likely to operate in high technology sectors (Autio et al., 2000; Bell, 1995; Zahra et al., 2000). The databases provided brief company information including web site addresses, location addresses and type of industry. The web site of each firm on the lists was visited to confirm that the contact details of the firms were correct; to eliminate multiple identification of the same firm, and to determine that the firm had entered the market within 6 years from its foundation. This sampling approach resulted in a potential sample of 215, excluding overlapped, firms.

Since there might be the possibility of overlooking potential samples due to reliance on the sample screening methods of the four databases, two leading Korean business newspapers (*The Hankyung Economic Newspaper* and *The Maeil Economic*

*Newspaper*) were searched for articles published 3 months before the data collection began. The newspapers were then content-analysed with a view to identifying reports of foreign activities of SMEs. The web site of selected firms was visited to confirm core information in the same manner as above, thus leading to additional 25 samples. Finally, efforts were made to identify potential sample firms as appropriate for this research via personal network. As a result, appointments with 6 firms in total were made to personally deliver questionnaires to their entrepreneurs. This also led to additional 6 samples. By this process 1,625 firms that had the appropriate characteristics were identified from the best information available on the population of rapidly internationalising SMEs in South Korea, as shown in Table 6.1.

Table 6.1: Sources of the sample

Source	Number
Survey conducted by SMBA (2006)	1,379
The membership lists of Inno-biz firm, Korean Venture Industry Association and Bio Venture Association	215
Two leading Korean business newspapers	25
Face-to-face contacts via personal networks	6
<b><i>The total number of sample</i></b>	<b>1,625</b>

In an effort to maximise a response rate, two methods were utilised. First, access to an executive summary of the study's findings was offered (Dillman, 2000; Fowler, 1993). Second, both mail and web-based surveys were used for the group of the sample evaluated as the closest to the samples targeted in this research. Specifically, 648 firms were identified, from the SMBA (2006) database as those that were no more than 8 years old and were engaged in international operations (export, licensing, joint venture, or FDI) before 2006. Questionnaires with a stamped address return envelope were

mailed to this group of firms, followed by e-mails with a hyper-link to a web-based questionnaire a week after the mailing. Prior to a web-based online survey, a pre-notice using mailing helps raise a response rate (Kaplowitz et al., 2004). The same e-mail message was sequentially sent out to the rest of the sampled firms, followed by two rounds of a reminder e-mail. Table 6.2 presents the survey methods used in this research. 162 questionnaires (counting one time for overlapped firms in the sample of 648) were returned because the addresses were unknown. Using telephone and e-mail, efforts were made to trace the correct addresses but the potential respondents were unavailable, reducing the sample to 1,463. A total of 323 responses were returned, yielding a response rate of 22.1%.

Table 6.2: Survey methods used

Survey method	Mailing	Web-based
A group of the samples from SMBA (2006) survey: 648	√	√
Total samples: 1,625		√

The responded questionnaires however were all carefully and stringently assessed through cross-checking with the secondary data obtained from the SMBA database and respondents' own web sites, in an effort to purify the data collected. This procedure helps to establish the validity of the survey-based measures (Zahra and Hayton, 2008). As a result, 52 respondents were eliminated because they did not correspond to the requirements specified for this study of the sample, were subsidiaries of larger firms, or had missing values that could not be rectified by visiting the web site of the firm, or by telephoning the respondents. These procedures led to the final sample of 271 and a final response rate of 18.5%. This response rate is comparable to those of other similar studies (e.g., Harzing et al., 2006; Murray et al., 2005; Wu et al., 2007). Table 6.3 provides a summary of the response results.

Table 6.3: Response results

Results	Sample number	Total number	Response rate (%)
Identified before survey	-	1,625	-
Returned as undeliverable	162	1,463	-
Responded before cross-checking	323	-	22.1 (323/1,463)
Eliminated	52	-	-
Final sample	271	-	18.5 (271/1,463)

### 6.2.3 Assessing non-response bias

To confirm that the respondents were a representative of the general population, non-response bias was assessed based on the notion that ‘late respondents’ would be more likely to be representative of non-responding SMEs (Armstrong and Overton, 1977). Following the recommendation by Armstrong and Overton (1977), responses were divided into two groups: The responses of late respondents (that is, those that responded after more than 3 weeks) were compared to the responses of early respondents (that is, firms which responded within 3 weeks of the mailing). Comparisons between the early and late respondents in key constructs including firm size (number of employees), the speed of internationalisation and the number of foreign markets supplied then were made using *t*-test. As a result, no significant differences were found between these two groups in terms of any of the three measures (for firm size:  $p=0.740$ , speed of internationalisation:  $p=0.886$ , number of foreign markets supplied:  $p=0.324$ ). Therefore, non-response bias was not expected to be a serious problem.

### 6.3 Sample Characteristics

As presented in Table 6.4, consideration of the general characteristics of the sample revealed that on average the sample firms had been in business for 9 years and the vast majority of the firms (84.8%) had been established since 1996. Most of the firms (78%) employed 50 or fewer employees, with an average number of 41. Regarding the CEO's level of education, most of the CEOs (86.7%) were at the university degree level or above, of which the university degree was dominant with 44.6%. Nearly all CEOs of the sample firms (95.2%) were male, while female was as low as 4.8%. According to the ISIC classification of industries (2-digit level), nearly half of the sample firms (49.5%) are centred on two industries (radio, TV and communications equipment and chemicals and chemical products). Moreover, nearly 55% are involved in production of various types of electronic and electrical machinery and equipment. Nearly all of the firms are located in the manufacturing sector and are mainly located within a few industries within this sector. With respect to the type of firm certificate, 70.8% of the firms had Inno-Biz certification, which is given by the government to SMEs which are fully equipped with competitive technology and technological capabilities supported by superior technology while 29.2% were with Venture.



Table 6.4: General characteristics of the sample (N=271)

Variable	Frequency	Percentage
<i>Year of establishment</i>		
Before 1990	17	6.4
1991-1995	24	8.8
1996-2000	134	49.6
After 2001	96	35.2
<i>Number of employees</i>		
10 or less	29	10.7
11-20	68	25.1
21-50	114	42.1
51-100	37	13.7
101-150	13	4.8
151-200	8	2.9
201-300	2	0.7
<i>CEO's level of education</i>		
Secondary sechool	17	6.3
Technical training	19	7.0
University degree	121	44.6
Master degree	58	21.4
PhD degree	56	20.7
<i>CEO's gender</i>		
Male	258	95.2
Female	13	4.8
<i>Industry (ISIC 2-digit level)</i>		
Radio, television and communications and apparatus (32)	82	30.3
Chemicals and chemical products (24)	52	19.2
Machinery and equipment (29)	32	11.8
Electrical machinery and apparatus (31)	31	11.4
Medical, precision and optical instruments (33)	25	9.2
Basic metals (27)	19	7.0
Office, accounting and computing machinery (30)	12	4.4
Others (15, 18, 20, 21, 22, 26, 28, 34, 36, and 92)	18	6.7
<i>Type of certification</i>		
Inno-Biz	192	70.8
Venture	79	29.2

Table 6.5 gives an overview of the international activity characteristics of the sample. Nearly two thirds of the firms (65.2%) entered foreign markets before the end of the third year of establishment and more than a third of the firms (35.1%) engaged in international business activities within a year on a legal basis. The revenue share from foreign activities revealed that international business activities were a very important source of income, and that the dominant source of these revenues came from exporting. The proportion of total revenue accounted for by foreign sales was high (mean: 44.5%). A high share of revenue from foreign sales has been found in other studies of early internationalising Korean firms. Kim and Jung (2007) discovered that 65% of their sample had a foreign sales share greater than 50% and Lee and Bae (2003) found that the average of foreign sales in their sample of Korean SMEs was 52%. Nearly all firms (94.8%) entered multiple foreign markets, with a median number of foreign markets of 3. The main initial foreign entry mode was exporting (62%). However, these firms were not only exporting; 38% of first entry modes involved licensing, international joint ventures, foreign production plants and the opening of sales offices overseas. The picture that emerges from the sample reveals a young and active group of small and middle sized early internationalising firms that are engaged in international business activities in a number of countries and that receive a significant share of their total revenue from international activities in South Korea. Finally, two countries China and Japan topped the list of foreign markets entered. These countries are of course geographically and culturally close to South Korea. However, the sample firms that entered North America (frequency: 158) and European Union (frequency: 153) did so on a nearly equal basis, even though these markets are geographically distant from their home base.

Table 6.5: International activity characteristics of the sample (N=271)

Variable	Frequency	Percentage
<i>Speed of internationalisation (year)</i>		
0	36	13.3
1	59	21.8
2	47	17.3
3	34	12.5
4	29	10.7
5	30	11.1
6	36	13.3
<i>Foreign revenue (as % of total sales)</i>		
1- 20	92	33.9
21-40	56	20.7
41-60	40	14.8
61-80	38	14.0
81-100	45	16.6
<i>Foreign revenue source (as % of total sales)</i>		
Export sales (mean=37.71, SD=32.81)	254	-
Resale of imports (mean=3.68, SD=12.16)	60	-
Sales licensing and royalties (mean=2.18, SD=8.76)	28	-
Other (mean=4.79, SD=14.53)	70	-
<i>Number of foreign markets supplied</i>		
1	14	5.2
2	48	17.7
3	92	33.9
4	47	17.3
5	31	11.4
6	12	4.4
7	9	3.3
8	3	1.1
9	6	2.2
10	2	0.7
11	0	0.0
12	7	2.6

Table 6.5: *Continued*

Variable	Frequency	Percentage
<i>Initial foreign market entry mode</i>		
Exporting	168	62.0
Licensing	33	12.2
Opening offices overseas	23	8.4
Overseas production and joint ventures	20	7.4
Contracts from exhibitions	16	5.9
Importing for resale	3	1.1
Others	8	3.0
<i>Scope of internationalisation(foreign markets supplied)</i>		
China	177	-
India	56	-
Japan	173	-
Southeast	142	-
Asia	59	-
North America	153	-
Latin America	42	-
European Union	138	-
Australia and New Zealand	42	-
Middle East	39	-
North Africa	16	-
Sub-Saharan Africa	14	-

#### 6.4 Measures

Constructed variables should be defined conceptually to identify any potential problems and then operationalised to provide the basis for testing the model (Ghauri and Gronhaug, 2005). To convert concepts into variables that can be analysed, the operational definition is critical. According to Ghauri and Gronhaug (2005: 38), an operational definition is referred to as “a set of procedures that describe the activities to be performed to establish empirically the existence or degree of existence of what is

described by a concept”. All the concepts of the constructs were converted into ‘variables’ based on the operational definitions. Table 6.6 reveals conceptual and operational definitions of the constructs used. Based on those definitions, each of the constructs is measured as follows:

Table 6.6: Conceptual and operational definitions of constructs used

Variable	Conceptual definition	Operational definition	Constructed variable for Structural equation modelling
International business experience of managers	The amount of experience that a CEO or key players have accumulated in an international context	The extent to which a top management team has prior international business experience, experience in travelling abroad, and foreign language ability	The extent to which top management possesses a great deal of international business experience. The extent to which top management has extensive experience of foreign travel. The extent to which top management is experienced in foreign language.
Value of networks for foreign activities	The value of networks that a firm is involved with for its international activities	Obtaining valuable information and knowledge from networks in key areas to help to engage in foreign activities	Assessment of the value to the firm of the following relationships: Product development for foreign markets Developing foreign market supply channels Developing foreign market intelligence R&D for foreign market development
Number of networks for foreign activities	The number of networks that a firm is involved with for its international activities	The number of networks used to obtain information and knowledge in key areas for foreign activities	How many relationships does the firm have to develop the following activities: Product development for foreign markets Developing foreign market supply channels Developing foreign market intelligence R&D for foreign market development
Foreign performance capacity	The ability of firms to achieve the necessary competencies to serve foreign markets	The extent to which a firm perceives its capacity to serve foreign markets	The firm's perception of their performance in comparison with their major market competitors: International customer satisfaction Development of technology from international activities Knowledge acquisition of international markets
Satisfaction with foreign market growth	Level of satisfaction of a firm with international growth	The extent of satisfaction of a firm with international growth rate and international market share in comparison with its major market competitors over the past 3 years	International growth rate International market share
Share of sales from international activities	Total sales from international activities	Total sum of reported international sales over the past three years as the percentage of total sales	Proportion of total revenue is earned from foreign business activities
Number of foreign markets supplied	Number of countries/markets supplied by a firm	The number of countries/markets in which a firm sold its products/services	Total number of countries/areas as foreign markets for the firm

#### **6.4.1 International business experience of managers**

The international business experience of managers has been most frequently used as an explanation for SME internationalisation (McDougall et al., 2003). The managers' previous experience is a key factor in securing the international engagement of rapidly internationalising firms (McDougall et al., 2003; Reuber and Fischer, 1997; Shrader et al., 2000; Smith et al., 2000). Specifically, it plays a central role in identifying new opportunities (Bloodgood et al., 1996; McDougall et al., 1994; Oviatt and McDougall, 1994), building networks (Madsen and Servais, 1997; McDougall et al., 2003; Mudambi and Zahra, 2007), and reducing risks (Acedo and Jones, 2007), all of which facilitate small firm internationalisation activities. The underlying assumption is that managers in international entrepreneurial firms who had exposure to the international environment may be more likely to create effective linkages which expedite their internationalisation efforts and contribute to enhancing a firm-specific capacity for superior international performance than managers lacking in international business experience.

The international business experience of managers has been measured using a variety of proxies: 'years of business experience in export related work' (Fischer and Reuber, 2003; Mudambi and Zahra, 2007; Shrader et al., 2000); 'the number of managers with international exposure' (Bloodgood et al., 1996; Carpenter et al., 2003; Fernhaber et al., 2008); 'percentage of managers with international work experience' (Nummela et al., 2004); 'foreign language ability' (Acedo and Jones, 2007; Zucchella et al., 2007); 'travelling experience abroad' (Acedo and Jones, 2007; Ruzzier et al., 2007); and 'international education experience' (Bloodgood et al., 1996; Nummela et al., 2004; Ruzzier et al., 2007). From the previous studies relating to the international business experience of managers, it is found that there is no definitive proxy for the construct. To overcome this problem, many of these studies employ multiple items to measure the international business experience of managers.

It is likely that frequent travel abroad allows managers to have opportunities to gather international business information, learn about market knowledge and practices and identify business opportunities (Leonidou et al., 1998; Ruzzier et al., 2007). Foreign language usage and fluency may capture the extent of global business activities (Acedo and Jones, 2007; Zucchella et al., 2007). However, in capturing the degree of the international business experience of managers, academic experience such as international education is likely to be less helpful than practical experience. That is, this indicator may provide a good pre-condition for firm internationalisation (Jones, 2001), but be associated indirectly or even hardly with international business experience *per se*. Bloodgood et al. (1996) support this view, demonstrating that international schooling was not significantly associated with foreign market performance of SMEs. Thus, to best capture the extent of the international business experience of managers, three items drawn from the previous literature were employed on a five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items include: ‘our top management possesses a great deal of international business experience.’, ‘our top management has extensive experience of foreign travel.’, and ‘our top management is experienced in foreign language.’. In the analysis, the estimates were summed, and a combined average value was constructed for the international business experience of managers.

#### **6.4.2 Value of networks for foreign activities**

A body of literature underlines the importance of obtaining value from networks (Elango and Pattniak, 2007; Mudambi and Zahra, 2007; Zucchella et al., 2007). Of particular importance to early internationalising SMEs is network connections that provide valuable outputs in terms of the acquisition of desirable information, knowledge, routines and competencies. Hence, the value of networks for foreign activities is



referred to as the extent of the value of use of networks with partners for key foreign activities. This variable is important to identify the quality of networks. Following the previous literature (Andersson et al., 2002; Chetty and Campbell-Hunt, 2003), the constructed variable for the value of networks was based on four areas - product development for foreign markets; development of foreign market supply channels; development of foreign market intelligence and R&D for foreign market development. Respondents were asked to assess the extent to which networks they form are valuable in terms of the four foreign activities. The four items were measured on a five point Likert scale ranging from 1 (very low) to 5 (very high) and then summed.

#### **6.4.3 Number of networks for foreign activities**

Network connections that provide valuable assets, knowledge and competencies are likely to be expanded in number as SMEs internationalise (Belso-Martnez, 2006; Morgan and Hunt, 1994). The number of networks for foreign activities is referred to as the extent of the number of networks with partners for key foreign activities. The constructed variable for the number of networks was based on four areas (Andersson et al., 2002; Chetty and Campbell-Hunt, 2003), which already indicated the extent of the value of networks. This method allows for identification of the value and number of networks by using the same indicators. Large firms will have more network partners than smaller firms, but a large number of network partners does not necessarily mean that a large firm has more partners relative to its size than smaller firms. By using a five point Likert scale to measure the number of networks, rather than asking for a metric measure of the number of networks, this potential problem was avoided. Respondents were asked to evaluate the extent of the number of network connections for the four international activities on a five point Likert scale ranging from 1 (very low) to 5 (very high) and summed.

#### **6.4.4 Foreign performance capacity**

For internationally oriented SMEs, foreign performance capacity is described as the extent of the capacity to achieve international business performance through knowledge acquisition and learning in foreign markets. It is likely that such firm activities as ongoing technology learning and innovation, commitment to customer satisfaction in niche markets (Jolly et al., 1992; Madsen and Servais, 1997), and valuable knowledge acquisition about international markets contribute to capacity building. Of particular importance to SMEs is the capacity to develop and enhance performance through these key activities to provide a competitive edge of international success and sustained growth. This clarifies that the construct 'foreign performance capacity' is a determinant of 'international performance'. Some previous research, however, used the indicators of foreign performance capacity as those of performance (e.g., Anand and Kogut, 1997; Blomstermo et al., 2004; Wiklund and Shepherd, 2003). For example, in Wiklund and Shepherd (2003), adoption of new technology and customer satisfaction were employed as a proxy for business performance. In some sense, the indicators could be employed as 'performance measures' unless followed by further performance variables such as sales growth and sales volume. It may be better to posit therefore that foreign performance capacity determines the extent of international performance which is captured by the share of sales from international activities, the number of foreign markets supplied, and satisfaction with foreign market growth.

To assess the extent of foreign performance capacity, based on the previous studies (e.g., Day, 1994; Knight and Cavusgil, 2004; Li and Calantone, 1998), three items were created: international customer satisfaction, development of technology from international activities and acquisition of knowledge of international markets. The foreign performance capacity was measured in a subjective manner using a five point

Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The respondents were asked to assess the extent to which they perceive the three items capturing the foreign performance capacity in comparison with their major market competitors over the past three years.

#### **6.4.5 International performance**

It is difficult to measure organisational performance (Lentz, 1981), particularly of SMEs (McDougall and Oviatt, 1996). There is little agreement on the methods by which the international performance of the rapidly internationalising firms should be assessed (McDougall et al., 1994). Previous literature has adopted a variety of indicators to measure international performance: international sales as a percentage of total sales (Brush et al., 2002; Cavusgil and Zou, 1994; Fernhaber et al. 2008; Preece et al., 1999; Reuber and Fischer, 1997; Shrader et al., 2003), the number of foreign markets supplied (Brush et al., 2002; Cavusgil and Zou, 1994; Fernhaber et al. 2008; Preece et al., 1999; Reuber and Fischer, 1997), international sales growth (Autio et al, 2000; Reuber and Fischer, 2002; Zhou, 2007), and perception-based overall assessment of international operations (Jantunen et al., 2005; Knight et al., 2004; Knight and Cavusgil, 2004; Nummela et al., 2004). However, it appears to be broadly accepted that international firm performance is a multidimensional construct and thus it should be measured using multiple indicators (e.g., Cavusgil and Zou, 1994; Hitt et al., 1997; Juntanen et al., 2005; Katsikeas et al., 2000; Lu and Beamish, 2004; Ruzzier et al., 2007; Sullivan, 1994; Venkatraman and Ramanujan, 1986). For example, Sullivan (1994) argued that multiple-item measures should be used rather than just a single measure in measuring internationalisation performance and Ruzzier et al. (2007) stated that the usefulness of a single indicator such as international sales as a percentage of total sales is overvalued, thus producing misleading results. Hitt et al. (1997) indicated that unidimensional

measures fail to simultaneously reflect the intensity of internationalisation (e.g., the degree of commitment to each country) and its scope (e.g., the number of foreign markets supplied). Finally, Jantunen et al. (2005) argued that use of multiple dimensions of performance better helps reflect 'reality'.

Thus, so as to provide a more comprehensive view of the international performance of small firms, consistent with the *de facto* criterion of best capturing international performance, three performance dimensions were used: the share of sales from international activities, the number of foreign markets supplied, and satisfaction with foreign market growth.

#### 6.4.5.1 Share of sales from international activities

The share of sales from international activities is one of the most commonly used dimensions for internationalisation performance (e.g., Brush et al., 2002; Fernhaber et al. 2008; Gankema et al., 2000; McDougall and Oviatt, 1996; Preece et al., 1999; Reuber and Fischer, 1997; Roberston and Chetty, 2000; Shrader et al., 2003). Based on these previous studies, the share of sales from international activities was adopted as one of the proxies for international performance. Consistent with previous studies, this construct was operationalised as the percentage of total sales derived from foreign markets. Following Verwall and Donkers (2002) and Ellis (2007), the question was designed for respondents to indicate the relative share of their total revenue derived from sales activities in the previous three years rather than directly the international share as a percentage of total sales. The source of sales activities includes: (1) export sales of products produced in your firm in Korea, (2) the resale of imported products by your firms in Korea or elsewhere in the world, (3) the domestic sales of products produced by your firm in Korea, (4) domestic sales connected to licensing and royalties, (5) foreign sales connected to licensing and royalties, and (6) other sources. Scores

ranged from 0% to 100%. Among the sources, shares of only item (1) and (5) basically were summed and used, with higher scores indicating a high level of share of sales from international activities. In some case, shares estimated as revenue derived from foreign activities were also added to the sales share. The benefit of operationalising the construct using this method is that it can provide not only a more conservative measure of the share of sales from international activities but can also help in understanding the sales revenue structure of firms.

#### 6.4.5.2 Number of foreign markets supplied

To capture international scope by which firms expand their operations, the number of foreign markets supplied was taken into account as another proxy for international performance. This dimension examines the extent to which a responded firm enters foreign markets outside its home base (Fernhaber et al., 2008). As one of the core indicators of international performance, the breadth of internationalisation has been well-established and a variety of methods have been employed, in an attempt to capture the international scope (e.g., Beamish and Munro, 1987; Bloodgood et al., 1996; Calof, 1993; Diamantopoulos and Inglis, 1988; Fernhaber et al., 2008; Jantunen et al., 2005; Preece et al., 1999; Sullivan, 1994; Zahra et al., 2000). For instance, Fernhaber et al. (2008) used the number of continents from which a venture generated revenue, while Beamish and Munro (1987) and Calof (1993) adopted the number of countries or regional markets to which a firm exports. Sullivan (1994) captured the extent of subsidiary dispersion among the ten psychic zones of the world, while Preece et al. (1999) and Diamnatopoulos and Inglis (1988) used the geographical coverage measure with six market areas with sales share: Asia, Canada, Europe, Latin America, USA, and Other. Similar to the literature thereof, Reuber and Fischer (1997) also employed the geographical scope with sales: Canada, North America, outside North America.

However, there seems to be no absolute means of accounting for the international scope of firms and some are unlikely to be fitted for rapidly internationalising SMEs. For example, using psychic distance (Johanson and Wiedersheim-Paul, 1975), as a criterion of geographical dispersion, Reuber and Fischer's (1997) measure may be inappropriate to capture the international breadth of the early internationalising firms because they are generally characterised as insensitive to psychic distance (Madsen and Servais, 1997). Sullivan's (1994) method also seems to be less useful because the small firms have very few or no subsidiaries. More noticeably, all the international scope measures established in the literature were developed for firms in western economies such as Europe and the United States. That is, it seems that none of the measures takes South Korea's geographical location into consideration. For example, the country is a long way from North America, generally regarded as the biggest market. Nonetheless, interestingly, other two big markets, Japan and China are very near. This raises the need to measure development which fits the context of South Korea. Thus, based on the extant literature, 12 countries/areas encompassing all the foreign markets were created: China, India, Japan, Southeast, Asia, North America, Latin America, the European Union, Australia and New Zealand, the Middle East, North Africa, and Sub-Saharan Africa. Respondents were asked to identify the countries/areas as foreign markets for their firm. The number of markets indicated was then summed, thereby creating the geographical diversity dimension: number of foreign markets supplied.

#### 6.4.5.3 Satisfaction with foreign market growth

While both the share of sales from international activities and the number of foreign markets supplied were measured in an objective manner, satisfaction with foreign market growth was assessed in a subjective manner. This dimension is complementary

to the objectively quantifiable measures. As a performance indicator, the use of profit-related financial information such as return on sales (ROS) and return on investment (ROI) may lead to ambiguous interpretations in small firms because rapidly internationalising SMEs may willingly reinvest their revenue in business activities such as R&D in order to enhance their capacity (McDougall et al., 1994; McDougall and Oviatt, 1996). More noticeably, many small firms are liable to be reluctant to reveal details of their financial information because of the 'tax incentive to keep income low' (Reuber and Fischer, 2002). It means that self-reported profit-related measures may be less reliable for small firms (Chandler and Hanks, 1993). It is reasonable to assume therefore that the growth-related dimension is more likely to be reflective of the assessment of international performance than the profit-related dimension in terms of its significance and accuracy.

Growth-related subjective measures of SMEs' satisfaction with their international performance are a useful indicator of their performance. Literature suggests that the perception-based assessment of performance can lead to an accurate reflection of objective measures and thus they can be regarded as valid and reliable (Chandler and Hanks, 1993; Venkatraman and Ramanujam, 1987). Thus, based on previous research (Cavusgil and Zou, 1994; Han and Celly, 2008; Knight et al., 2004; Kuivalainen et al., 2007), two indicators were captured: international sales growth rate and international market share. Respondents were asked to evaluate their level of satisfaction with each growth-related activities in comparison with their major market competitors over the previous three years. The two items were measured on a five point Likert scale ranging from 1 (very low) to 5 (very high) and then summed to create another international performance dimension: satisfaction with foreign market growth.

## **6.5 Analytical Procedures and Techniques**

Multivariate analytical techniques were used to examine the robustness of the constructed variables and to test hypotheses. Multicollinearity of the constructs and common method bias, with considerations of the source of and the collection method of the data, were assessed to avoid potential bias which could give rise to serious concerns about the results of the study. Reliability analyses of the constructs were performed in two ways: internal consistency analysis with Cronbach alpha values and composite reliability. Following the two-step approach recommended by Anderson and Gerbing (1988), in the first step, the measurement model was estimated with confirmatory factor analysis (CFA). The measurement model allows for examinations of construct reliability and validity. In the second step, the structural model was estimated to perform hypothesis testing. As a main analytical technique to conduct these analyses, structural equation modelling was performed using AMOS version 16, based on the maximum likelihood (ML) estimation method. The ML method, a technique which is most widely used in structural equation modelling, tends to produce unbiased estimates under moderate violations of normality (Bollen, 1989; Browne and Cudeck, 1993; Hair et al., 2006). The choice of the appropriate estimation technique is critical in estimating accurate parameter estimates (Hoogland and Boomsma, 1998; Monsen and Boss, 2009).

Structural equation modelling is defined as a “multivariate technique combining aspects of factor analysis and multiple regression that enables the researcher to simultaneously examine a series of interrelated dependence relationships among the measured variables and latent constructs (variables) as well as between several latent constructs” (Hair et al., 2006: 710). The structural equation model is a combination of factor analysis and path analysis, which permit direct and indirect effects between factors (Bollen, 1989). Each of the constructs (latent variables) routinely includes



multiple indicators. This technique was used for two key reasons; First, structural equation modelling allows for the simultaneous testing of multiple regression equations including both direct and indirect effects. It is thus particularly powerful and preferred when testing mediating constructs (Frazier et al., 2004; Wu et al., 2008). Second, as testing simultaneously interdependencies of constructs, this technique also helps to avoid bias which may cause by running individual regressions, by incorporating measurement errors into the model (Edelman et al., 2005; Monsen and Boss, 2009). This type of approach has been used to investigate the performance of early internationalising SMEs (e.g., Knight and Cavusgil, 2004; Knight et al., 2004; Yli-Renko et al., 2001; Zhou et al., 2007).

In structural equation modelling, the overall goodness-of-fit of the hypothesised model is assessed by several fit indices:  $\chi^2$  value; RMR; GFI; AGFI; RMSEA; NFI; TLI; and CFI. The indices assessing a model's fit are commonly divided into the two groups: absolute fit indices and incremental fit indices (Bollen, 1989). Absolute fit indices are a direct measure of how well a hypothesised model reproduces the sample data, while incremental fit indices deal with how well the hypothesised model fits relative to some restricted, nested baseline models (Hair et al., 2006; Hu and Bentler, 1998).

### **6.5.1 Absolute fit indices**

The  $\chi^2$  statistic, as a fundamental measure of absolute fit, quantifies the differences between the observed and estimated covariance matrices, which is the key value in assessing how well a model fits in structural equation modelling (Hair et al., 2006). However, since it is sensitive to the large size of the sample and assumes a perfect fit between the hypothesised model and the sample data, the  $\chi^2$  statistic in a complex model tends to be most inflated, thereby indicating significance of the associated p-value. Thus,

in most cases, the model fit is assessed with alternative fit indices (Bollen, 1989; Hu and Bentler, 1995; Joreskog, 1993; Tanaka, 1993).

The commonly used alternative fit indices include normed  $\chi^2$  ( $\chi^2/\text{df}$ ), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), root mean square residual (RMR), and root mean square error of approximation (RMSEA) (Shah and Goldstein, 2006). The  $\chi^2/\text{df}$ , which is a ratio of  $\chi^2$  value to the degree of freedom, is often used instead to address the limitation of the  $\chi^2$  value. As a rule of thumb, an  $\chi^2/\text{df}$  ratio of less than 3.00 indicates an acceptable model fit for the hypothesised model (Carmines and McIver, 1981; Hair et al., 2006). As early attempts to produce a model fit statistic, the GFI and the AGFI, which adjusts GFI by a ratio of degrees of freedom in a model, are suggested. With being more sensitive to sample size and more robust against normality, the two indices measure the extent to which the hypothesised model accounts for the variances and covariances. The possible range of the GFI and AGFI is 0 to 1.00, with values greater than 0.90 typically considered good and values from 0.80 to 0.90 considered moderate (Bentler and Bonett, 1980; Hair et al., 2006). The AGFI values are typically lower than GFI values in proportion to model complexity (Hair et al., 2006: 747). The RMR is referred to as the average difference of the residuals between the elements in the sample and hypothesised covariance (Hair et al., 2006). Lower values of RMR indicate better fit and a value of less than 0.05 is typically considered as desirable (Browne and Cudeck, 1989). The RMSEA is another alternative attempt, which “better represents how well a model fits a population, not just a sample used for estimation” (Hair et al., 2006: 748), and thus suggested analyses relying on maximum likelihood (Browne and Cudeck, 1993). An RMSEA value less than 0.10 is typically acceptable (Hair et al., 2006). However, in a conservative measure, the value should be less than 0.08 (Bagozzi and Yi, 1988; Joreskog and Sorbom, 1993). Thus, the GFI and AGFI increase as goodness-of-fit becomes improved and are likely to be above by 1.00, while

the RMR and RMSEA decrease as the model fit increases and are likely to be below zero (Browne and Cudeck, 1989).

### **6.5.2 Incremental fit indices**

Incremental fit indices differ from absolute fit indices in that they are used to compare the hypothesised model with alternative models such as a null model or nested models. Some of the most frequently employed incremental fit indices include the normed fit index (NFI), non-normed fit index (NNFI) or the Tucker-Lewis index (TLI), and comparative fit index (CFI) (Hair et al., 2006; Hu and Bentler, 1999). Bentler and Bonnet's (1980) NFI measures the extent to which the goodness-of-fit of the hypothesised model improves over the null model. It ranges between 0 and 1.00 and the closer its value is to 1, the better the fit. Bentler's (1990) CFI is based on the NFI, including model complexity in a fit measure (Hair et al., 2006). The CFI checks for non-normal distributions and its cut-off threshold is greater than 0.90 (Browne and Cudeck, 1993). The TLI is referred to as "the percentage of observed-measure co-variation explained by a given measurement or structural model" (Anderson and Gerbing, 1988: 421). In most cases, the TLI is regarded as a more accurate index than the NFI in that it is more robust in reflecting the goodness-of-fit of the hypothesised model irrespective of sample size (Anderson and Gerbing, 1988; Bentler, 1989). A high value of the TLI means a better fit, approaching 1.00. However, this index is not normed and thus its value can fall below zero or above 1.00 (Hair et al., 2006). In practice, the TLI is very similar to the CFI because both of them provide robust values in sample size.

## **6.6 Assessment of Sample Size**

Sample size is critical in that it provides a basis for the estimation of sampling errors (Hair et al., 2006). Although criteria of minimum sample sizes vary depending on analysis procedures and model characteristics (MacCallum, 2003; MacCallum et al., 2001), in general they can be assessed with two considerations of ‘the ratio of respondents to parameters’ and ‘estimation technique’. The rationale for this is that the more parameters to be estimated, the higher the ratio of respondents to parameters needs. According to Hair et al. (2006: 740), “a generally accepted ratio to minimise problems with deviations from normality is 15 respondents for each a parameter in the model” (Hair et al., 2006: 740). Given the sample size of 271 and parameters of 18 to be estimated in this study, the sample size slightly exceeded the ratio ( $15 \times 18 = 270$ ). It has been reported that the use of maximum likelihood (ML) as an estimation method in structural equation modelling provides valid results with sample size of 50, but the ML solution is stable with the sample size of 100 to 150 (Hair et al., 2006). To secure a sound basis for estimation, a sample size of 200 or more is highly recommended (Hair et al., 2006; Weston and Gore, 2006). Given that the ML method is sensitive to larger sample size ( $>400$ ) (Tanaka, 1993), it is suggested that the sample size falls to between 150 and 400 (Hair et al., 2006). Thus, the sample size of 271 was appropriate to estimate parameters and to test the hypotheses using structural equation modelling.

## **6.7 Data Screening**

As structural equation modelling is employed for data analysis, it is critical to screening the original data carefully for missing data, data distribution normality, and outliers should be taken prior to generating an input matrix and conducting analysis (Hair et al.,

2006; Kline, 2005; Shah and Goldstein, 2006). For instance, significant missing values result in convergence failures, biased parameter estimates, and inflated fit indices (Brown, 1994; Muthen et al., 1987) and departures from normality are linked to skewness and kurtosis issues with measures (Hair et al., 2006; Kline, 2005). Thus, appropriate data screening helps to secure the powerful capabilities of the technique and to generate accurate structural coefficients (Hair et al., 2006). Following Kline (2005), all the constructs were examined for missing values, outliers and distributional characteristics. The results revealed that no influential outliers were found, whereas a high kurtosis was found in 'number of foreign markets supplied (kurtosis = 3.91)'. If the value of either kurtosis or skewness calculated exceeds the critical value of  $\pm 2.58$  (0.01 significance level), which is the most commonly used, this means that the distribution is nonnormal in terms of characteristic (Hair et al., 2006). In structural equation modelling, since restrictive simplifying assumptions such as kurtosis are critical (Shah and Goldstein, 2006), the natural log transformation of the construct was used in the analysis in order to achieve normality and quality of variance in the construct. To deal with a few missing values detected, mean substitution was applied, which is one of the widely used methods. The missing values were replaced with the mean value of the constructs calculated from all valid values (Hair et al., 2006). This method has been adopted by previous studies (e.g., Edelman et al., 2005; Wu et al., 2008).

## **6.8 Construct Analysis**

### **6.8.1 Descriptive statistics of the items used**

Table 6.7 shows descriptive statistics for the items used. The mean values of the three indicators used in the construct the *international business experience of managers* were 3.29, 3.95, and 3.72 on the five-point scale. The standard deviations were between 0.97

and 1.17 for all the three items. The minimum value was 1 and maximum value was 5 for all three indicators. The mean values for the four indicators used to represent the construct *number of networks for foreign activities* were 3.79, 3.70, 3.59, and 3.44, respectively, and their standard deviations were between 1.05 and 1.11. The minimum value was 1 and the maximum value was 5 for all four indicators. To assess the construct *value of networks for foreign activities*, the four items were employed. Their mean values were 4.04, 3.93, 3.80, and 3.76, respectively, and the standard deviations were between 0.93 and 1.00. The minimum value was 1 and maximum value was 5 for all the three items. The three indicators were employed to represent the construct *foreign performance capacity*. The mean values of the items were 3.44, 3.35, and 3.47, respectively, and the standard deviations were 0.93, 0.91, and 0.82, respectively. With respect to the range of the value, the minimum was 1.00, while the maximum was 5.00 for all the three indicators. The mean values for the two items employed to represent the construct *satisfaction with foreign market growth* were 3.19 and 2.89, respectively, with respective standard deviations of 1.14 and 1.03. The minimum value was 1 and the maximum value was 5 for all the two indicators. The construct *share of sales from international activities*, as a single indicator, had a mean of 44.52 and a standard deviation of 32.08, with a respective minimum value (1.00) and maximum value (100.00). The descriptive statistics of the construct *number of foreign markets supplied* revealed that its mean value was 3.86 with a standard deviation of 2.18. The minimum value was 1.00, while the maximum value was 12.00.

### **6.8.2 Correlations**

Using the Pearson correlation  $r$ , which estimates the degree of linear association between two continuous constructs, correlation analyses were conducted. The correlation value in theory ranges from -1.00 to +1.00 (Kline, 2005). The correlations of

10 constructs including control variables are given in Table 6.8. Overall correlations among the constructs were moderate, but some deserve additional discussion. The number of networks and the value of networks were relatively highly correlated ( $r=0.59$ ,  $p<0.01$ ). This might imply that a higher value of business contacts leads to a larger number of the relationships, as hypothesised. Foreign performance capacity was also highly correlated with satisfaction with foreign market growth ( $r=0.59$ ,  $p<0.01$ ). The foregoing relationships had the equal correlation coefficient of .59 ( $p<0.01$ ), with the highest value among all the correlations. On the contrary, it was found that value of networks was insignificantly correlated with the share of sales from international activities ( $r=0.09$ ,  $p=n.s.$ ). It may mean that the value of linkages with partners *per se* is not necessarily associated with revenue derived from international activities. It is likely therefore that an intervention may be necessary to have the valuable activities of networks linked with activities of international sales. Noticeably, it was found that the number of foreign market supplied was significantly correlated with all control variables: firm size ( $r=0.17$ ,  $p<0.01$ ), length of international experience ( $r=0.18$ ,  $p<0.01$ ), and R&D intensity ( $r=0.15$ ,  $p<0.05$ ). However, the result of alternative models including these control variables shows that these correlations do not undermine the use of the variables used to test the hypotheses. (For more detail, see Table 7.4)

Table 6.7: Descriptive statistics for the items used

Construct	Item	Statistics			
		Mean	SD	Min	Max
International business experience of managers	International business experience	3.29	1.17	1.00	5.00
	Experience of foreign travel	3.95	0.97	1.00	5.00
	Experience in foreign language	3.72	1.03	1.00	5.00
Number of networks for foreign activities	Product development for foreign markets	3.79	1.11	1.00	5.00
	Developing foreign market supply channels	3.70	1.08	1.00	5.00
	Developing foreign market intelligence	3.59	1.05	1.00	5.00
	R&D for foreign market development	3.44	1.08	1.00	5.00
Value of networks for foreign activities	Product development for foreign markets	4.04	0.93	1.00	5.00
	Developing foreign market supply channels	3.93	0.95	1.00	5.00
	Developing foreign market intelligence	3.80	0.96	1.00	5.00
	R&D for foreign market development	3.76	1.00	1.00	5.00
Foreign performance capacity	International customer satisfaction	3.44	0.93	1.00	5.00
	Technology development from international activities	3.35	0.91	1.00	5.00
	Knowledge acquisition of international markets	3.47	0.82	1.00	5.00
Satisfaction with foreign market growth	International growth rate	3.19	1.14	1.00	5.00
	International market share	2.89	1.03	1.00	5.00
Share of sales from international activities		44.52	32.08	1.00	100.00
Number of foreign markets supplied		3.86	2.18	1.00	12.00



Table 6.8: Descriptive statistics and correlations among constructs

Construct	Mean	SD	1	2	3	4	5	6	7	8	9
1. International business experience of managers	3.65	0.88	1.00								
2. Number of networks for foreign activities	3.63	0.90	0.24**	1.00							
3. Value of networks for foreign activities	3.88	0.81	0.32**	0.59**	1.00						
4. Foreign performance capacity	3.42	0.71	0.26**	0.41**	0.39**	1.00					
5. Satisfaction with foreign market growth	3.03	1.00	0.28**	0.29**	0.20**	0.59**	1.00				
6. Share of sales from international activities	44.52	32.08	0.23**	0.21**	0.09	0.23**	0.40**	1.00			
7. Number of foreign markets supplied <sup>1</sup>	3.86	2.18	0.27**	0.21**	0.22**	0.20**	0.22**	0.27**	1.00		
8. Firm size	41.00	41.42	0.15*	-0.01	-0.03	-0.01	0.12	0.07	0.17**	1.00	
9. Length of international business	6.51	4.26	0.06	-0.03	-0.04	0.07	0.11	0.14**	0.18**	0.27**	1.00
10. R&D intensity	2.41	1.20	0.08	0.02	0.05	0.08	-0.05	0.05	0.14*	-0.04	-0.10

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

<sup>1</sup> Log transformation

### **6.8.3 Assessing multicollinearity**

Multicollinearity represents “the degree to which any variable’s effect can be predicted or accounted for by the other variables in the analysis. As multicollinearity rises, the ability to define any variable’s effect is diminished. The addition of irrelevant or marginally significant variables can only increase the degree of multicollinearity, which makes interpretation of all variables more difficult” (Hair et al., 2006: 24). As shown in Table 6.8, although correlation coefficients among constructs are moderate, multicollinearity was checked with variance inflation factor (VIF) values using SPSS to assess the possibility of multicollinearity. The VIF values which are well below the common cut-off threshold of 10.00 indicate the absence of multicollinearity (Hair et al., 2006). The results revealed that, in all cases, the VIF statistic was well below the cut-off of 10.00, ranging from 1.042 to 1.882. The results are consistent with the rule of thumb recommended by Hair et al. (2006). Multicollinearity is therefore unlikely to threaten parameter estimates.

### **6.8.4 Assessing common method bias**

Data for all the constructs were obtained from a single informant based on our single-respondent questionnaire. Single informants have been extensively employed in management research and are considered a reliable source when the informant is senior enough in an organisation (BarNir and Smith, 2002). However, reliance on the same source using a questionnaire could bring about common method bias. In an attempt to limit and assess its potential effect, several steps were taken. First, all psychometric properties were measured with multiple items because response biases are shown to be more problematic at the item level than at the construct level (Harrison et al., 1996). Secondly, as a more stringent fashion, the common method bias was assessed with a post-hoc analysis with Harman’s one factor test on all the items (Podsakoff and Organ,

1986). All the constructs were entered into an exploratory factor analysis. The basic assumption of this technique is that “if a substantial amount of common method variance is present, either (a) a single factor will emerge from the factor analysis, or (b) one ‘general’ factor will account for the majority of the covariance in the interdependent and criterion variables” (Podsakoff and Organ, 1986: 536). The results revealed that no single factor emerged, nor was there a general factor which accounted for the majority of variance, with the largest factor explaining only 28.2%. These results indicated that common method bias is not likely to be a significant problem. As an additional safeguard, confirmatory factor analysis was estimated in a way which all items were restricted with loadings on a single factor. The underlying assumption is that if common method bias is present, the confirmatory factor analysis which contains all of the constructs should yield a single method factor (Podsakoff et al., 2003). The fit indexes obtained from this analysis revealed a very poor model fit ( $\chi^2=949.49$  (df=98, p=0.000),  $\chi^2/df=9.689$ , GFI=0.663, AGFI=0.533, RMR=0.137, RMSEA=0.179, NFI=0.587, TLI=0.522, CFI=0.610). These results provide additional evidence that common method bias is unlikely to account for any observed relationships among the constructs.

### **6.8.5 Construct reliability and validity**

To assess reliability and validity of the constructs, following the two-step approach (Anderson and Gerbing, 1988), the measurement model was created by performing confirmatory factor analysis with no relations. The confirmatory factor analysis enables the researcher to test how well measured indicators represent the constructs (Hair et al., 2006). As indicated earlier, the fundamental model fit index is the  $\chi^2$  value. However, as it is very sensitive to sample size, the  $\chi^2$  value generated from a test involving large sample size in general rejects the model even if it is appropriate (Bagozzi and Baumgartner, 1994). To remedy this concern, several indices including absolute and

incremental ones were used to assess the goodness-of-fit of the measurement model (Bollen, 1989, Bryne, 2001). Although the  $\chi^2$  value was significant ( $\chi^2 = 156.03$  (df=110, p=0.003), values on all the goodness-of-fit indices were within an acceptable range ( $\chi^2/df=1.418$ , RMR=0.047, GFI=0.940, AGFI=0.907, RMSEA=0.039, NFI=0.935, TLI=0.972, CFI=0.980). Thus, a satisfactory model fit was achieved.

#### 6.8.5.1 Construct reliability

Reliability is referred to as “the extent to which a variable or set of variables is consistent in what it is intended to measure (Hair et al., 2006: 3)”. That is, if multiple measurements are taken, the reliable measures will all be consistent in their values. In this sense, reliability assesses “the degree of consistency between multiple measurements of a variable” (Hair et al., 2006: 137). Internal consistency was assessed using Cronbach alpha values and item-total correlation (Hair et al., 2006; Kline, 2005; Nunnally and Bernstein, 1994). The Cronbach alpha value’s conservative “rule of thumb” is 0.70 (Nunnally, 1978). Table 6.9 presents the Cronbach alpha values of reliability for all the constructs with multiple items found above the acceptable level of 0.70, ranging from 0.705 to 0.868. The item-total correlation measures the strength of association between an item and the remainder of its scale and a value that exceeds 0.4 is considered acceptable (Nunnally and Bernstein, 1994). As shown in Table 6.9, the values of item-total correlations ranged from 0.430 (for international customers satisfaction) to 0.783 (for developing foreign market intelligence).

It appears however that debates about which of several reliability estimates is to be preferred remain open (Bacon et al., 1995). For example, the Cronbach alpha value, albeit widely used, may be an inferior measure of reliability because in many cases it is only a lower bound on reliability (Bollen, 1989). With these considerations, it is recommended that composite reliability based on estimated model parameters be

reported (Bollen, 1989; Shah and Goldstein, 2006). The construct reliability is defined as “a measure of reliability and internal consistency of the measured variables representing a latent construct” (Hair et al., 2006: 771). The rationale behind it is that the indicators all consistently represent the same construct and thus the existence of internal consistency of the constructs is evident in high composite reliability (Hair et al., 2006). As a more stringent value to measure reliabilities, this composite reliability is frequently employed in conjunction with structural equation modelling (Hair et al., 2006). Construct reliability values of 0.70 or above suggests a good reliability for the construct. Although the value is between 0.60 and 0.70, the construct reliability may be acceptable provided that other indicators of a model’s construct validity are satisfactory (Hair et al., 2006). Following the procedure recommended by Fornell and Larcker (1981), the composite reliability was calculated. The specific formula is;

$$CR = \frac{(\sum_{i=1}^n \lambda_i)^2}{(\sum_{i=1}^n \lambda_i)^2 + (\sum_{i=1}^n \varepsilon_i)}$$

$CR$  = composite reliability

$\lambda_i$  = the squared sum of factor loadings

$\varepsilon_i$  = the sum of the error variance terms for a construct

As shown in Table 6.9, the construct reliabilities for all the constructs ranged from 0.684 to 0.881, exceeding acceptable standards except in the case of foreign performance capacity which was 0.684. Table 6.10 shows however that standardised factor loadings of the three indicators for this variable were all greater than 0.50 ( $p < 0.01$ ). This demonstrated that the composite reliability of the construct of foreign performance capacity was acceptable (Hair et al., 2006).

Table 6.9: Reliabilities of the constructs used

Construct	Item	Internal reliability		Composite reliability
		Cronbach $\alpha$	Item-total correlation	
International business experience of managers	International business experience	0.782	0.590	0.768
	Experience of foreign travel		0.642	
	Experience in foreign language		0.643	
Value of networks	Product development for foreign markets	0.868	0.673	0.881
	Developing foreign market supply channels		0.722	
	Developing foreign market intelligence		0.783	
	R&D for foreign market development		0.705	
Number of networks	Product development for foreign markets	0.855	0.660	0.828
	Developing foreign market supply channels		0.690	
	Developing foreign market intelligence		0.763	
	R&D for foreign market development		0.682	
Foreign performance capacity	International customer satisfaction	0.705	0.430	0.684
	Technology development from international activities		0.606	
	Knowledge acquisition of international markets		0.546	
Satisfaction with foreign market growth	International growth rate	0.818	0.696	0.794
	International market share		0.696	

Note: A single indicator can be fixed at 1 which is the same as  $R^2$ .

#### 6.8.5.2 Construct validity

Construct validity is referred to as “the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure” (Hair et al., 2006: 771). That is, the concept is related to the extent to which measures correctly represent the constructs of study, thus dealing with the accuracy of measurement (Hair et al., 2006). According to Clark and Watson (1995: 310), “the most precise and efficient measures are those with established construct validity; they are manifestations of constructs in an articulated theory that is well supported by empirical data”. The construct validity was assessed by examining convergent validity and discriminant validity (Campbell and Fiske, 1959).

Convergent validity is defined as “the extent to which indicators of a specific construct converge or share a high proportion of variance in common” (Hair et al., 2006: 771). This definition means that central to the construct validity is the notion of unidimensionality. That is, a construct is invalid without having only one underlying concept (Churchill, 1979) and thus careful assessment of unidimensionality prior to estimating construct validity should be paramount (Gerbing and Anderson, 1988). In this respect, confirmatory factor analysis provides a more rigorous vehicle by testing for the unidimensionality of the scales of the constructs on a stringent basis (Gerbing and Anderson, 1988). The convergent validity of the constructs was estimated with factor loadings and *t*-values (Anderson and Gerbing, 1988; Bagozzi and Yi, 1988; Joreskog and Sorbom, 1993). According to Anderson and Gerbing (1988: 16), “convergent validity can be assessed from the measurement model by determining whether each indicator’s estimated pattern coefficient on its posited underlying construct factor is significant (greater than twice its standard error)”. Additionally,  $R^2$  values measuring the strength of the linear relationships were examined (Joreskog and Sorbom, 1993). The measurement model results, as shown in Table 6.10, present the standardised factor

loadings, the  $t$ -values, and the  $R^2$  values. In the measurement model, the indicators of the constructs loaded on only their designated construct, without cross-loadings, and each loading of the constructs was even greater than twice its standard error and significant at the 0.01 level (Anderson and Gerbing, 1988). In more detail, all the path coefficients from the five constructs to the 16 indicators were statistically significant. All the  $t$ -values considerably exceeded the standard of 2.00, with the lowest  $t$ -value being 7.385, as cut-off threshold recommended by Anderson and Gerbing (1988), indicating satisfactory convergent validity for all the constructs. Overall assessment of  $R^2$  values was also acceptable. This demonstrates that the linearity of the relations between the constructs and the indicators were significantly strong in all cases, with just one exception. For the item *knowledge acquisition of international markets*, included in the construct of foreign performance capacity, the linearity of the relations was relatively weaker, with an  $R^2$  value of 0.25. Although the  $R^2$  value of this indicator was lower than that of the other indicators, its high  $t$ -value indicated that it was highly significant. Furthermore, the extant relevant literature supports that this indicator is essential in explaining the construct foreign performance capacity. This approach was taken by Andersson et al. (2002, 2007). These results provide evidence that all the constructs are homogeneous, in support of convergent validity.



Table 6.10: Measurement model results

Constructs and indicators	Factor loading <sup>1</sup>	t-value	R <sup>2</sup> value
<b><i>International business experience of managers (IBE)</i></b>			
Assess your top management in the following areas:			
Our top management possesses a great deal of international business experience.	0.706	-	0.498
Our top management has extensive experience of foreign travel.	0.748	9.892	0.560
Our top management is experienced in foreign language.	0.780	10.012	0.608
<b><i>Value of networks for foreign activities (VN)</i></b>			
What is your assessment of the value to your firm of your network relationships in the following areas?:			
Product development for foreign markets	0.717	-	0.514
Developing foreign market supply channels	0.824	13.501	0.680
Developing foreign market intelligence	0.871	13.935	0.758
R&D for foreign market development	0.753	12.722	0.567
<b><i>Number of networks for foreign activities (NN)</i></b>			
Approximately how many relationships does your firm have to develop the following activities?:			
Product development for foreign markets	0.625	-	0.391
Developing foreign market supply channels	0.783	11.039	0.613
Developing foreign market intelligence	0.920	11.577	0.846
R&D for foreign market development	0.705	12.075	0.498

Table 6.10: *Continued*

Constructs and indicators	Factor loading <sup>1</sup>	t-value	R <sup>2</sup> value
<b><i>Foreign performance capacity (FPC)</i></b>			
How would you rate your firm's performance in comparison with your major market competitors over the past three years?:			
International customer satisfaction	0.717	-	0.515
Development of technology from international activities	0.566	8.303	0.323
Knowledge acquisition of international markets	0.504	7.385	0.254
<b><i>Satisfaction with foreign market growth (SFMG)</i></b>			
How would you rate your firm's performance in comparison with your major market competitors over the past three years?:			
International growth rate	0.783	-	0.614
International market share	0.889	13.244	0.790
<b><i>Share of sales from international activities<sup>2</sup> (SSIA)</i></b>	1	-	1
<b><i>Number of foreign markets supplied<sup>2</sup> (NFMS)</i></b>	1	-	1
<b><i>Model fit</i></b>			
$\chi^2 = 156.03$ (df=110, p=0.003), $\chi^2/df = 1.418$ , RMR = 0.047, GFI = 0.940, AGFI = 0.907, RMSEA = 0.039, NFI = 0.935, TLI = 0.972, CFI = 0.980			

Note: <sup>1</sup> Standardized factor loading

<sup>2</sup> The measure coefficient was fixed at 1.0 and the error variance equal to 0. By using this method, this indicator is assumed to be a perfect measure of each of constructs (Hair et al., 2006).

\* All constructs except SSIA and NFMS were measured by a five point Likert scale. SSIA and NFMS were measured by reported data from respondents.

Discriminant validity is defined as “the extent to which a construct is truly distinct from other constructs” (Hair et al., 1998). Discriminant validity was assessed in three ways. First, it was estimated in the measurement model (Joreskog and Sorbom, 1993). This method has been accepted by the previous literature (e.g., Andersson, 2007; Chetty et al., 2006; Eriksson et al., 1997). As presented in Table 6.10, the set of constructs had satisfactory discriminant validity, as key statistical estimates revealed absence of unidimensionality. Second, the discriminant validity was also examined by comparing a constrained model with an unconstrained model in a series of two-factor confirmatory factor analysis models (Anderson and Gerbing, 1988). The two constructs are distinct if the  $\Delta\chi^2$  value is significantly lower for the unconstrained model using a  $\chi^2$  difference test (Bagozzi and Philips, 1982). This method has been adopted by a number of studies (e.g., Hult et al., 2007; Li et al., 2009; McEvily and Marcus, 2005; Mesquita and Lazzarini, 2008; Wu et al., 2007). With 27 pairs in total, which are all possible pairs of constructs ( $7H_2$ ), each model was run twice, once constraining the covariance ( $\phi$ ) coefficient to equal 1.00 and once freeing this parameter. In all cases, the  $\chi^2$  value for the unconstrained model was significantly lower ( $p < 0.05$ ) than the  $\chi^2$  value for the constrained model, with excess of the critical value ( $\Delta\chi^2_{(\Delta d.f = 1)} > 3.84$  (Diamantopoulos and Siguaw, 2000)).  $\Delta\chi^2_{(\Delta d.f = 1)}$  values were all fallen within the range from 8.0 to 119.4 (For example, international business experience of managers – number of networks:  $\Delta\chi^2_{(\Delta d.f = 1)} = 78.2$ ; number of networks – value of networks:  $\Delta\chi^2_{(\Delta d.f = 1)} = 62.0$ ; foreign performance capacity – satisfaction with foreign market growth:  $\Delta\chi^2_{(\Delta d.f = 1)} = 23.7$ ). This means that correlations between constructs are statistically and significantly different from 1.00 which means a perfect correlation (Bagozzi and Yi, 1988). These results provide evidence that the discriminant validity for all the constructs is secured. Third, as a step taken to further secure the degree of separation between constructs, the confidence interval test was conducted to assess whether this interval of each of pairs of

the constructs include the value of 1.00, by calculating a confidence interval of the coefficient values ( $\pm 2$  standard errors). Unless it includes 1.00, or significantly less than the value of 1.0, discriminant validity is demonstrated (Anderson and Gerbing, 1988; Bagozzi and Yi, 1988). This method also has been used in similar studies (e.g., Katsikea et al., 2009; Sousa and Bradley, 2006). In none of the cases did the confidence interval contain the value of 1.00, thereby further supporting discriminant validity among the constructs. Details of confidence interval test for all pairs of the constructs are located in Appendix III.

## **6.9 Summary and Discussion**

The interest of this research lies in South Korean SMEs that had entered foreign markets within 6 years from outset. Three criteria used to identify the early internationalising firms secure the representativeness of the sample: an SME in size, internationalisation within 6 years of formation and an independent firm. As there is no unique database of such businesses in South Korea, a number of sources were used to build a reliable sampling frame. To improve clarity, several steps were taken to develop the questionnaires. A web-based survey was employed as the most suitable for data collection across several industry sectors and data was obtained from information provided by the firm's CEO or managing directors. These data collection procedures led to the final sample of 271, yielding a response rate of 18.5%. The sample size of 271 is acceptable to estimate parameters and test hypotheses using structural equation modelling. Results from the assessment of non-response bias reveal that these methods secured a representative sample.

The general and international activity characteristics of the sample reveal that the vast majority of sampled firms are located in a high-technology industry, and have a

relatively high volume of foreign sales. Notably, although export is the dominant entry mode, a number of the sampled firms began internationalisation within 3 years of formation using diverse entry modes. Nearly all the sampled SMEs had operational experience in multiple foreign markets.

Operationalisations of the key variables used in this study are presented to test the conceptual model. To avoid potential bias that may pose a serious threat to the results, data screening such as normality, multicollinearity between constructs and common method variance were checked for. Reliability of the variables was assessed using both Cronbach alpha values and composite reliability measures. Construct validity was assessed by examining convergent and discriminant validity. Specifically, convergent validity was estimated with factor loadings and *t*-value in the measurement model. Discriminant validity is assessed in a more stringent way which uses three methods: estimation in the measurement model; comparison of a constrained model with an unconstrained model and a confidence interval test. The results indicate that the reliability and validity of the constructs are secured. This series of data collection procedures and construct analysis therefore provide secure underpinnings for hypothesis testing.

## CHAPTER 7: RESULTS AND DISCUSSION

### 7.1 Introduction

This chapter first presents the results of hypothesis testing and further analyses with *post-hoc* testing. The findings in relation to the Research Questions are then discussed, followed by discussion of the results relating to the literature. In particular, Research Questions 1 and 2 are answered using the findings from the descriptive analyses of data obtained from a survey using a questionnaire and the secondary data on SMEs in South Korea. The remaining research questions are answered and the findings discussed using the results of the structural equation model.

### 7.2 Hypothesis Testing

To best capture the relationships among the constructs, a structural model was identified using structural equation modelling. The validity of the model was assessed with several goodness-of-fit indices, which are the same as those used for the measurement model. The model tested is shown in Figure 7.1. Although the  $\chi^2$  value was significant ( $\chi^2=236.56$  (df=123, p=0.000)), the model fit was acceptable considering that all the fit indices were well above or below the cut-off threshold or very close to it ( $\chi^2/df=1.923$ , RMR=0.058, GFI=0.912, AGFI=0.877, RMSEA=0.058, NFI=0.902, TLI=0.937, CFI=0.950). As the next phase of the model fit evaluation, it is important to interpret the structural path coefficients to test hypotheses by assessing the strength and significance of these relationships (Goerzen and Beamish, 2003). The results confirm all of the hypotheses at the 0.01 significance level. Table 7.1 reports the results of hypothesis testing.

**7.2.1 Hypothesis 1:** *The international business experience of managers is positively associated with foreign performance capacity.*

Hypothesis 1 postulated that the *international business experience of managers* would be positively associated with *foreign performance capacity*. The results from hypothesis testing show that the *international business experience of managers* exerts a significant effect on *foreign performance capacity* ( $\beta=0.266$ ,  $p<0.01$ ), in support of Hypothesis 1.

**7.2.2 Hypothesis 2:** *The international business experience of managers is positively associated with the value of networks.*

In Hypothesis 2, it was hypothesised that the *international business experience of managers* would be positively connected to the *value of networks* for foreign activities. That is, it is likely that managers with good backgrounds in international business in Born Globals play a crucial role in forming the valuable networks necessary for engagement in international business activities. The coefficient ( $\beta=0.385$ ,  $p<0.01$ ) confirms that the *international business experience of managers* is a significant determinant of the *value of networks* for international activities, thus providing support for Hypothesis 2.

**7.2.3 Hypothesis 3:** *The value of networks is positively associated with the number of networks.*

Hypothesis 3 predicted the positive relationship between the *value of networks* and the *number of networks* for foreign activities. The coefficient ( $\beta=0.620$ ,  $p<0.01$ ) between the *value of networks* and the *number of networks* provides support for the view that the *value of networks* is a significant antecedent of the *number of networks*, in support of Hypothesis 3.

**7.2.4 Hypothesis 4:** *The number of networks is positively associated with foreign performance capacity.*

Hypothesis 4 postulated the positive effect of *number of networks* on *foreign performance capacity*. From the results, a significantly positive linkage between the *number of networks* for foreign activities and *foreign performance capacity* is found ( $\beta=0.401$ ,  $p<0.01$ ). Thus, Hypothesis 4 is supported.

#### **7.2.5 Hypotheses of the association between foreign performance capacity and measures of international performance**

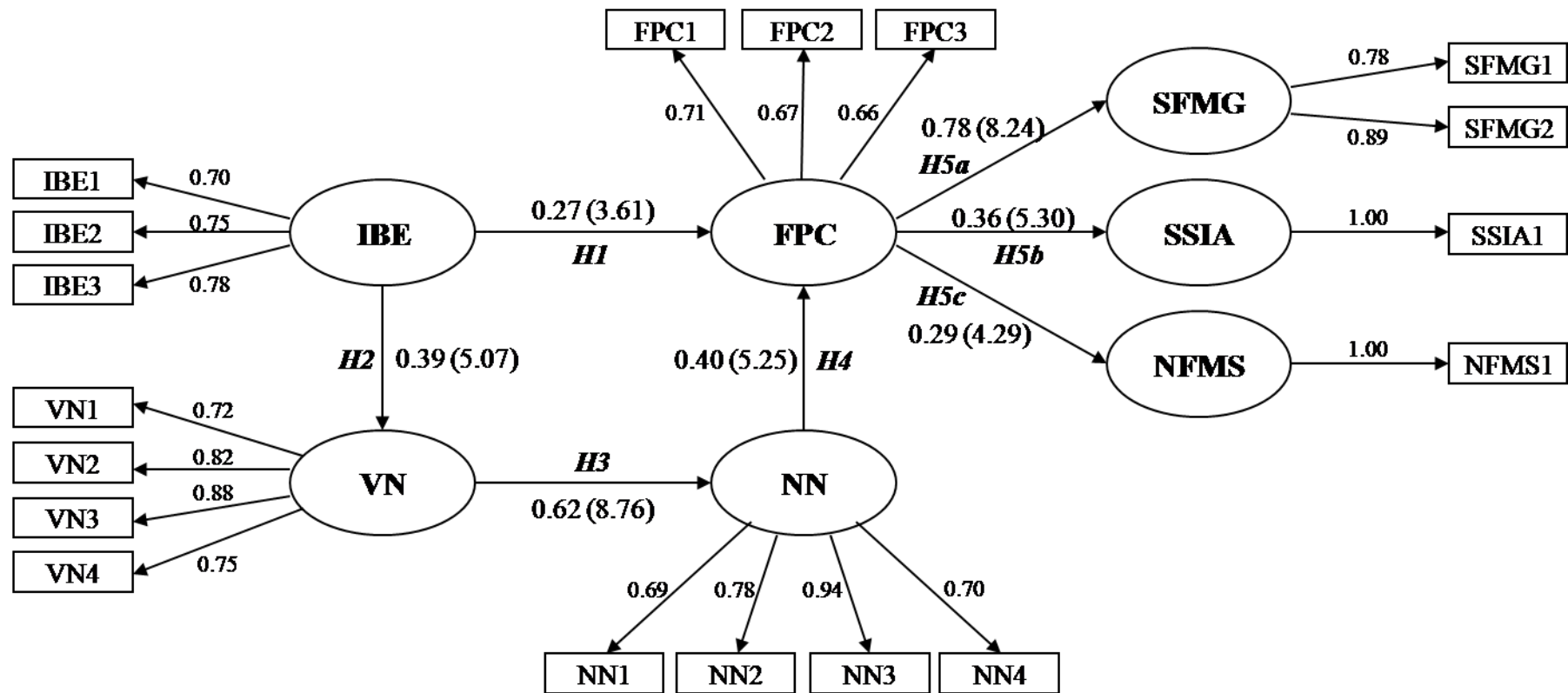
**Hypothesis 5a:** *Foreign performance capacity is positively associated with satisfaction with foreign market growth.*

**Hypothesis 5b:** *Foreign performance capacity is positively associated with the share of sales from international activities.*

**Hypothesis 5c:** *Foreign performance capacity is positively associated with the number of foreign markets supplied.*

In the connection between *foreign performance capacity* and international performance, it was hypothesised that *foreign performance capacity* would have a positive impact on international performance measures – *satisfaction with foreign market growth*, the *share of sales from international activities* and the *number of foreign markets supplied*. The results reveal that *foreign performance capacity* is significantly associated with all of the three measures of international performance with high values of coefficient: *satisfaction with foreign market growth* ( $\beta=0.783$ ,  $p<0.01$ ), *share of sales from international activities* ( $\beta=0.364$ ,  $p<0.01$ ) and *number of foreign markets supplied* ( $\beta=0.292$ ,  $p<0.01$ ). Thus, Hypothesis 5a to 5c are all supported.





Note: 1. Coefficients of postulated relationships between constructed variables (*t*-values in parentheses – all significant at 0.01 level).

2. IBE: international business experience of managers, VN: value of networks, NN: number of networks, FPC: foreign performance capacity, SFMG: satisfaction with foreign market growth, SSIA: share of sales from international activities, NFMS: number of foreign markets supplied

Figure 7.1: Results of the full model

Table 7.1: Results of hypothesis testing

No.	Hypothesized path	Unstandardised coefficient	Standardised coefficient	Standard error	t-value
1	International business experience of managers → Foreign performance capacity	0.242	0.266	0.067	3.605**
2	International business experience of managers → Value of networks	0.356	0.385	0.070	5.070**
3	Value of networks → Number of networks	0.693	0.620	0.079	8.760**
4	Number of networks → Foreign performance capacity	0.353	0.401	0.067	5.252**
5a	Foreign performance capacity → Satisfaction with foreign market growth	1.056	0.783	0.128	8.240**
5b	Foreign performance capacity → Share of sales form international activities	0.580	0.364	0.110	5.296**
5c	Foreign performance capacity → Number of foreign markets supplied	0.227	0.292	0.053	4.294**

**Model fit**

$\chi^2 = 236.56$  (df=123, p=0.000),  $\chi^2/df = 1.923$ , RMR = 0.058, GFI = 0.912, AGFI = 0.877, RMSEA = 0.058, NFI = 0.902, TLI = 0.937, CFI = 0.950

Note: \* p<0.05, \*\* p<0.01

### **7.3 *Post-hoc* Analysis**

To check for the significance of the indirect effects among variables, a *post-hoc* analysis is conducted. The indirect effect is based on the product of two unstandardised path coefficients (MacKinnon et al., 2002). For example, the indirect effect of the international business experience of managers on the number of networks through the value of networks can be achieved by multiplying the path from international business experience of managers to value of networks by the path from value of networks to number of networks. However with only coefficients of the indirect effects, their significance cannot be assessed. To test the statistical significance of the indirect effects in the relationships, the Sobel test statistic is calculated (Baron and Kenny, 1986; Sobel, 1982). The Sobel test can determine whether an indirect effect is significant or not, taking account of both unstandardised coefficients and standard errors of the direct effects (Goodman, 1960; MacKinnon et al., 1995, 2002; Sobel, 1982). Regarding explanatory power, it is reported that the Sobel test is superior to other mediation tests (MacKinnon et al., 2002; Preacher and Hayes, 2004). Although there are two other similar tests such as Aroian (1947) and Goodman (1960), it is reported that all three tests for large sample sizes generate similar results (MacKinnon et al., 2002). Since it has been widely used (Bontis et al., 2007; MacKinnon et al., 2007) and is the most conservative (MacKinnon et al., 1995), the original version of the Sobel test (Sobel, 1982) is employed to test the significance of the indirect effects among the constructs. The significance of the indirect effects is measured by the following formula:

$$Z = \frac{\alpha\beta}{\sqrt{\alpha^2\sigma_\beta^2 + \beta^2\sigma_\alpha^2}}$$

$Z$  = test statistic

$\alpha$  = unstandardised coefficient for the association between independent variable and mediator

$\beta$  = unstandardised coefficient for the association between the mediator and dependent variable

$\sigma_\alpha$  = standard error of  $\alpha$

$\sigma_\beta$  = standard error of  $\beta$

Table 7.2 reports the coefficients of the indirect effects among variables and their statistical significance determined by the Sobel test (Baron and Kenny, 1986; Sobel, 1982). The results show that all the indirect effects are significant at 0.01 level. Results of the significance test of the indirect effects are reported in Appendix IV.

Table 7.2: Results of the indirect effects

Path	Coefficient <sup>1</sup>	z statistic <sup>2</sup>
International business experience of managers → Value of networks → Number of networks	0.247 (0.356x0.693)	4.399**
Value of networks → Number of networks → Foreign performance capacity	0.245 (0.693x0.353)	4.516**
Number of networks → Foreign performance capacity → Satisfaction with foreign market growth	0.373 (0.353x1.056)	4.440**
Number of networks → Foreign performance capacity → Share of sales from international activities	0.205 (0.353x0.580)	3.727**
Number of networks → Foreign performance capacity → Number of foreign markets supplied	0.080 (0.242x0.227)	3.323**
International business experience of managers → Foreign performance capacity → Satisfaction with foreign market growth	0.256 (0.242x1.056)	3.309**
International business experience of managers → Foreign performance capacity → Share of sales from international activities	0.140 (0.242x0.580)	2.980**
International business experience of managers → Foreign performance capacity → Number of foreign markets supplied	0.055 (0.242x0.227)	2.761**

**Model fit<sup>3</sup>**

$\chi^2 = 236.56$  (df=123, p=0.000),  $\chi^2/df = 1.923$ , RMR = 0.058, GFI = 0.912, AGFI = 0.877, RMSEA = 0.058, NFI = 0.902, TLI = 0.937, CFI = 0.950

Note: \* p<.05, \*\* p<.01

<sup>1</sup> The coefficient of the indirect effects was calculated using unstandardised coefficients.

<sup>2</sup> z statistic was calculated using Sobel test.

<sup>3</sup> Since structural equation modelling allows for the simultaneous testing of both direct and indirect effects (Frazier et al., 2004), the model fit is the same as one of the direct effects in the hypothesis testing.

## 7.4 Alternative Model Strategies

To rigorously test the conceptual model, alternative model strategies were taken into account. Alternative explanations were performed in two ways. First, it may be possible that some nested models can fit the data with an acceptable goodness-of-fit. It is necessary to exclude these models on logical grounds (Anderson and Gerbing, 1988). Thus, with a theoretical foundation, tests of a series of nested models were conducted to see if the research model provides the best explanations (Anderson and Gerbing, 1988). With the research model (*Model 1*), the three nested rival models were specified:

- *Model 1* (research model)
- *Model 2* with a direct path between *international business experience of managers* and *number of networks*
- *Model 3* with a direct path between *value of networks* and *foreign performance capacity*
- *Model 4* with both of the direct paths

Chi-square difference tests were conducted between the research model and each of the three rival models. Unless the chi-square value between the research model and each of the nested models exceeds its critical value of 3.84 ( $\Delta df=1$ , 0.05 significance level) (Joreskog and Sorbom, 1993), which means the respective rival model differs insignificantly from the research model, the research model is statistically supported. The results revealed, as shown in Table 7.3, that the *Model 1* (research model) was preferred to the *Model 2* ( $\Delta\chi^2_{(\Delta df=1)}=0.76$ ,  $p=n.s.$ ) and to the *Model 3* ( $\Delta\chi^2_{(\Delta df=1)}=2.50$ ,  $p=n.s.$ ). The research model was even superior to *Model 4* ( $\Delta\chi^2_{(\Delta df=2)}=3.40$ ,  $p=n.s.$ ). Regarding the overall model fit indices of all the models, as presented in Table

7.3, no significant improvement between the research model and the nested rival models has been made. From this analysis, a more parsimonious *Model 1* was indicated by the data. This result provides sound evidence that the research model is more rigorous and justifiable (For details, see Appendix V).

Table 7.3: Nested models

Model	Model fit										
	$\chi^2$ (df, p)	$\chi^2/df$	RMR	GFI	AGFI	RMSEA	NFI	IFI	TLI	CFI	PNFI
1	236.56(123, .00)	1.923	0.058	0.912	0.877	0.058	0.902	0.950	0.937	0.950	0.725
2	235.80(122, .00)	1.933	0.056	0.912	0.877	0.059	0.902	0.950	0.937	0.950	0.719
3	234.06(122, .00)	1.919	0.058	0.913	0.878	0.058	0.903	0.951	0.938	0.950	0.720
4	233.16(121, .00)	1.927	0.057	0.913	0.877	0.059	0.903	0.951	0.937	0.950	0.714

**$\chi^2$  difference test results**

*Model 1* versus *Model 2*:  $\Delta \chi^2_{(\Delta df=1)} = 0.76$  (p=n.s.). Thus, '*Model 1*' is preferred.

*Model 1* versus *Model 3*:  $\Delta \chi^2_{(\Delta df=1)} = 2.50$  (p=n.s.). Thus, '*Model 1*' is preferred.

*Model 1* versus *Model 4*:  $\Delta \chi^2_{(\Delta df=2)} = 3.40$  (p=n.s.). Thus, '*Model 1*' is preferred.



Second, consistent with Zhou et al. (2007), another alternative model including several control variables was tested, with a focus on their effects on the three constructs of international performance, to assess whether inclusions of control variables affect the results of this study. Although most of the studies using structural equation modelling are apt to take no control variables into consideration because of placing emphasis on the parsimony of the model, such variables might exert a significant influence on international performance, thus changing results. This means that it is important to see if estimates from the model, including the control variables, remain unchanged on a statistical basis. Based on theoretical reasons, the four control variables that may affect international performance of small firms were identified and added into the alternative model: the CEO's level of education, firm size, length of international experience and R&D intensity.

*CEO's level of education:* For small firms, the extent of senior managers' level of education may be a fundamental source of prior knowledge and skills which are crucial in identifying opportunities (Shane, 2000). This may lead to the level of education being a driving force of the firms' entrepreneurial behaviours (Zahra, 1993). It is most likely thus that CEO's background of education is influential in planning and implementing business activities in that the entrepreneur is a dominant decision-maker in the firms (Hambrick and Mason, 1984). It can be assumed therefore that well educated CEOs are likely to be more actively involved in internationalisation activities through using their knowledge and skills than those who are less educated. For rapidly internationalising firms, the CEO's knowledge and specific skills are likely to be crucial in securing international activities and success. Thus, the CEO's level of education was taken into account as one of the control variables and measured with 'the level of education that a

CEO has achieved'. The question was composed of: secondary school, technical training, university degree, Master degree and PhD degree.

*Firm size:* Larger small firms may have certain advantages, such as relative market power and resources, which may affect performance (Hambrick et al., 1982; Kundu and Katz, 2003). For instance, a larger pool of resources foster effective competition in international markets (Andersson et al., 2004; Bonaccorsi, 1992; Jantunen et al., 2005). Firm size might also influence international diversity of operations (Erramilli and D'Souza, 1993). The size of a firm has been typically operationalised as either the volume of sales (e.g., Jantunen et al., 2005; Yli-Renko et al., 2002) or the number of employees. However, since it is very hard to obtain accurate details of financial data from small firms, many of the studies measure the firm size via the number of employees (e.g., McEvily and Marcus, 2005; McNaughton, 2003; Rasheed, 2005; Stam and Elfring, 2008; Steensma et al., 2005; Wu et al., 2008; Zahra et al., 2000). Thus, in this study, firm size was measured using the number of employees and transformed by the natural logarithm due to its skewness and kurtosis.

*The length of international experience:* From the viewpoint of experiential learning suggested by traditional internationalisation theories of firms (Johanson and Vahlne, 1977, 1990; Johanson and Wiedersheim-Paul, 1975), the international experience of firms might have a positive effect on international performance (e.g., Jantunen et al., 2005; Sapienza et al., 2005; Zahra et al., 2000). Firms with a longer period of international business might gain more resources and skills, which are necessary to international performance (Zahra et al., 2000). It is also likely that firms with sufficient international experience have the advantage of being able to leverage this experience in advancing their learning effort and knowledge (Eriksson et al., 1997; Sapienza et al.,

2005) in further deriving profits and expanding their operations. Based on these considerations, the length of international business experience of a firm was controlled for international business. It was measured by subtracting the number of years that the firm had engaged in international activities and also log-transform to correct for skewness and kurtosis. It might also be necessary to control for firm age. However, given the unique characteristic of the sample firms (engagement in international activities within six years from establishment), the variable may be highly correlated with the length of international business experience. The result of the correlation analysis revealed that the correlation was extremely high for both variables ( $r=0.78$ ). Thus, in order to avoid the potential problem of multicollinearity, only the length of international experience was used as a better reflection of encompassing firm age and a firm's international business experience.

*R&D intensity:* Given that many of early internationalising firms operate in a high-tech industry sector, R&D intensity might influence the international performance of these small firms. It might be that, for internationally oriented SMEs, R&D intensity has more bearing on international activities and expansions than for larger firms. As a proxy for technology assets such as technological know-how and patents (Lu and Beamish, 2004), R&D intensity was assessed with the extent of R&D expenditure relative to total revenues. However, in most of the previous literature, R&D intensity was calculated by dividing the R&D expenditure by total sales (e.g., Dhanaraj and Beamish, 2003; Lu and Beamish, 2006) on a quantifiable basis. However, it was believed that respondents would be unlikely to provide accurate details of the R&D expenditure and annual sales volume (Dikova and Witteloostuijn, 2007). Thus, following Dikova and Witteloostuijn (2007), R&D intensity was evaluated by directly asking the proportion of the R&D

expenditure as a percentage of total revenue. A logarithmic transformation was also attempted to remedy the problems of skewness and kurtosis.

As shown in Table 7.4, the results indicate that, with all the controls across the three constructs of international performance, only three associations were significant. In detail, firm size was positively associated with the *number of foreign markets supplied* ( $\beta=0.126$ ,  $p<0.05$ ). The length of international experience was found to exert a positive effect on the *number of foreign markets supplied* ( $\beta=0.128$ ,  $p<0.05$ ). R&D intensity was related to the *number of foreign markets supplied* ( $\beta=0.179$ ,  $p<0.01$ ). On the contrary, it was found that the CEO's level of education had no linkage with any of the international performance constructs. Yet, the strength and direction of the relationships and their significance level were all the same as those of the research model. These results are evident that the research model is robust with regard to other characteristics of the sample firms. Furthermore, the research model is supported by the parsimony principle, which is "given two different models with similar explanatory power for the same data, the simpler model is to be preferred" (Kline, 2005: 136).

Table 7.4: Parameter estimates of the alternative model including control variables

Hypothesized path	Standardised coefficient	t-value
International business experience of managers → Value of networks	0.385	5.071**
International business experience of managers → Foreign performance capacity	0.258	3.518**
Value of networks → Number of networks	0.620	8.758**
Number of networks → Foreign performance capacity	0.403	5.288**
Foreign performance capacity → Satisfaction with foreign market growth	0.785	8.450**
Foreign performance capacity → Share of sales from international activities	0.350	5.160**
Foreign performance capacity → Number of foreign markets supplied	0.271	4.162**
CEO's level of education → Satisfaction with foreign market growth	-0.008	-0.162
CEO's level of education → Share of sales from international activities	0.002	0.034
CEO's level of education → Number of foreign markets supplied	-0.110	-1.948
Firm size → Satisfaction with foreign market growth	0.098	1.933
Firm size → Share of sales from international activities	0.040	0.689
Firm size → Number of foreign markets supplied	0.126	2.220*
Length of international experience → Satisfaction with foreign market growth	0.038	0.748
Length of international experience → Share of sales from international activities	0.111	1.940
Length of international experience → Number of foreign markets supplied	0.128	2.252*
R&D intensity → Satisfaction with foreign market growth	-0.096	-1.891
R&D intensity → Share of sales from international activities	0.038	0.666
R&D intensity → Number of foreign markets supplied	0.179	3.161**
<b>Model fit</b>		
$\chi^2 = 389.26$ (df=170, p=.000), $\chi^2/df = 2.060$ , RMR = 0.066, GFI = 0.887, AGFI = 0.848, RMSEA = 0.063, NFI = 0.850, TLI = 0.897, CFI = 0.915		

Note: \* p<.05, \*\* p<.01

## **7.5 Discussion of the Findings In Relation To Research Questions**

The aimed to examine distinguishing characteristics of early internationalising SMEs and investigate complex relationships between the foreign market performance and its antecedents identified in the South Korean context. To achieve this objective, the thesis began by addressing the five key research questions. All the research questions are discussed with the findings from the major characteristics of the economic and business environments in which South Korean Born Globals operate and the hypothesis testing.

### **7.5.1 Research Question 1:** *What are the major characteristics of the economic and business environments in which South Korean Born Globals operate?*

A growing number of South Korean SMEs are entering foreign markets at or near their founding. As early internationalising SMEs are playing an increasingly crucial role not only in a global marketplace but also in the SME sector in South Korea, it is important and timely to explore the major characteristics of the economic and business environments in which early internationalising South Korean SMEs operate. Research Question 1 focuses on this issue. Section 5.2 to 5.3 provides an overview of the characteristics of the economic and business environment for South Korean SMEs and how they refer to South Korean Born Globals. As a primary feature, the overview describes the South Korean SMEs' importance to the national economy, especially in terms of the number of companies (Table 5.2) and number of employees (Table 5.3). In light of their importance, government policy emphasises means of enhancing the competitiveness of SMEs, with a special focus on technological capabilities and growth potential. As part of this policy, for example, supporting agencies such as SMBA currently concentrate on fostering innovative SMEs: that is, those who seek to create value and profitability through ongoing innovative business activities (Section 5.2.2).

Innovative SMEs are regarded as having greater potential to improve productivity and profitability and to enhance technological capabilities, in comparison with conventional SMEs (Table 5.7). Financial support for SMEs is also provided by credit guarantee agencies supported by the government. More opportunities to access public funds and credit guarantees are open to innovative SMEs because these funds focus on technology development and commercialisation (Section 5.2.4).

In recognition of the increasing importance of the international activities of South Korean SME (Table 5.8), government policy is being directed to support SME internationalisation. A variety of programmes directed towards helping SME internationalisation have been developed (Section 5.3): most of them tend to focus on helping SMEs to embark upon internationalisation or to promote exporting activities. This helps foster an economic and business environment that is tailor-made for the international activities of Born Globals in South Korea.

**7.5.2 Research Question 2:** *What are the views of South Korean Born Globals on the economic and business characteristics that they face in their host locations?*

In an effort to provide an answer to Research Question 2, survey data was used, with a focus on the view of South Korean Born Globals on financial arrangements, network relationships, and domestic institutional and market factors. Although the primary data provided a rough picture of the major characteristics of the economic and business environment of South Korean Born Globals, this helped understanding of how the early internationalising South Korean SMEs perceive the domestic business environment in which they operate. As shown in Section 5.5.1, it revealed that a number of South Korean Born Globals regarded retained profits, rather than the financial support provided by government agencies, as the primary source of finance for their investment in international activities. From this result, one possible explanation is that a lack of

financial support is made for early internationalising South Korean SMEs that already exposed substantially to an international marketplace. Regarding network connections described in Section 5.5.2, it was found that early internationalising South Korean SMEs tend to form many business networks for foreign activities with two major partners: customers and suppliers. In particular, the survey data showed that they had relatively fewer networks with government agencies. This may imply, as indicated in Research Question 1, that the South Korean government's support programmes for the internationalisation of SMEs tend to centre substantially on export promotion and potential foreign market entrants. Section 5.5.3 described the view of South Korean Born Globals on the domestic institutional and market environment in which they operate. Early internationalising South Korean SMEs see their domestic market increasing in size with competition becoming more intense, especially in regards to price. South Korean Born Globals tend to view the overall government support for international activities as less satisfactory both in terms of financial support and of the quality of the consulting service. This is in line with the view on financial support for them, discussed in Section 5.5.1. It was also found that a number of early internationalising South Korean Born Globals perceive high costs of regulations and skilled labour shortage in the domestic market.

**7.5.3 Research Question 3:** *Are there any significant positive relationships between the international business experience of managers and the use of networks and what are the affects of these factors for the ability of South Korean Born Globals to enhance their foreign performance capacity?*

Research Question 3 focuses on the relationships between the international business experience of managers and the use of networks for foreign activities in Born Globals and a subsequent effect on the enhancement of foreign performance capacity. The



extant literature contends that the international business experience of managers plays a central part in capitalising on external networks for the rapid internationalisation of SMEs, often from inception (Oviatt and McDougall, 1994, 1995). The findings from the empirical tests reveal that there is a significantly positive association between the international business experience of managers and the use of networks. That is to say, it was found that the extent of the international business experience of managers in Born Globals leads to an increase in the value of networks the firms establish for their foreign activities. Furthermore, international business experience of managers was found to be positively associated with the number of networks with an intervention of value of networks. These findings indicate that entrepreneurs or top management teams with international business experience in the early internationalising firm are an essential pre-requisite in developing strategic networks to engage in international activities and further survive in tough foreign markets. The findings provide empirical evidence for the view (McDougall et al., 1994; Oviatt and McDougall, 1995; Zhou et al., 2007), stating that founders or managers in internationally oriented SMEs tend to develop their personal networks formed through their prior international experience and thus such networks can be transferred to firm networks for internationalisation.

Research Question 3 also aims to see if the positive relationship between the international business experience of managers and the use of networks leads to enhancement of the foreign performance capacity of SMEs. The competitiveness of early internationalising SMEs in international markets is helped by the enhancement of their foreign performance capacity (Jantunen et al., 2005; Knight and Cavusgil, 2004). The results from the empirical tests show that the interaction between the international business experience of managers and the use of networks leads to enhancement of foreign performance capacity. In more detail, Hypothesis 2 indicates that the international business experience of managers is a determinant of the value of networks

in the internationalisation process of the small firm. The findings from the *post-hoc* analysis indicate that the international business experience of managers indirectly contributes to an increase in the number of networks via the value of networks. This finding suggests that the process of deriving benefits from the use of networks to aid the process of engaging in international activities is complex and is partly driven by interactions between the international business experience of managers and the value of networks and number of networks (Loane and Bell, 2006; Sharma and Blomstermo, 2003) and the subsequent effects on foreign performance capacity and foreign market performance. Regarding the association between the number of networks and foreign performance capacity, the result of the test for Hypothesis 4 confirms that the number of networks is an important driver of foreign performance capacity. The result supports the view (McEvily and Zaheer, 1999; Sharma and Blomstermo, 2003), that a number of valuable international networks are needed for SMEs to learn and understand more about international market knowledge. This finding also indicates that it is vital for internationally oriented SMEs to develop and manage their own routines of acquiring knowledge about foreign markets by capitalising on networks (Eriksson et al., 1997; Johanson and Mattsson, 1988). Lastly, it is also crucial to investigate the indirect effect of the value of networks on foreign performance capacity with the intervention of number of networks. The result of the *post-hoc* analysis indicates that the active use of the networks for foreign activities plays an important role in building up a sound basis of the competitive advantage and performance.

These discussions lead to the conclusion that, in South Korean Born Globals, there is a positive relationship between the international business experience of managers and the use of the network for foreign activities. Furthermore, it is plausible to argue that the positive interaction of the constructs contributes to the enhancement of

foreign performance capacity. These findings provide empirical evidence for the extant relevant literature with conceptual frameworks or arguments.

This study postulates (Hypothesis 4) that increasing the number of networks will enhance foreign performance capacity. A large expansion of networks however may “limit strategic options as opportunities must then be pursued within the network boundaries” (Mort and Weerawardena, 2006: 567). This leads to the assumption that there is unlikely to be a continuous linear relationship between the number of networks and foreign performance capacity, indicating that there may be an optimum number of networks. The relationship between the number of networks and foreign performance capacity may be reverse U-shaped or L-shaped. That is, once the optimum number is reached the positive relationship with foreign performance capacity either remains constant (a reverse L-shaped relationship) or declines (a reverse U-shaped relationship). These mean that reverse U- and L-shaped, that is, first rising then dropping or remaining constant. These effects of the number of networks on foreign performance capacity are a focus of enquiry in Born Global research, as the existing literature on networks has underlined only positive effects in this area (Mort and Weerawardena, 2006). In another *post-hoc* analysis, the quadratic effects were tested to see if there is evidence of the alternative specifications but no significant non-linear relationships between the number of networks and foreign performance capacity were found. The results of this study therefore support the view that there is a linear relationship between the number of networks and foreign performance capacity in South Korean Born Globals. One possible explanation is that this finding might be derived from the sampled cases of the research using cross-sectional data. Thus, future research particularly longitudinal research is needed to explore this relationship further, in particular to assess if an inverted U- or L-shape relationship exists.

**7.5.4 Research Question 4:** *Does enhancement of the foreign performance capacity of South Korean Born Globals lead to improvements in foreign performance?*

In small firms pursuing a dedicated internationalisation from their establishment, the extent of their ability to achieve superior international performance is crucial (Belso-Martinez, 2006; Dierckx and Cool, 1989; Jantunen et al., 2005; Knight and Cavusgil, 2004). For instance, Knight and Cavusgil (2004) contend that foreign performance capacity is an essential pre-requisite of achieving superior international performance of the firms. This view is also implied by the resource-based view (e.g., Barney, 1991; Bloodgood et al., 1996; Westhead et al., 2001) and knowledge-based view (e.g., Autio et al., 2000; Gassmann and Keupp, 2007; Loane and Bell, 2006). With this theoretical background, Research Question 4 aims to see if enhancement of the foreign performance capacity of South Korean Born Globals leads to improvements in international performance, with a particular focus on the volume of foreign sales and the number of foreign markets supplied.

Consistent with previous literature (Autio et al., 2000; Dierckx and Cool, 1989; Jantunen et al., 2005; Knight and Cavusgil, 2004; Knight and Kim, 2009), findings from the hypothesis testing (Hypothesis 5a, 5b and 5c) reveal that, in early internationalising SMEs, foreign performance capacity is a pre-condition for achieving good international business performance. Specifically, of the three measures of international performance, satisfaction with foreign market growth was most greatly influenced by the antecedent, with the value of 0.783. This result is a reflection of the importance of foreign performance capacity in the early internationalising SMEs as an essential pre-requisite for sales growth and expansion in international markets (Knight et al., 2004; Knight and Cavusgil, 2004; Knight and Kim, 2009). The significant linkage between foreign performance capacity and share of sales from international activities reveals that SMEs with good foreign performance capacity have a tendency to have a high level of foreign

sales (Autio et al., 2000; Knight and Cavusgil, 2004; Knight and Kim, 2009). Furthermore, in the relationship between foreign performance capacity and the number of foreign markets supplied, it is found that foreign performance capacity can be a core intangible asset for foreign market expansion, even though SMEs may have limited human and financial resources. These findings highlight that foreign performance capacity leads to superior international performance in both the share of sales from international activities and the number of foreign markets supplied. Additionally, early internationalising SMEs with an ability to perform well in foreign markets experience satisfactory international growth. From the findings, one can conclude that the impact of foreign performance capacity across various international performance measures is consistent. The results suggest that early internationalising SMEs can improve their foreign performance by establishing and skilfully managing foreign performance capacity (Autio et al., 2000; Knight et al., 2004; Knight and Kim, 2009). In this sense, the survival and prosperity of rapid internationalisers may be explained by their ability to effectively absorb intangible resources such as proprietary technology and international business knowledge and then to transfer them. These findings indicate that the foreign performance capacity of South Korean Born Globals contributes to their performance in international markets.

**7.5.5 Research Question 5:** *Are network effects more important than the international business experience of managers for enhancing the foreign performance capacity of South Korean Born Globals?*

In international entrepreneurship literature, the international business experience of managers and the use of networks have been most frequently discussed as essential requisites for the rapid internationalisation of small firms. It has been established that the international business experience of managers allows entrepreneurial SMEs to

discover new growth opportunities in an international marketplace and to exploit them to achieve competitive advantages (e.g., Crick and Jones, 2000; McDougall et al., 2003; Oviatt and McDougall, 1994). In the internationalisation process, this international business experience plays an important role in learning about international business practice and knowledge at a rapid pace (Rasmussen et al., 2001) and lessens the perceived uncertainty (Acedo and Jones, 2007; Ruzzier et al., 2007). The use of networks has also been regarded as one of the key determinants for the successful internationalisation of SMEs (e.g., Chetty and Blankenburg-Holm, 2000; Coviello, 2006; Coviello and Munro, 1995; 1997; Gabrielsson et al., 2008; Loane and Bell, 2006; Ojala, 2009; Sharma and Blomstermo, 2003). Indeed, the use of networks for foreign activities is essential for SME internationalisation and provides a context for opportunities to create mutually beneficial long-term linkages (Andersson, 2002; Knight and Cavusgil, 1996) driving engagement in international activities.

No study has thus far considered which factor is more influential in enhancing foreign performance capacity. In consequence, the question of which characteristic exerts the greatest influence on the firm's ability has not yet been answered. It is likely that exploring the extent to which the factors contribute to enhancement of foreign performance capacity will have practical implications for managers in early internationalising firms. That is, it could establish whether managers with international business experience must get involved in networks to engage in foreign activities. Managers should take advantage of networks for successful international activities, provided that the use of networks is shown to be more crucial than the international business experience of managers for enhancing foreign performance capacity, even though the international business experience of managers directly leads to enhancement of foreign performance capacity. On the other hand, if the international business experience of managers is found to contribute more to foreign performance capacity

than the use of networks, the extent of the international business experience of managers should be treated as a pre-requisite for both networks for foreign activities and enhancement of foreign performance capacity.

The empirical results suggest that the use of networks is more important than the international business experience of managers in enhancing the foreign performance capacity of South Korean Born Globals. The direct connection between the number of networks and foreign performance capacity is stronger, with the value of 0.401, than the link between international business experience of managers and foreign performance capacity, with the value of 0.266. This indicates that the international business experience of managers is relatively less likely to provide direct knowledge that is helpful in overcoming the problems which may arise in firm internationalisation (Athanassiou and Nigh, 2000; Collinson and Houlden, 2005; Eriksson et al., 1997). The empirical evidence however shows that a capacity to secure competitive advantage in international markets relies substantially on the extent of the international business experience of managers, which could determine overall potential for international business performance of the firms (Greene et al., 2001; Manolova et al., 2002). The international business experience of managers is also of particular importance because it helps to obtain valuable output from networks that subsequently enhance the foreign performance capacity of firms via the number of networks. The *post-hoc* analysis supports this view, providing empirical evidence for significance of the indirect effect of international business experience of managers on foreign performance capacity via value of networks and number of networks. These results are also backed by the literature (Blomstermo et al., 2004; McEvily and Zaheer, 1999; Loane and Bell, 2006; Sharma and Blomstermo, 2003). Hence, these findings provide an answer to Research Question 5, indicating that the number of networks has a greater effect on foreign performance capacity than the international business experience of managers in South

Korean Born Globals, but that the managers' background in international business also exercises a significant indirect effect on foreign performance capacity.

## **7.6 Summary and Discussion**

This chapter presents the results of hypothesis testing, discussions of the findings in relation to the research questions and the results relating to the literature. To test hypotheses, the suggested research model is assessed using structural equation modelling. The results confirm all of the hypotheses at the 0.01 significance level. Specifically, it is found that the international business experience of managers influences the value of networks greater than foreign performance capacity. One possible explanation is that managers in early internationalising South Korean SMEs tend to take more advantage of their prior international business experience for acquiring valuable output from networks rather than for enhancing the potential ability to perform well in foreign markets. The findings also show that there is a positive linear relationship between the value of networks and the number of networks for foreign activities. In other words, South Korean Born Globals seek to form valuable networks as their international activities increase. Foreign performance capacity is found to be a sound determinant of international business performance, with the greatest impact on 'satisfaction with foreign market growth'. Further analyses using *post-hoc* testing indicate that the indirect effects between variables are all significant. To rigorously test the research model suggested by this research, two methods are used. First, nested models are tested and compared with it using a chi-square difference test. The results prove that the research model is the most parsimonious, thereby providing evidence of the rigour and justification of the model. Second, a model including several control variables is tested to see if the control variables significantly affect the results of the



hypothesis testing. Four control variables are selected: the CEO's level of education, firm size, length of international experience and R&D intensity. The results indicate that all estimates and t-values remain at the same level of significance. This is evident that the research model is the most robust and parsimonious.

The chapter also summarises the contribution to the body of knowledge on the internationalisation of SMEs by providing discussion about the major research findings in relation to Research Questions 1 to 5. All the questions were answered on the basis of the findings from hypothesis testing and the analysis of the major characteristics of the economic and business environment South Korean Born Globals operate in. Research Question 1 focuses on what the major characteristics of the environment for SMEs mean for early internationalising SMEs in South Korea. It was found that SMEs are vitally important to the country and that government agencies provide diverse support programmes for them. With the aim of encouraging innovative SMEs to enter foreign markets, public policy is being directed to support for the internationalisation of SMEs. It revealed however that there are few support programmes specifically for South Korean Born Globals. This implies that there is the need to develop more tailor-made support policies for such SMEs. Research Question 2 relates to the view of early internationalising South Korean SMEs on the major impact of the economic and business environment characteristics they face in their host locations. To provide an answer to this research question, primary data gathered from a survey was utilised. This helped to understand the view of South Korean Born Globals of financial arrangements, network relationships and domestic institutional and market environments relating to their activities. It was found that many early internationalising South Korean SMEs largely use retained profits for international activities, with less reliance on government's financial support. This implies that a number of South Korean Born Globals still find it difficult to access public funds or that there are limited financial

resources for SMEs already operating in international markets. It was also found that early internationalising South Korean SMEs tend to make network connections for foreign activities largely with their major partners including customers and suppliers. However, they had few networks with other partners such as research centres and trade-related industry associations. In particular, South Korean Born Globals had few relationships with government agencies. It is likely that this derived from limited public policy directed towards early internationalising SMEs. The survey data show that overall a number of South Korean Born Globals perceive that the domestic institutional and market environments in which they operate are under unappealing conditions.

Research Question 3 seeks to explore the extent and direction of any significant links among the international business experience of managers, networks and foreign performance capacity. The results from hypothesis testing confirm that the international business experience of managers positively influences both the ability to perform well in foreign markets and the value of networks. The number of networks also positively contributes to foreign performance capacity. Importantly, the interaction of both factors leads to enhancement of foreign performance capacity. Research Question 4 aims to see if foreign performance capacity improves international business performance. Empirical tests confirm that the enhancement of foreign performance capacity leads to improvements in satisfaction with foreign market growth; share of sales from international activities; and the number of foreign markets supplied. Research Question 5 is concerned with whether the network effect is greater than the international business experience of managers in enhancing foreign performance capacity of South Korean Born Globals. The results show that the network effect is more important than that of the international business experience of managers. These discussions shed light on relationships which have remained under-explored and point to several novel and important findings that advance theory and inform practice.

## **CHAPTER 8: CONCLUSION**

### **8.1 Introduction**

Based on the foregoing discussion of the findings, this chapter presents implications for theory, practice and public policy for South Korean Born Globals as well as a summary of the main issues arising from this research. Limitations of the research are recognised and directions for future research are suggested, before the final summary and discussion.

### **8.2 Summary of the Main Issues**

There is a broad consensus that two factors - i.e., the international business experience of managers and the use of networks - are salient attributes of early internationalising SMEs distinguishing them from firms explained by the traditional views of internationalisation. It is also emerging that the ability of early internationalising SMEs to perform well in foreign markets is important to securing international performance. However, the hypothesised links between these factors have remained under-investigated. This is a gap in the literature on the major drivers which affect the international activities of early internationalising SMEs. Additionally, little is known about the characteristics of South Korean Born Globals. This research thus aimed (1) to examine the major characteristics of Born Globals in South Korea in terms of the economic and business environment in which South Korean Born Globals operate and to assess the major effects of this environment on such firms and (2) to investigate the relationships between the international business experience of managers and the use of networks and the subsequent effect on the capacity of Born Globals to perform well in international markets, and to assess the relative strength of these key factors on

international performance.

Drawing on the existing literature of SME internationalisation, this research has built a conceptual model of key factors identified. This model was then tested using data obtained by a survey using questionnaires. Hypotheses were developed and then tested using structural equation modelling. The empirical evidence from the analysis helped to fill the gap identified in the literature. The survey data also helped to provide the view of South Korean Born Globals on financial arrangement, network building, and the economic and business environments in which they operate. The findings of this research had several implications for theory building, public policy and managerial issues. In particular, this research is the first to investigate the relationships between the generic factors and foreign performance capacity and the subsequent impacts on the international business performance of South Korean Born Globals. This thesis therefore advances our knowledge of Born Globals.

### **8.3 Contribution and Implications**

#### **8.3.1 Theory building**

International business experience of managers – the use of networks – foreign performance capacity – international performance relationship

There is in the literature a consensus that two key concepts - network for foreign activities and the international business experience of managers are of paramount importance to international entrepreneurial SMEs. It is surprising however that the literature has explored these interactions of these key variables mainly in the conceptual frameworks (e.g., Oviatt and McDougall, 1995) or in case studies (e.g., McDougall et al., 1994; Mort and Weerawardena, 2006). Investigation of the associations between the international business experience of managers and the use of networks in international

entrepreneurship research has only been subject to a limited number of empirical studies (e.g., Reuber and Fischer, 1997). Furthermore, questions of how interactions of the concepts lead to enhancement of foreign performance capacity for international business outcomes have not been addressed. This study sought to investigate these questions. To capture these interdependencies, the study develops a conceptual model with hypothesised relationships among these key factors. The findings suggest that the international business experience of managers has an important role to play not only in enhancing the capacity to boost international performance, but also in forming valuable business network links. The use of networks leads to significant enhancement in foreign performance capacity, thereby improving international business performance. To sum up, these results provide empirical evidence of an association between the key variables for early internationalising SMEs in South Korea: the international business experience of managers affects the use of networks and subsequently influences foreign performance capacity and this capacity boosts foreign market performance. The results imply that strategic use of the international business experience of managers and networks lies at the heart of the international growth potential and performance of early internationalising firms. This attempt also provides a timely response to calls to investigate the linkage among informal personal networks and formal business relationships and business performance (Zhou et al., 2007). This research therefore contributes to a theoretical extension of the relationships regarding antecedents and international performance of Born Globals.

#### Multiple dimensions of networks

The literature on the whole agrees that the use of networks is extremely beneficial to SMEs engaged in international operations. Despite the importance of the concept, surprising little attention has been paid to how to access and to measure the use of

networks in an empirical setting. Previous studies have operationalised the concept using a single dimension (e.g., Andersson and Wictor, 2003; McDougall et al., 2003). However, it appears more realistic that the concept has multiple dimensions. This study operationalised two dimensions of networks: the value of the network and the number of networks. The findings indicate that the value of networks leads to an increase in the number of networks and a sequential effect on foreign performance capacity. This illustrates, albeit partially, how network activities contribute to the enhancement of foreign performance capacity in international entrepreneurial SMEs. The results suggest that adopting the notion that networks can be treated separately as two types of dimensions allows a deeper understanding of the way in which networks contribute towards performance in the foreign activities of SMEs. The findings also can be taken as response to Mort and Weerawardena's (2006: 567) call for: "future research should also focus on the linkages between fundamental and secondary networks, and the processes by which International Entrepreneurship is facilitated and deepened in the domain of Born Globals through the elaboration of networks". This study therefore advances an understanding of the operational issue of networks in empirical research on Born Globals.

#### Item development of network constructs

This research suggests that a network for foreign activities is a construct which is comprised of multiple dimensions: the value of the network and the number of networks. In an effort to measure network frequency, the extant literature has mostly used numerical scales by using questions such as "*How many contacts does your firm have?*". It is unlikely however that such a measurement method adequately takes into account variation in network range which may be triggered by 'firm size'. Thus, larger SMEs are more likely to have more network connections compared to smaller SMEs. In an

attempt to remedy this potential problem, this research assesses the value and number of networks with four items using five point Likert scales ranging from a few to a lot of networks. This method permits estimation of the respondents' assessment of whether they have a few or a large number of networks. In a similar fashion this measurement system allows respondents to assess the value they receive from their networks. These items were created through extensive literature review (e.g., Andersson et al., 2002; Chetty and Campbell-Hunt, 2003) and help to best capture the extent to which managers in early internationalising SMEs perceive the value and number of networks for international activities. Judging by the high loadings shown in the measurement model, it is evident that networks are well explained by the items. This study therefore contributes to development of the operationalisation of network constructs.

#### Introduction of foreign performance capacity into Born Global research

Another contribution of this study is the introduction of the concept of foreign performance capacity. This foreign performance capacity concept is explicitly introduced as a central driver for international business performance as a basis for developing competitive advantage of early internationalising SMEs. The findings suggest that foreign performance capacity is a key driver of international performance. Not only does foreign performance capacity per se contribute to performance, but it plays a mediating role in the linkage between the key factors of international business experience and networks and international business performance. A picture of the association between the international business experience of managers and the number of networks via foreign performance capacity on international performance portrays that the international performance of the firms relies partially on complex interactions of the constructs rather than on each construct. This implies that the concept should be taken into careful consideration in investigating the complex interactions involved in the

international business performance of Born Globals. Although the extant relevant literature specifies numerous concepts for achieving international success, the present study is the first to address the crucial roles of foreign performance capacity as a vehicle for linking international business experience and networks to the international performance of Born Globals.

#### Empirical evidence in relation to theories

The research model is designed to capture the relationships between key factors and the international performance of Born Globals and yields important insights into the international activities and performance of these firms. By conducting empirical tests for the associations, this study provides complementary support to previous qualitative studies of the international business experience of managers and the use of networks. For example, since Oviatt and McDougall (1994), individuals with international business experience and international entrepreneurship have been as an essential requisite for the rapid international expansion of SMEs. There appears to be agreement about the importance of the international business experience of managers and the use of networks in the course of internationalisation and further foreign activities, but very few empirical studies, with a focus on associations from key drivers international business experience of managers and networks to international performance, have been carried out.

Along with the international business experience of managers, the use of networks for foreign activities is also taken into account as a key driving force of foreign performance capacity and international performance. From a methodological point of view, by using the network view to describe SME internationalisation, a qualitative approach mainly using case studies (e.g., Chetty and Agndal, 2007; Chetty and Blankenburg-Holm, 2000; Chetty and Campbell-Hunt, 2004; Coviello, 2006;



Coviello and Munro, 1995; 1997; Freeman et al., 2006; Gassmann and Keupp, 2007; Laanti et al., 2007; Mort and Weerawardena, 2006; Ojala, 2009; Sharma and Blomstermo, 2003) has so far been dominant. The qualitative case study research is that “it is successful in providing an understanding of how and why something occurs, but it fails to yield information on how often it occurs” (Freeman and Cavusgil, 2007: 14). The approach also has limitations in testing the relationships.

To sum up, although plenty of studies based on qualitative insights have been conducted, empirical evidence using large sample sizes remains limited. By taking a quantitative approach to investigating antecedents and their effects on the international performance of Born Globals, the present research is complementary to the literature based on the qualitative approach and responds to calls for empirical tests in the research of Born Globals to generalise findings (e.g., Freeman et al., 2006, Freeman and Cavusgil, 2007). This study also contributes to a theoretical extension of Born Global research, responding to Freeman et al (2006: 60) claims that “given the paucity of quantitative research on the born-global SME phenomenon, considerable research must be done to develop valid measures of the dependent and independent variables and measures for testing the hypothesized relationships between them”.

#### Empirical support for the RBV in Born Global research

Consistent with Knight and Kim (2009), the present study also supports the notion that a firm is a bundle of resources. Networks for foreign activities could be regarded as external resources, while the international business experience of managers is an internal resource. The latter appears particularly exclusively embedded in a firm because of its unique and non-imitable character. From a resource-based perspective, the international business experience of managers thus has great potential to become a source of sustained competitive advantage whereas networks are resources that are

potentially available to all would-be rivals. However, the networks that are of value to a firm's foreign involvement could be well built up once the international business experience of managers can be effectively utilised. This argument is empirically supported by the findings of this research. Finally, the configuration of internal and external resources leads to the development and enhancement of foreign performance capacity, as backed by the results. A complex approach using a hypothesised model with a focus on the interactions of these resources is more realistic because the international performance of early internationalising SMEs can be explained by the interaction of a bundle of resources (Knight and Cavusgil, 2004; Westhead et al., 2001).

#### Expansion of the research context of Born Globals

Thus far, a majority of studies of early internationalising SMEs have been conducted in western economies including the United Kingdom, the United States, Scandinavian countries, and New Zealand. It is evident that there is little literature on Born Globals relating to the Asian region (for more detail, see Table 2.1). From the findings, it is estimated that a large number of South Korean SMEs are already involved in international operations following early international expansion. In particular, as South Korea is one of the world's leaders in information and communication technology, it is likely that more start-ups will start to engage in international activities immediately after establishment given that early internationalising SMEs are largely identified in high-technology sectors (Autio et al., 2000; Bell, 1995; Zahra et al., 2000). Given these circumstances, this research expands the scope of the research settings of Born Globals. This contribution helps to fill the gap between western economies and emerging economies in Born Global research and provide a basis for international comparisons, allowing for a greater understanding of the major characteristics of South Korean Born Globals.

This research also contributes to moving Born Global research forward in South Korea. Although growing attention has been paid to international entrepreneurial firms in South Korea since the ‘venture boom’ in the late 1990s (Cho et al., 2007), the field of international entrepreneurship is still under-researched. As mentioned in Chapter 1, the relevant literature carried out in South Korea is limited to the timing of foreign market entry (Chang et al., 2007); international expansion strategies (Lee et al., 2007); comparative study with domestic market-oriented SMEs (Han et al., 2008; Kim and Jung, 2007); and internationalisation speed (Han, 2008; Kim and Song, 2009; Kim and Ko, 2005; Park, 2005; Park, 2007; Park and Ko, 2007). In particular, for South Korean Born Globals, this research is the first to investigate the relationships between the international business experience of managers, the use of networks, foreign performance capacity and the subsequent impact on international business performance, with a large sample size. This research therefore contributes to enriching the literature on Born Globals in South Korea.

### **8.3.2 Managerial issues**

#### Emphasis on foreign performance capacity for international performance

This study emphasises the central role of foreign performance capacity in leading to improvements in the international business performance of Born Globals. The findings confirm that foreign performance capacity is a significant driving force of international business performance in areas such as satisfaction with foreign market growth, share of sales from international activities, and the number of foreign markets supplied. In addition, it is found that foreign performance capacity not only has a direct effect on performance, but also plays a mediating role in the linkage between antecedents and consequences. Although some of the literature assumes strong linkages between individuals with international work experience and international networks and business

performance in early internationalising firms, the present study provides empirical evidence of the importance of foreign performance capacity in achieving superior international performance. Consistent with Knight and Kim (2009), the findings suggest that international business performance and the survival of the firm appear to hinge on the extent of the foreign performance capacity. This implies that, for the international entrepreneurial SMEs to be able to secure international business success, foreign performance capacity must be well developed and managed on an ongoing basis. Even SMEs relatively new to international business need to compete effectively in an international marketplace so developing good foreign performance capacity is important in the early stages of Born Globals. Therefore, early internationalising firms entering multiple foreign markets need to develop foreign performance capacity to best allocate and effectively leverage resources to compete effectively in foreign markets. It is therefore advisable for managers to embark promptly upon promoting acquisition of foreign market knowledge prior to engaging in international activities. In consequence, managers should seek to emphasise and enhance foreign performance capacity for better international performance.

#### Strategic importance of international business experience of managers

The findings indicate that the international business experience of managers is a key antecedent, influencing both foreign performance capacity and the value of networks. It is most likely that managers with international business experience in a variety of domains such as R&D, client and customer management and international sales have their own personal networks in particular business domains. As a strategic asset, these linkages appear transferable to firm networks, leveraging the previous experiences. It is plausible that if the extent of the international business experience of managers is high, the firms in which these managers work are to make good contacts with potential

partners. It is also possible that taking advantage of the international business experience of managers allows Born Globals to have access to external resources such as knowledge about technology, customers and markets via networks. Even if SMEs form weak ties with network partners for international activities, international SMEs can directly embark upon enhancing their capacity to achieve superior international performance because the international business experience of managers directly contributes to enhancing foreign performance capacity by reducing uncertainties and by providing quick access to important information and knowledge about international business activities. This indicates that the rich international business experience of managers plays a crucial role in stimulating the knowledge acquisition that leads to competitive advantage. The results of this research imply that the international business experience of early internationalising SME managers is an essential resource for the development of both networks and foreign performance capacity. Managers in early internationalising firms are therefore advised to seek to take full advantage of a strategic use of their international business experience so that the firms can make valuable contacts for international activities and enhance their capacity to achieve superior foreign performance.

With regard to elements of the international business experience of managers, it was found that the extent of the experience of senior in foreign languages had greater importance in assessing the international business experience of managers than the rest of the items (see Table 6.10). This result provides further evidence of the importance of the international business experience of managers in terms of key knowledge, such as foreign language abilities (Welch and Welch, 2008) that are important for the ability of SMEs to prosper in tough international markets. This implies that actively recruiting human resources with a global mindset or international business experience should be beneficial for successful foreign activities (Bell et al., 2003). For instance, in cases

where only a limited number of managers are good at foreign languages, this strategy should be of great help. If costs are serious constraints given the relatively small size of Born Globals, it may be a good alternative to search for managers with work experience in South Korea-based international joint ventures or international business units in multinational companies.

#### A way of network building

Of particular importance to Born Globals is the use of networks for foreign activities as they have the potential to determine foreign performance capacity and thereby international performance outcomes. As shown in Table 6.7, not all managers in South Korean Born Globals have sufficient international business experience. Where the international business experience of managers is limited, early internationalisers may utilise networks as a source of resource acquisition for successful foreign activities. The extant literature (e.g., Coviello and Munro, 1997; Sharma and Blomstermo, 2003) supports this as networks appear to be particularly important for SMEs that go international shortly after founding. Linkages can help firms to enter foreign markets rapidly and to acquire the external resources necessary for international business success. Business relationships can offer Born Globals significant learning opportunities that enhance foreign performance capacity. The findings of this research suggest that the use of networks is more important to foreign performance capacity than the international business experience of managers in small firms. This supports the view that effective network building is important. In relation to the networks, this research highlights that the relationship has multiple dimensions: the value of networks and the number of networks. In order to develop strategic networks and to become involved in them, this study suggests that early internationalising SMEs need to make valuable connections by taking advantage (if managers with good international business

experience are available) of personal networks and the previous international business experience of managers. Once they are perceived as valuable and beneficial to international activities, the number of such valuable networks needs to be developed to enhance foreign performance capacity in the many areas in which Born Globals require the information, knowledge and competencies that come from valuable networks. The findings provide empirical evidence for this argument. The present study therefore presents managerial implications of how early internationalising SMEs may strategically develop networks for foreign activities to enhance their performance in foreign markets.

#### Implications from control variables

The results of the control variables indicate that the extent of satisfaction with the growth of international sales and the volume of international sales are not significantly affected by the CEO's educational level, firm size, the length of international business, and R&D intensity. This suggests that it is likely that the management team's degree of international business experience is more important than the CEO's level of education. Since managers with good backgrounds in international business can contribute to network building and performance, emphasis should be placed on management team formations and their prior knowledge of international business. Although all the sampled firms in the study are SMEs, there may be some variance between them in terms of size. Firm size is found to have an insignificant effect on international performance except for the number of foreign markets supplied. This implies that Born Globals managers should pay particular attention to mapping out a strategy and implementing it, rather than to increasing their firm size. R&D intensity in early internationalising SMEs was found to be limited to boosting share of sales from international activities, but it exerts a significant positive effect on the number of

foreign markets supplied. This implies that the intensity could be strategically leveraged as a source of competitive advantage as the number of foreign markets entered increases.

### **8.3.3 Public policy**

The results also have implications for public policy formulation aimed at supporting early internationalising firms. Born Globals are likely to increase in number (e.g., McDougall et al., 2003; Rialp et al., 2005a) especially in export-led economies such as South Korea. Such firms are also likely to play an important role in the economic development of countries such as South Korea. Given that Born Globals internationalise rapidly with limited resources, experience and size, they are particularly vulnerable to competition and change in the international business environment. These difficulties appear to be particularly severe in the early stages of internationalisation. In South Korea, however, there have been no supportive public policies specific to the early internationalising firm, despite the existence of a variety of general programmes to stimulate exporting and to help SMEs. Since the vast majority of the early internationalising firm founders or managers have a clear vision of going international soon after establishment, particular consideration is needed to design a systematic support system for such firms. These circumstances call for a fundamental reconsideration of supportive public policy. It is therefore clear that a tailor-made supportive policy is of great use to such firms (Bell et al., 2003; Dimitratos and Jones, 2003; Knight and Cavusgil, 2005).

#### The need for a database

A reliable database is fundamental to designing programmes for promoting and supporting the international activities of these firms. Nonetheless, there is no unique database of all early internationalising firms in South Korea. A systematic database of



SMEs would make comprehensive surveys and in-depth studies possible, thereby helping enable public agencies to develop more specifically tailored support programmes. The setting up of a database that contains details of early internationalising firms should therefore be prioritised.

#### Aid to access external resources

Given their differences to traditional domestic SMEs, early internationalising firms need different kinds of support for the acquisition of the external resources that are vitally important to international operations (Bell et al., 2003; Kuivalainen et al., 2004). This is a matter largely of financial resources, human resources and up-to-date information about foreign markets. In particular, it might be that more financial investment for cutting-edge product development and competitive internationalisation capabilities is needed given that the vast majority of Born Globals operate in a turbulent international business environment (Kuivalainen et al., 2004). However, as presented in Section 5.5.1, a number of South Korean Born Globals rely heavily on their retained profits as the primary source of finance for investment in international activities, rather than the financial support provided by government agencies. This reflects the view that there is a lack of financial support for South Korean Born Globals already substantially exposed to the international marketplace. This implies that timely provision of financial support for such firms should lead them to more successful international activities.

Another concern of early internationalising South Korean SMEs is the lack of human resources, especially those with international business experience. Since Born Globals are firms that internationalise rapidly, they are mostly characterised as small-sized firms with limited human resources. The findings of this study show that individuals with international business experience are a fundamental source of successful foreign activities. South Korean Born Globals also recognise, Section 5.5.3,

that there is serious skilled labour shortage in the domestic base. This implies that it might be useful for early internationalising South Korean SMEs to introduce a ‘pooling system’ which facilitates the timely matching of individuals who possess the particular knowledge and skills required for international operations with early internationalising firms. Given that searching for skilled managers is time-consuming and costly, especially for SMEs, such a support programme could be particularly helpful for them. Policy makers are therefore advised to pay particular attention to support for early internationalising SMEs in overcoming human resource constraints.

It is likely that a programme of provision of up-to-date information in accordance with the life-cycle and activities of early internationalising South Korean SMEs would be useful. Results from the characteristics of the sampled firms (for more detail, see Section 6.3) show that in South Korea, a majority of Born Globals operate in high-technology sectors, similar to those in other countries (e.g., Autio et al., 2000; Zahra et al., 2000). Given that these sectors are fast-growing, it is important that these firms are able to acquire information quickly about market trends, customer needs, cutting-edge technology and emerging niche markets, etc. Indeed, this is of particular importance to early internationalising SMEs because such knowledge acquisition can help them to perform well in foreign markets, as confirmed by the findings. However, in many cases, the resource constraints experienced by such SMEs may preclude them from gaining access to such valuable information and knowledge. For example, activities such as comprehensive market surveys targeted towards identification and in-depth analysis of new global markets and up-to-date international customer needs, etc. are costly and it is almost impossible for a small firm to carry them out alone. Discussion in Section 5.5.3 provides evidence of this, showing that South Korean Born Globals regard consulting services, including information provided by government agencies, as lacking. Consideration is thus needed to develop ‘a programme of

information provision' so as to effectively provide timely tailor-made information to early internationalising SMEs on an ongoing basis. As part of the programme, the hosting of international conventions and conferences regarding international business trends should help these firms to gain relevant information and to deepen their understanding of the changing international business environment. These programmes are expected to enable early internationalising South Korean SMEs to discover new lucrative opportunities, leverage their resource bases, and enjoy benefits as a first-mover in a specific foreign market.

#### Support for network building

The results of this research clearly indicate that the use of networks for international activities is of great help for Born Globals to acquire external resources, knowledge and competencies and to enhance their ability to improve international performance. The results demonstrate that Born Globals managers themselves are able to significantly contribute to developing the international business relationships by leveraging their own personal networks. However, in some sense, managers' knowledge about international business tends to be narrow in scope, thereby overlooking more beneficial network building opportunities. Sample characteristics presented in Section 6.4 provide partial evidence for this possibility. For example, if nearly all managers have experience only in the area of research and development (R&D), they might be less able to develop useful networks regarding client management or sales and distribution channels for foreign markets. This implies, ironically, that their network building abilities from their own international business experience could be limited by their lack of experience in some key areas. The data on the loadings on the indicators of the value of networks provide evidence on how important various types of knowledge are; product development for foreign activities (0.625), developing foreign market supply channels

(0.783), developing foreign market intelligence (0.920) and R&D for foreign market development (0.705). In these circumstances, public support agencies in charge of fostering SME internationalisation could provide complementary support for early internationalising South Korean SMEs, for example, by creating a community such as ‘South Korean Born Globals network’. The support could also lead to connections with similar communities in other countries, thus forming a global-scale network. In addition, it might be useful to provide details of valuable potential partners such as clients, venture capital, research centres, etc. for such businesses so that internationally oriented SMEs can gain access to valuable partners with a minimum of cost and effort.

#### Born Globals development using Inno-biz firms

As shown in Table 6.4, a large number of South Korean Born Globals are awarded ‘Inno-biz certificate’. Inno-biz firms represent so-called high-technology SMEs with technological capabilities and are recognized by SMBA on the basis of the process of innovativeness evaluation. Since the inception of the certification program in 2001, 14,626 SMEs in total had been authenticated by 2008. If a SME is certified as Inno-biz, it becomes easier to get financial support from government agencies. Given that innovative technology and technological capability are central to the international growth of SMEs, many of them still appear to have great potential to be successful in a global marketplace. Yet, it might be that they hesitate to engage in international activities at or near their founding because of a relatively low level of consideration of international business at an early phase of operations. That is, they may be ‘sleeping Born Globals’. Thus, it should be regarded as an important policy issue to wake them from their sleep. This approach could help firms to maximise their own capacity, taking full advantage of their technological capability for successful international activities.

### Development of success cases

Given that it is expected that Born Globals will be widespread in the future, developing best practices in the strategies of these firms should provide useful guidance for potential Born Globals. Since South Korean SMEs may have different characteristics from those in western economies in relation to management team formations and international business practices, successful South Korean Born Globals could provide both future Korean Born Globals and firms currently operating in foreign markets with insights into the design and revision of international business strategies. It is also likely that such success stories play an important part in reducing trial-and-error and risks in the internationalisation process of SMEs. The contribution of this type of assistance programme is therefore to raise the possibility of successful rapid internationalisation of small firms and to help develop strategies and reduce uncertainty.

### **8.4 Limitations of the Research and Directions for Future Research**

Despite contributions to the body of knowledge of Born Globals and the implications for public policy and managerial issues, this research also has several limitations, which are discussed with suggestions for future research.

First, Born Globals in the present study are operationally defined as ‘SMEs which engage in international activities within six years of establishment’. Given there are no generally agreed criteria for defining early internationalisers (Freeman et al., 2006, Gabrielsson et al., 2008; Karra et al., 2008), the issue of the operational definition of Born Globals is regarded as a limitation. Thus, there is a need for further definitions of Born Globals to best capture the true meaning of Born Globals and allow for comparative studies, as suggested by previous literature (e.g., Knight and Cavusgil, 1996; Zhou et al., 2007).

Second, by focusing on ‘how’ generic variables interact and affect international business performance of Born Globals, the study did not investigate the detailed motivations and dynamics that propel the complex process involved in internationalisation. However, an exploration of the motivations and dynamics is crucial given their roles in providing the fundamental source of international entrepreneurship. Further research is thus needed to gain a greater understanding of the roles of individuals and the dynamics of opportunity seeking in rapid internationalisation. It would be particularly useful to see if managers with no previous international work experience seek definitely to establish networks for internationalisation and managers with the experience make less use of networks for the internationalisation.

Third, in an effort to minimise the potential effects of the possible internal factors, this study sought to control for key variables and the robust results suggested that the model has good explanatory power. However, this study did not take account of external variables which might significantly interact with other variables (Preece et al., 1999). These could include industry types; the business environment in the domestic market; the extent of resources available, etc. For example, industry-specific conditions could drive the extent of SME internationalisation and these conditions might be important when taken into account simultaneously with country-specific factors in terms of markets served. Steps to overcome these limitations would enhance the generalisability of the findings. Future studies therefore should include other measures which might influence the international activities of Born Globals. Interestingly, up until now, SMEs have steadily grown towards building solid contract relationships with large enterprises in South Korea, as the majority of South Korean SMEs operate in industrial and intermediate goods industries. This led to the result that the strong contract relationships preclude many start-ups from seeking sufficient volume of demand in their areas. From an institutional condition perspective, as described in

Chapter 5, a number of South Korean rapid internationalisers agree that complying with the regulations is costly when operating in the home market. This institutional environment is likely to make the domestic market less attractive to business. These external operation-specific conditions could be a potential factor that propels start-ups to pay attention to international markets from inception through diverse forms of networks. These discussions might provide fresh perspectives of ‘why’ SMEs internationalise rapidly.

Fourth, this research focuses exclusively on early internationalising SMEs in South Korea. This condition precludes comparison of rapid internationalisers with late or non-internationalisers in key findings. Future research is needed to use a broader sampling population that includes the three kinds of SMEs in order to gain a better understanding of antecedents and performance of Born Globals in a more stringent manner. It would be also more useful to simultaneously consider Born-again Globals in those categories (Bell et al., 2001).

Fifth, in investigating antecedents and their effects on international performance in South Korean Born Globals, this research takes a quantitative approach. However, this empirical approach appears to have limitations to providing a deeper understanding of the complex interactions between the main factors in a more sophisticated manner. Thus, as complementary to the findings of this research, in-depth case studies would be helpful to gain a more significant insight into the relationships. As discussed in Chapter 7, this research tested to see if there is evidence of a quadratic relationship between the number of networks and foreign performance capacity. In other words, once the number of networks reaches at an optimum level, the positive link with foreign performance capacity would remain constant (an inverted L-shape relationship) or decline (an inverted U-shape relationship). This result provided support for a linear relationship between the two variables in South Korean Born Globals. This finding however might

be derived from the cross-sectional data used in this research. This implies that there may be a possibility of a quadratic relationship between the number of networks and foreign performance capacity if using other types of data such as longitudinal data. Hence it would be fruitful to investigate the relationship with longitudinal data.

Sixth, in capturing the international business experience of managers, this research took little account of the extent to which managers possess social capital and its transfer to network identification and building in a systematic manner. Hence, in Born Global research, consideration of social capital in assessing the international business experience of managers would help to more explicitly assess the role and importance of the factor as an underlying source of opportunity recognition, network building and enhancement of performance capacity in international markets.

International business performance of South Korean Born Globals was measured with three measures: satisfaction with foreign market growth, share of sales from international activities and the number of foreign markets supplied. This study used no measures of financial performance. Hence, it would be useful to use more stringent financial performance measures such as return on asset (ROA) and return on investment (ROI). The precision and accuracy of the measurement with international business outcomes could be improved by such an endeavour.

To measure the number of foreign markets supplied, a total of 12 foreign markets were selected through previous literature review. This method however might raise a potential response error. For example, a Born Global that focuses strategically on the Southeast Asian market is counted merely as 'one', even though having entered multiple countries within that area. In other words, there might be bias to count the number of markets, treating each of all countries as a single market. Thus, research into a classification and criterion of measuring geographical international diversification would also be fruitful.



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## APPENDICES

### Appendix I : Recent empirical studies on rapid internationalisation of the firm (2005-2008)

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Acedo and Jones (2007)	Spain / n.s.	216 questionnaires	Theory of international new ventures and entrepreneurship theory	The relationships between owner/manager's cognition and the speed of internationalisation in internationalising firms	International orientation: <i>education level, languages spoken, likeness to travelling, and experience abroad</i> Tolerance to ambiguity, Proactivity, Risk perception, Internationalisation speed	International orientation is related to higher levels of proactivity and a lower perception of risk, except for tolerance of ambiguity.  A higher tolerance of ambiguity does not exhibit a proactive disposition.	Perception of risk is the key cognitive factor regarding rapid internationalisation  Risk perception may be reduced by increasing the international orientation of the individuals involved and their tolerance of ambiguity.
Arenius, Sasi, and Garbielsson (2006)	Finland / software industry	1 case (12 interviews from members)	The rapid internationalisation of the firm	The role of the Internet in the rapid internationalisation of knowledge intensive firms	Resource scarcity Liability of foreignness Internet as a sales channel Speed of internationalisation	The Internet is an effective tool which allows firms to enter foreign markets at a rapid pace.  Faced with liability of foreignness and resource scarcity, knowledge intensive firms are expected to go international rapidly by using the Internet as a sales channel.  The Internet can influence both the international marketing operation modes and sales channel of the firms.	The Internet has the potential to increase the international intensity and diversity of the knowledge intensive firm, helping to compensate a lack of international business experience.  The Internet may simplify the internationalisation paths and organisation structures of knowledge intensive firms when going global, reducing the need of physical contacts.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Aspelund and Moen (2005)	Norway / all sectors	283 questionnaires	Process models of internationalisation and the born global perspective	Development of a typology of small and medium-sized firms regarding their speed and level of internationalisation	General characteristics International motivation Foreign market selection Foreign market entry modes Competitive profile International strategy performance	Small firms with different international motivation and competitive profiles tend to select different types of internationalisation patterns.  Clustering procedures provide evidence of path dependency in the internationalisation process and a large number of born globals are small businesses.  Born globals internationalise to derive extreme profitability compared to other types of firms.  The strong technological and market advantages combined with strategic focus are prerequisites for the successful international activities, thus becoming born globals.	Strategic intent and leveraging are crucial to internationalisation patterns of SMEs.  Born globals are forced to internationalise rapidly because of their specialised products and services, which may be secured by sufficient size of markets. In order to secure international success, the firms therefore are required to have strong competitive advantage in technology and marketing.  Managers in early internationalising firms should seek to have a global vision, thus helping to avoid organisational inertia and reinforce further internationalisation.  For policy makers, the target groups for export promotion programmes should include the new types of firms to provide support tailored to them.
Barringer, Jones, and Neubaum (2005)	US / n.s.	Secondary data of 100 firms	n.s.	Key attributes associated with rapidly internationalising firms through comparison between rapid-growth and slow-growth firms	Founder characteristics: <i>relevant industry, higher education, prior entrepreneurial experience, entrepreneurial story</i>  Firm attributes: <i>growth-oriented vision and mission, commitment to growth, participation in interorganisational relationships, planning, and goal setting</i>  Business practices: <i>add unique value, fill a niche, and customer knowledge</i>  HRM practices: <i>selective hiring, employee empowerment, training, employee development, nonfinancial and financial incentives, and stock options</i>  Rapid growth	The characteristics of the founder of a firm, along with a firm's attributes, business practices, and HRM practices, are important in helping a firm achieve rapid growth.	This research suggests a multitude of factors associated with rapid internationalisation. In particular, impacts of 'entrepreneurial stories', 'creating unique value' and 'HRM practices' variables on rapid growth of the firm are meaningful.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Blesa, Monferrer, Nauwelaerts, and Ripolles (2008)	Spain and Belgium / all sectors	207 questionnaires	International new venture perspective	How international new ventures acquire market knowledge from foreign markets and develop international positional advantage in those markets	Early international commitment  Market orientation: <i>inter-functional coordination, information search, information dissemination, response design, response implementation</i>  International positional advantage	An early international commitment influences the international positional advantage of international new ventures, facilitated by market orientation.  Market orientation can offer the information, knowledge, and actions which allow the international new venture to successfully compete in an international arena.	The gradual approach of internationalisation can be still useful to explain the behaviour of the early internationalising firms if the theories are accompanied by the unique characteristics of the firms.  Learning advantage of newness contributes to the international growth and competitive position of the international new venture.  The analyses provide a better understanding of how the firms can be competitive in the global marketplace, struggling with liabilities of newness and foreignness.
Chetty and Agndal (2007)	Sweden and New Zealand / all sectors	20 cases (50 interviews from members)	Transaction cost approach, network approach, and social capital perspective	How social capital affects small firms to change internationalisation modes.	Social capital's roles: <i>Efficacy, Serendipity, Liability</i>	Relational influences on SMEs internationalisation mode change are important.  The efficacy role of social capital is proved as a significant enabler for the mode change.  The serendipity and liability roles of social capital are a crucial trigger the mode change.  Of the three roles, the most frequent impact on the mode change is found the liability role.	The liability role of social capital in SMEs can have a positive influence on the outcome of the firms.  The liability of social capital has potential to integrate two theoretical frameworks: transaction cost and networks.  As enabling internationalisation mode changes, social capital should be developed and managed effectively.  A number of opportunities for mode change occur serendipitously because social capital in triggering this change. Thus, managers should keep monitoring their relationships not to miss out new lucrative opportunities.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Cloninger and Oviatt (2007)	US / Service industry	190 questionnaires	The Eclectic Paradigm (OLI)	Empirically testing service content is a critical variable influencing both the propensity of young ventures to internationalise and their location decisions.	Intangibility: <i>manufactured products, professional skills, and reports/audits</i> Inseparability: <i>face-to-face and export</i> Heterogeneity: <i>custom and standard</i> Perishability: <i>be stored/later use and delivery be delayed</i>	The service content of the outputs of international new ventures is significantly different from the service content of domestic young ventures.  The service content of the outputs of international young ventures is significantly different in different overseas locations.	Entrepreneurs need to recognize the extent of service content in their firm's outputs and to heighten their awareness of the potential implications that service content may bring on their firm's profitability.  Researchers and practitioners should seek to understand the effect of service content has on firm strategies and performance, and service characteristics should be incorporated into the development of business and entrepreneurship theories.
Contractor, Hsu, and Kundu (2005)	India and Taiwan / Software industry	108 questionnaire	International Entrepreneurship Theory: Theory of International New Ventures	To compare the impact of entrepreneurial factors and firm-specific factors on export performance of software industry of two nations: India and Taiwan	Entrepreneurship: <i>technical education, international experience, technological innovativeness, and strategic orientation</i>  Firm structural: <i>size, age, and international experience</i>  Firm strategy: <i>foreign expertise and foreign market coverage</i>	For start-up firms operating in high technology industry such as software industry, export performance is strongly associated with the character and background of the entrepreneurs. Firm-specific factors also in part affect their performance.	Export promotion and financial institutions should work to identify and nurture a growing number of entrepreneurs.  Traditional explanation of performance from the manufacturing industry is not necessarily applied to the service sector, or at least that traditional theory variables provide a less than complete explanation
Coviello (2006)	New Zealand / software industry	3 interviews (firms)	Network theory and international entrepreneurship	To assess the network dynamics of international new ventures	Network structure: <i>range, density, effective size, closeness centrality, and betweenness centrality</i>  Network interactions: <i>content, direction, and duration</i>	The overall changes in network structure play a role in increasing social capital for INVs.  Tie content, direction and duration of network interactions are more idiosyncratic. Thus, no one pattern explains the nature of ties in INV networks. This ties can be either social or economic, and either strong or weak.  Common patterns of structural evolution are identified, while international dimensions are found to be more variable.  The effective size of network increases, whereas the levels of constraint decrease.	This study emphasises certain subtleties regarding network evolution of international new ventures and provides insights into their network's structure and interactions.  Although networks of international new ventures are a major driver for their internationalisation, it cannot be easily categorised due to its variance.  However, the firms can derive competitive advantage from the network if managing it effectively.  Changes of the effective size and levels of constraints could provide international new ventures more opportunities in international markets.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Elango and Pattnaik (2007)	India / 5 kinds of manufacturing industries	Secondary data of 794 firms	Process theory of internationalisation and network theory	Explaining how firms in emerging markets build capabilities to operate in international markets through networks	Firm strategy factors: <i>marketing intensity, research intensity, market power, and operational efficiency</i>  Network characteristics: <i>network internationalisation, network scope, and foreign partner ownership</i>  Firm internationalisation	Firms draw on the international experience of their parental and foreign networks to build capabilities.  Network scope is of use for increasing exposure to international markets only in the case of networks.  While operating in international markets firms from emerging markets lack the differentiation advantages, they possess cost advantages.	Despite a lack of resources, emerging market firms seeking international markets need to resort to strategies that build international capabilities sequentially.  From the findings of this research, small firms operating in foreign markets need to integrate their own resources including networks into their strategic planning.  Firms little supported by parental network have better seek foreign partners drawing on their own resources.
Fernhaber, Gilbert, and McDougall (2008)	US / 9 types of industry	Secondary data of 156 firms	International entrepreneurship and ecological theory	To examine the concentration effects of industry clustering on resource acquisition for new venture internationalisation	International intensity  International scope, Size  R&D intensity  International work experience	The concentration of industry clustering within a location can promote new venture internationalisation, demanding resources.  Too much clustering increases competition, thus weakening the firm's ability to gain necessary resource to internationalise  A curvilinear relationship between the concentration of industry clustering and internationalisation of new venture is found.	The findings imply that location is particularly relevant to successful internationalisation of new ventures, particularly in terms of resource acquisition.  R&D intensity and international work experience are of great use to new ventures so as to continue their international endeavours. These two factors allow the firms to exploit local resources effectively and remove constraints from increased competition within a location.
Fink, Harms, and Kraus (2008)	Austria, Czech, and Slovenia / n.s.	146 questionnaires	Network and co-operation of internationalisation	To investigate the effect of self-commitment on international performance in SMEs	Self-commitment: <i>reputation, frustration tolerance, advance on trust, self-exposure, and self-restriction</i>  Maxim-based cooperation structure: <i>autonomy, equality, and mutual determination of behaviour</i>  Maxim-based communication: <i>conscious relationship and honesty</i>  Performance: <i>turnover growth</i>	Self-commitment positively influences structure, communication, and performance in both settings (national and international co-operations). Structure and communication does not significantly affect performance in a national context, while significantly influencing it in an international setting. Differences between groups are not detected, except a path: structure → performance).	The impact of self-commitment on performance in SME co-operations can be taken into account as valid irrespective of geographical and cultural contexts.  With international co-operations, maxim-based communication and maxim-based structures can be key driving forces for the firm's success.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Freeman and Cavusgil (2007)	Australia / n.s.	12 interviews	Network perspective, resource-based view, and international entrepreneurship	To examine the effect of born global managers' perceptions on the firms and to develop a typology of commitment states	Stage of commitment Internal and external environment Network evolution Foreign market selection Entry modes	The four entrepreneurial states of commitment - the responder, the opportunist, the experimentalist, and the strategist – are identified and offer a holistic attitudinal understanding of the internationalisation of small firms.  The experimentalist and strategist are backed by international entrepreneurship, network perspective, and resource-based view.  Greater understanding of states of commitment of entrepreneurs in born globals is important.  Leaping into multiple markets and switching them are strategic entrepreneurial moves of small firms.	Smaller firms should not hesitate to enter multiple leading markets at the same time.  The rapid pace of internationalisation of born globals relies to a considerable extent on the extent of technological innovation.  To be able for the smaller firms to accelerate their internationalisation, entrepreneurs are advised to create relationships with potential foreign network partners who consist of high-level executives of large global firms on a continuous basis.
Freeman, Edwards, and Schroder (2006)	Australia / n.s.	20 interviews in three firms	Internationalisation theories: born globals and network perspective	To explore how born global firms achieve rapid growth in international markets through their networks and the relationships change over time.	Lack of economies of scale Lack of resources: <i>financial and knowledge</i> Aversion to risk taking	Born global firms can overcome constraints to rapid internationalisation adopting various strategies: personal networks, collaborative partnerships, client followership, use of advanced technology, and multiple modes of entry	Collaborative partnerships enable born global firms to achieve economies of scale quickly.  The use of multiple foreign entry modes allows them to rapidly expand their operation internationally and to realise the economies of scale.  The use of the various entry modes allows born global firms to minimise risk, thus helping secure international success.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Gassmann and Keupp (2007)	Switzerland, Germany and Australia / biotechnology industry	6 interviews	Knowledge-based view	Identifying the basis of the competitive advantage that enables small firms to internationalise early and rapidly	<p>Uniqueness of specialisation in international value chains</p> <p>Homogeneity of product or service</p> <p>Uniqueness of innovation</p> <p>Scope of intellectual property rights protection</p> <p>Embeddedness in global communication and networks</p> <p>Importance of geographical location</p> <p>Resource 'on demand'</p>	<p>Based on the knowledge-based view, this research provides what the basis of born globals' competitive advantage is and how it can be sustained by protection.</p> <p>Suggesting other measures to overcome for born globals the problem of limited tangible resources</p>	<p>This research shows whether networks provide mechanisms enabling the firm to overcome resource deficiencies.</p> <p>By focusing on intra-firm data, firms can use various business models for internationalisation.</p> <p>Different from other studies, the cases show it is possible to commit resources in one country.</p> <p>Value chains and protection of intellectual property rights can provide how to build up and sustain their firm's international competitive advantages.</p> <p>Born globals should invest more in knowledge, rather than tangible resources</p> <p>Suggestion of how SMEs may turn into quickly born globals.</p> <p>Internationalisation can be done by positioning in international value chains.</p>
Gleason and Wiggernhorn (2007)	US / n.s.	Secondary data of 124 firms	Theory of international new ventures	Analysing which factors of born-globals determine their choice for foreign entry mode	<p>Size</p> <p>Proprietary knowledge</p> <p>Profitability: <i>ROA and ROE</i></p> <p>Intangibility</p> <p>Leverage</p> <p>Liquidity</p>	<p>Larger, more profitable, and more liquid firms have a higher propensity to engage in joint ventures rather than acquisitions.</p> <p>Firms that announce joint ventures have significantly positive abnormal returns, whereas announcements of acquisitions result in insignificant abnormal returns.</p>	<p>The level of development of the target country affects international mode choice.</p> <p>This research is the first to examine the market's response to announcements of joint ventures and acquisitions made by born globals. It is also the first to examine the effects of the management team and board of directors on international expansion of born globals.</p> <p>Intangibility is an important determinant of abnormal returns, implying that investment in proprietary technology and processes is essential for the success of the international expansion.</p> <p>Anyone in the board should have international experience unless the founder has it.</p>

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Han and Celly (2008)	Canada / all the sectors	70 questionnaires	Ambidextrous organisational theory, international new venture perspective	To investigate the linkage between strategic ambidexterity of international new ventures and their performance	Standardisation Innovation Numbers of foreign markets Few international investments Performance-profit dimension Performance-growth dimension	INVs that adopt strategic ambidexterity reap superior performance.  The concept of strategic ambidexterity is crucial to firm success and sustainable survival. Thus, the pairs of the concept, i.e., standardisation – innovation, few investments – many countries, may be the best practice for the early internationalising firms.	This research is the first to address the importance of strategic ambidexterity for the performance of INVs, providing new insights into the firms' entrepreneurs.  The strategic ambidexterity allows the small firms to build sustainability and performance, providing a solid platform turning limitations or crisis into opportunities.  Thus, embracing the strategic option may be the best way to achieving superior performance of INVs.
Jantunen, Nummela, Puumalainen, and Saarenketo (2008)	Finland / 9 types of industry	299 questionnaires	Strategic orientations and born global perspective	To investigate the impact of strategic orientation on international performance with a focus on moderating effects of international growth strategy	Strategic orientation: <i>entrepreneurial orientation, international growth orientation, and learning orientation</i>  International growth strategy: <i>born global, born-again global, traditional international, and domestic</i>  International performance: <i>satisfaction</i>	The strategic orientation and international performance is moderated by international growth strategy.  Entrepreneurial orientation and learning orientation are particularly distinct between born globals and other types of firms.  Learning orientation exerts the highest influence on performance.	Becoming born globals relies to a considerable extent on a high degree of both entrepreneurial and international growth orientation.  To be able firms to secure international success, they should develop their entrepreneurial characteristics and learning capabilities. However, it is also important to take cautious account of their levels.
Knight and Cavusgil (2005)	US / n.s.	24 interviews and 365 questionnaires	Born global perspective	To investigate the linkages among firm orientations, strategies, and international performance and then develop taxonomy of the firms.	Orientations: <i>international entrepreneurial orientation and technological leadership</i>  Generic strategies: <i>differentiation, focus, and cost leadership</i>  International performance	In the taxonomy, reasonable discrimination is achieved in the four clusters: 1) entrepreneurial strategy and technology leaders, 2) high-tech focusers, 3) entrepreneurs emphasising cost leadership, and 4) poor performers 'stuck-in-the-middle'. Thus, there are four types of born global firms.	Born globals may be more competitive by avoiding approaches of cost leadership as a sole source of competitive advantage.  Well-defined strategic orientation such as focus and differentiation may be critical for smaller, resource-poor born globals for their successful international involvement.  The rapid internationalisation of the firm allows it to reap superior performance.  As born globals are young, less experienced with limited resources, public policy tailored to the firms are highly recommended and important.



Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Kuivalainen, Sundqvist and Servais (2007)	Finland / n.s.	185 questionnaires	Theory of international new ventures	Analysing how the scale and scope of being a born globals affect their performance	International experience Share of foreign turnover Number of countries exported to Proactiveness Risk taking Competitive aggressiveness Performance: <i>sales, profit, and sales efficiency</i>	Between true born globals and born-internationals, distinction has been made in terms of the scale and scope of internationalisation, while no difference has found regarding the timing of it.	Entrepreneurial behaviour has an impact on international strategy of born globals.  The two types of born globals have different characteristics regarding experience and size of the firm.  The true born globals were older than born-internationals, but they had also better export performance.
Laanti, Gabriellsson, and Gabriellsson (2007)	Finland / wireless technology industry	4 interviews (firms)	Process models of internationalisation and born global perspective	To examine the effect of resources and capabilities of born globals on their globalisation strategies	Resources and capabilities: <i>founders/management, innovation, network, and finance</i>  Globalisation strategies: <i>product categories, operation strategies, and global market presence</i>	Founders of the cases are highly competent in technological and international business knowledge. They are found to possess an international focus and high degree of entrepreneurial attitudes.  The cases (Finnish wireless technology born globals) are found to have a sufficient amount of funding available, thus allowing for their rapid internationalisation.	In the early stage of internationalisation of born globals, domestic network is crucial. The role of foreign network increase, later on.  Central to born globals is the capacity to innovate.  The rapid advancement of born globals can be explained by high levels of resources and capabilities.
Loane and Bell (2006)	Australia, Canada, Ireland, and New Zealand / 7 types of industry	143 questionnaires and 53 interviews	Network approaches of, resource-based view of, and knowledge-based view of internationalisation	To explore the role of networks in the acquisition of knowledge and resources in small entrepreneurial firms and the effect of the two factors on the rapid internationalisation of the firms	Network leverage: <i>used existing networks and built new networks</i>  Resource acquisition  Knowledge acquisition	Social and business networks are a valuable resource for the small firms.  Although small firms clearly understand the value of networks, not all the firms possess relevant networks when going international, contrary to the existing theories.  Networks are just one of many parts of knowledge and resources.  Network acquisition and network leverage are one of the various strategic options for firm internationalisation.	Firms should not only use present connections with partners, but also seek to establish new ones for further internationalisation.  To be able for early internationalising entrepreneurial firms to secure international success, the development of relevant network should be carried out in a strategic fashion and mutually beneficial to both themselves and partners on an ongoing basis.  Policy markers are advised to pay more attention to support for the firms to have access to and develop promising networks.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Loane, Bell, and McNaughton (2007)	Australia, Canada, Ireland, and New Zealand / 7 types of industry	143 questionnaires and 53 interviews	Born global perspective and entrepreneurship (top management teams)	To explore the effect of top management teams in rapidly internationalising firms on internal capabilities and external resources for rapid and dedicated internationalisation	<p>Origin of founding teams: <i>number firms founded by teams, worked together, studied together, and friends coming together</i></p> <p>Experience of management teams: <i>work broad, international experience, study abroad, relevant industry experience, global vision</i></p> <p>Team formation, capabilities and skills of management teams</p> <p>External resources and their building</p> <p>Export ratio</p>	<p>Firms with heterogeneous managements can enjoy superior performance: internationalisation speed, broader scope of international markets, and higher foreign sales. That performance is enhanced by greater resource capabilities and skills in top management teams.</p> <p>A combined network of the heterogeneous members may be more diverse and extensive than that of an individual entrepreneur.</p>	<p>The combined creativity, knowledge and resourcefulness of top management teams are crucial for rapid internationalisation of knowledge-based firms.</p> <p>For firms operating in high-tech sectors, team formations may be more necessary and beneficial.</p> <p>There is a need to take into account the circumstances in terms of changes in management teams because it is important in dealing with perceived capability gaps.</p> <p>The role of public support agencies as moderators assisting small firms to form their teams effectively and have access to network is essential to their rapid internationalisation.</p>
Mudambi and Zahra (2007)	UK / n.s.	275 questionnaires	Strategic choice theory and theory of international new ventures	To examine the survival probabilities of international new ventures through comparison with other sequential modes of international firms	<p>Industry characteristics: <i>industry growth, seller concentration, foreign penetration, knowledge-based nature of the industry, and industry type</i></p> <p>Firm characteristics: <i>technological competence, company size, international experience, government support, mode of initial entry, and country-of-origin</i></p> <p>Possession of unique intangible assets: <i>high-technology industry, R&amp;D intensity, and patents</i></p> <p>The international experience of senior managers</p> <p>International networks: <i>TMT number of countries, large MNE experience, and export intensity</i></p> <p>Reliance on alternative government structures</p>	<p>INVs have similar odds of survival as other modes of foreign entry.</p> <p>INVs are especially useful in riskier industries, underscoring the importance of understanding a firm's resources and industry characteristics and how they might influence INVs' survival.</p> <p>It is quite crucial to include strategy and choice in models of firm performance in examining new firm survival in international markets.</p>	<p>Entrepreneurs and managers should consider their firm's industry conditions and resources before entering foreign markets. This is especially important for young new ventures.</p> <p>Entrepreneurial TMT's international experience is of importance in that the characteristic have a strong impact on a firm's survival in foreign markets.</p> <p>This research also urges managers to effectively exploit their firms' intangible resources as they consider internationalising their operations.</p> <p>Probabilities of Firms with high levels of technological competencies are higher than firms without such competencies in global markets.</p>

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Nadkarni and Perez (2007)	US / 17 types of industry	Secondary data of 212 firms	Resource theories, Eclectic paradigm, and process theory of internationalisation	Investigating the mediating role of domestic mindsets in the relationship between prior conditions and early international commitments	Domestic resource diversity Domestic competitive action complexity Complexity of domestic mindset, and early international commitment Diversification, firm age, technology expertise, capital intensity, product differentiability, market share, and international experience of TMT	Domestic resource diversity and domestic action complexity have impacts on complexity of domestic mindset. Complexity of domestic mindset plays a mediating role in the relationship between the two antecedents and early international commitments.	Resource decision-making factors are of importance in early international commitments. Knowledge and learning gained in domestic markets through diverse resource and competitive activities may be crucial in early international commitments. Investigating the role of mindsets in early international decisions made by born-globals is an important area of research.
Nordman and Melen (2008)	Sweden / biotechnology industry	8 interviews (firms)	Born global and knowledge perspective and Uppsala school's perspective of and Austrian school's perspective of discovery and exploitation of opportunities	To explore the relationship between kinds of knowledge (international and technological) of entrepreneurs of born globals and the firms' discovery and exploitation of international opportunities	International knowledge Technological knowledge Foreign market opportunity Opportunity search activity Ongoing foreign market activity	All the cases were initially managed by individuals who possessed a high level of technological knowledge. Thus, the knowledge is positively bearing on rapid internationalisation of firms. International knowledge of the firms' entrepreneurs allows them to plan their internationalisation strategies in a structured fashion. Born Internationals seems to be proactive while Born Academics are reactive, in terms of opportunity discovery. The former tends to go international faster than the latter.	The international process of born globals may deviate, depending on entrepreneurs' knowledge background. Not all born globals are created by individuals with a high level of international knowledge. It is necessary to analyse the internationalisation of born globals with a particular focus on heterogeneous groups to gain a deeper understanding of it. To do so, a more holistic approach is needed to be taken.
Pla-Barber and Escriba-Esteve (2006)	Spain / n.s.	271 questionnaires	Process theory of internationalisation, Theory of international new ventures, and competitive advantage theory	Analysing if exporting firms following rapid internationalisation process from a late investor country are in existence.	Management team's attitude to internationalisation: <i>proactive attitude, reactive attitude, and global orientation</i>  Competitive advantages: <i>marketing differentiation and technology differentiation</i>  Networks: <i>suppliers network, customers network, competitors network, and institutions network</i>	Firms from a late investor country do not necessarily need to follow a slow, sequenced pattern to enter international markets effectively.  But, the variables - technological differentiation, global strategic vision, influence of institutions, and size - had no effect on the speed of the internationalisation process.	This research focuses on the forces behind an accelerated process of internationalisation, emphasising their strategic management.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Sullivan-Mort and Weerawardena (2006)	Australia / all the sectors	6 interviews (firms)	Internationalisation theories, capability-based view, and born globals perspective	To explore the role of networking capabilities in born globals and establish conceptual framework focused on the capabilities	Behavioural characteristics of born globals: <i>innovativeness, proactiveness, and risk-taking</i>  Networking capability: <i>resource configurations</i>  Rapid internationalisation: <i>market exploitation</i>  Knowledge intensive products: <i>technological knowledge and market trend knowledge</i>  International market performance: <i>market entry and market development</i>	International entrepreneurship in born globals can be characterised by dynamic networking capabilities, which is central to the accelerated internationalisation of the firms with international performance.  The dynamic networking capabilities allow the early internationalisation firms to significantly reduce risks which may occur in decisions to enter foreign markets.  Network capability is crucial to both a low-tech sector and a high-tech sector.	Born globals should seek to foster dynamic networking capabilities with a view to achieve international performance.  Networking activity per se is not the best strategy, but should be complemented by entrepreneurial behaviours.  Even, firms in low-tech industries should pay more attention to raising their network capabilities.  Strategic decision of firms may be remarkably limited once involved in networks, thus calling for cautious considerations of network activities.
Tuppura, Saarenketo, Puumalainen, Jantunen, and Kylaheiko (2008)	Finland / 8 types of industry	299 questionnaires	Internationalisation theories and knowledge-based view	Investigating the relationships among the characteristics of the firm's resource base, market-entry timing orientation, and international growth orientation	Knowledge characteristics: <i>accumulated experience, versatility, and network dependence</i>  Market-entry timing orientation  International growth orientation  Internationalisation strategy: <i>path type, operation mode, and number of countries</i>	Knowledge characteristics (particularly, accumulated experience) exert a positive influence on market-entry timing orientation and international growth strategy. The both sequentially affect an internationalisation strategy.	Findings imply that firms perceive themselves as being better ready to pioneer new foreign markets if possessing prior knowledge of those markets.  It is the timing of the internationalisation activities that is a paramount issue when decision makers take into account an internationalisation strategy.
Zhou (2007)	China / n.s.	775 questionnaires	Theory of international new ventures and process theory of internationalisation	Investigating the impact of international entrepreneurial proclivity and foreign market knowledge on the performance of born globals	International entrepreneurial proclivity: <i>proactiveness, risk-taking, and innovativeness</i>  Foreign market knowledge  Cultural diversity, firm size, international experience, product type, international sales growth, born-global speed	Foreign market knowledge leads to early and rapid internationalisation and the effect is driven by international entrepreneurial proclivity.	This research is the first step of whether foreign market knowledge may lead to early and rapid internationalisation.  Young internationalising firms should develop other mechanisms to acquire the requisite knowledge and resources.  Foreign market knowledge may drive the difference between traditional process model of internationalisation and the early internationalisation.

Author(s) / Year	Countries / Industries	Research method / Sample	Theoretical backgrounds	Key themes	Key factors	Conclusions	Implications
Zhou, Wu, and Luo (2007)	China / n.s.	129 questionnaires	Social Networks Theory	Investigating the mediating role of social networks in the relationship between internationalisation orientations and the performance of born globals.	Outward internationalisation Inward internationalisation Guanxi networks (social networks) Performance: <i>export, profitability, and sales</i>	Both outward and inward internationalisation orientations have impacts on firm performance, except for sales performance, via home-based social networks. There are however differences in the mediating role of the social networks on performance measure, with a stronger effect in the case of outward internationalisation.  The role of such social networks is crucial to speed and profitability of born globals.	In theory, this research exhibit that the social networks perspective can explain to a considerable extent the performance of born globals. Additionally, social networks tie can have benefit not only for export initiation and foreign market entry but for performance of born globals.  In practice, this research suggests that managers of international firms should weigh up social networks as a very efficient means of helping internationally oriented SMEs so as to go global more rapidly and profitably.  For policymakers, government's export assistance programmes and services would benefit if they are focused on cultivating personal social networks.
Zucchella , Palamara, and Denicolai (2007)	Italy / n.s.	144 questionnaires	Theory of international new ventures and network theory	Analysing the drivers of precocity of internationalisation of the firm	Entrepreneurial-specific: <i>education and foreign languages, international experiences and prior work experiences</i>  Business-specific: <i>focalisation of strategy,</i>  Location-specific: <i>clusters and districts</i>  Network-specific: <i>formal agreements, social relationships, and knowledge sharing at the interorganisational level</i>  Internationalisation precocity: <i>INVs and EIFs surge</i>	Overall, positive relationships between age of the firm and precocity in internationalisation found.  In the effect on internationalisation, the role of network was not strongly supported while the knowledge of foreign language is very significant	The role of foreign language is vital for potential entrepreneurs with an international mindset.  An early internationalisation can turn into a competitive advantage when initial vision is complemented effectively by other drivers: business, organisation, and location.

**Appendix II** : Descriptive statistics for the view of the economic and business environments

Construct	Item	Statistics			
		Mean	SD	Min	Max
Financial arrangement	Retained profits	3.73	1.08	1.00	5.00
	Bank loans	2.78	1.21	1.00	5.00
	Financial support by government	2.60	1.23	1.00	5.00
Network relationships	Customers	3.95	0.95	1.00	5.00
	Suppliers	3.89	0.88	1.00	5.00
	Competitors	2.27	0.98	1.00	5.00
	Government research centres	2.23	1.12	1.00	5.00
	University research centres	2.26	1.13	1.00	5.00
	Government policy makers	1.92	0.96	1.00	5.00
	Industry based associations/agencies	2.63	1.18	1.00	5.00
Trade associations/agencies	2.64	1.15	1.00	5.00	

**Appendix II : Continued**

<b>Construct</b>	<b>Item</b>	<b>Statistics</b>			
		<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
Domestic institutional/market factors	Size of the domestic market	3.73	0.98	1.00	5.00
	Degree of competition in the domestic market	3.47	1.10	1.00	5.00
	Competition in price in the domestic market	3.45	1.04	1.00	5.00
	Financial support environments	2.83	1.02	1.00	5.00
	Support from government agencies	2.89	0.99	1.00	5.00
	Costs of regulations	3.52	0.82	1.00	5.00
	Skill shortages in the labour market	3.59	0.84	1.00	5.00

**Appendix III:** Discriminant validity for all pairs of the constructs - Confidence interval test

<b>Dimension</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>t-value</b>	<b>Lower Boundary</b>	<b>Higher Boundary</b>
VN – NN	0.28	0.05	6.02	0.18	0.38*
IBE – NN	0.16	0.05	3.48	0.06	0.26*
IBE – VN	0.21	0.05	4.56	0.11	0.31*
VN – FPC	0.22	0.04	5.29	0.14	0.30*
NN – FPC	0.23	0.04	5.15	0.15	0.31*
IBE – FPC	0.18	0.05	3.55	0.08	0.28*
IBE – SFMG	0.24	0.06	3.92	0.12	0.36*
NN – SFMG	0.21	0.05	4.35	0.11	0.31*
VN – SFMG	0.13	0.04	2.89	0.05	0.21*
FPC – SFMG	0.53	0.07	7.64	0.39	0.67*
IBE – SSIA	0.21	0.06	3.38	0.09	0.33*
IBE – NFMS	0.13	0.03	4.02	0.07	0.19*
NN – SSIA	0.16	0.05	3.21	0.06	0.26*
VN – SSIA	0.07	0.05	1.46	-0.03	0.17*
SFMG – SSIA	0.40	0.07	5.74	0.26	0.54*
FPC – SSIA	0.22	0.06	3.92	0.10	0.34*
NN – NFMS	0.07	0.02	3.09	0.04	0.11*
VN – NFMS	0.08	0.03	3.33	0.02	0.14*
SFMG – NFMS	0.11	0.03	3.40	0.05	0.17*
FPC – NFMS	0.08	0.03	3.06	0.02	0.14*
SSIA – NFMS	0.15	0.03	4.25	0.09	0.21*

Note: \* does not contain the value of 1.0.

IBE = international business experience of managers, VN = value of network, NN = number of network, FPC = foreign performance capacity, SFMG = satisfaction with foreign market growth, SSIA = share of sales from international activities, NFMS = number of foreign markets supplied



#### Appendix IV: Significance test of the indirect effects

Indirect path	Indirect effect	Test <sup>1</sup>	z statistic	p-value
IBE → VN → NN	0.247	(1)	4.399	0.000
		(2)	4.378	0.000
		(3)	4.421	0.000
VN → NN → FPC	0.245	(1)	4.516	0.000
		(2)	4.495	0.000
		(3)	4.538	0.000
IBE → FPC → SFMG	0.256	(1)	3.309	0.001
		(2)	3.289	0.001
		(3)	3.329	0.001
IBE → FPC → SSIA	0.140	(1)	2.980	0.003
		(2)	2.944	0.003
		(3)	3.017	0.003
IBE → FPC → NFMS	0.055	(1)	2.761	0.006
		(2)	2.718	0.007
		(3)	2.806	0.005
NN → FPC → SFMG	0.373	(1)	4.440	0.000
		(2)	4.417	0.000
		(3)	4.464	0.000
NN → FPC → SSIA	0.205	(1)	3.727	0.000
		(2)	3.694	0.000
		(3)	3.761	0.000
NN → FPC → NFMS	0.080	(1)	3.323	0.001
		(2)	3.288	0.001
		(3)	3.360	0.001

Note: <sup>1</sup> (1) = Sobel test, (2) = Aorian test, and (3) = Goodman test

IBE = international business experience of managers, VN = value of network, NN = number of network, FPC = foreign performance capacity, SFMG = satisfaction with foreign market growth, SSIA = share of sales from international activities, NFMS = number of foreign markets supplied

## Appendix V: Results of the analyses of alternative models

Hypothesized path	Coefficient			
	Model A	Model B	Model C	Model D
International business experience of managers → Value of networks	0.39**	0.38**	0.38**	0.38**
International business experience of managers → Number of networks		0.06		0.06
International business experience of managers → Foreign performance capacity	0.27**	0.26**	0.22**	0.22**
Value of networks → Number of networks	0.62**	0.60**	0.62**	0.59**
Value of networks → Foreign performance capacity			0.14	0.15
Number of networks → Foreign performance capacity	0.40**	0.40**	0.32**	0.32**
Foreign performance capacity → Satisfaction with foreign market growth	0.78**	0.79**	0.77**	0.77**
Foreign performance capacity → Share of sales from international activities	0.36**	0.37**	0.35**	0.36**
Foreign performance capacity → Number of foreign markets supplied	0.29**	0.29**	0.29**	0.29 **

Note: 1. \* p<.05, \*\* p<.01

2. Indirect effects were calculated using unstandardised coefficients.

3. The significance of the indirect effects was estimated using Sobel test statistic.

**Appendix VI:** Results of direct effects including the IBE – NN relationship and VN – FPC relationship

Hypothesis	Hypothesized path	Unstandardised coefficient	Standardised coefficient	Standard error	t-value
1	International business experience of managers → Foreign performance capacity	0.202	0.220	0.070	2.879**
2	International business experience of managers → Value of networks	0.349	0.377	0.070	4.976**
	International business experience of managers → Number of networks	0.063	0.060	0.065	0.956
3	Value of networks → Number of networks	0.667	0.592	0.083	8.010**
	Value of networks → Foreign performance capacity	0.144	0.145	0.086	1.674
4	Number of networks → Foreign performance capacity	0.281	0.318	0.076	5.252**
5a	Foreign performance capacity → Satisfaction with foreign market growth	1.035	0.773	0.125	8.261**
5b	Foreign performance capacity → Share of sales from international activities	0.559	0.355	0.108	5.199**
5c	Foreign performance capacity → Number of foreign markets supplied	0.224	0.291	0.052	4.296**

**Model fit**

$\chi^2 = 233.16$  (df=121, p=0.000),  $\chi^2/df = 1.927$ , RMR = 0.057, GFI = 0.913, AGFI = 0.877, RMSEA = 0.059, NFI = 0.903, TLI = 0.937, CFI = 0.950

Note: \* p<0.05, \*\* p<0.01

## **Appendix VII: Questionnaire (*in English*)**

Note: The questionnaire was drafted in English and translated it into Korean. The Korean version was checked by two Korean academics with good knowledge of both languages. The final questionnaire then was piloted in 10 firms to make sure that the questions were understood by the respondents. More detail was provided in Chapter 6.

### **Questionnaire on international activities of Korean firms**

#### **NOTES FOR COMPLETION OF THE QUESTIONNAIRE:**

- (a) Your response will be strictly confidential and no firm will be named in any publication/report, which follows the analysis of the data that we collect.
- (b) All the questions relate to the firm at the site to which the questionnaire has been sent.

#### **Section 1: Information about Your Firm**

1.1 Postcode: \_\_\_\_\_

1.2 Website address (if not applicable, please give your email address): \_\_\_\_\_

1.3 Age of Chief Executive Officer (CEO): \_\_\_\_\_

1.4 Average age of top management: \_\_\_\_\_

1.5 In what year was your firm founded? \_\_\_\_\_

1.6 In what year did your firm begin international activities? \_\_\_\_\_

1.7 Please indicate which industry your firm operates in. For example,

- Software
- IT and Communication Hardware
- Consumer Electronic Products
- Life Sciences and Medical Technology

The industry that you consider your firm to be in is \_\_\_\_\_.

1.8 How many workers does your firm currently employ? \_\_\_\_\_

Over the last three years has the number of your workers increased \_\_\_\_\_ or decreased \_\_\_\_\_ or remained constant \_\_\_\_\_?

1.9 How much money as a percentage of annual sales is spent on research and development (R&D) activities?

①	②	③	④	⑤
0-10%	11-20%	21-40%	41-60%	60+%

1.10 What proportion of your total revenue is earned from:

\_\_\_\_\_ % export sales of products produced in your firm in Korea

\_\_\_\_\_ % resale of imported products by your firm in Korea or elsewhere in the world

\_\_\_\_\_ % domestic sales of products produced by your firm in Korea

\_\_\_\_\_ % domestic sales connected to licensing and royalties

\_\_\_\_\_ % foreign sales connected to licensing and royalties

\_\_\_\_\_ % other sources (please specify) \_\_\_\_\_

100%

## Section 2: General Information about CEO or Top Management

2.1 What is the highest level of education your CEO has achieved? (Please tick one)

- Secondary school ( )
- Technical training ( )
- University degree ( )
- Master degree ( )
- PhD degree ( )

2.2 The CEO or other member of the top management speaks \_\_\_\_\_ number of foreign. Please indicate the major foreign language spoken by the CEO \_\_\_\_\_

Item	Low	Moderate	High		
What is the ability of your CEO or top management in the major foreign languages that they speak?	①	②	③	④	⑤

2.3 What is the approximate percentage of your employees that spend most of their time on international business activities? \_\_\_\_\_%

2.4 In relation to question 2.3 – what is the average number of months that these employees have spent most of their time on international business activities? \_\_\_\_\_ months

2.5 Number of employees who studied in foreign countries: \_\_\_\_\_

2.6 Please tick the option that best describes your view on the following statements.

Item	Strongly disagree		Moderate		Strongly agree
Our top management possesses a great deal of international business experience.	①	②	③	④	⑤
Our top management has extensive experience of foreign travel.	①	②	③	④	⑤
Our top management is experienced in foreign language.	①	②	③	④	⑤

### Section 3: Financial arrangement and network relationships

3.1 What are your R&D expenditures as a percentage of total revenue? \_\_\_\_\_%

3.2 Approximately what percentage of your employees is primarily engaged in R&D? \_\_\_\_\_%

3.3 To what extent does your firm raise finance for investment for international business activities by the following means?

Item	Low	Moderate	High		
Retained profits	①	②	③	④	⑤
Bank loans	①	②	③	④	⑤
Financial support by government	①	②	③	④	⑤
Other means (please specify):					

3.4 Approximately how many relationships to develop foreign markets does your firm have with the following?

Item	Low	Moderate	High		
Customers	①	②	③	④	⑤
Suppliers	①	②	③	④	⑤
Competitors	①	②	③	④	⑤
Government research centres	①	②	③	④	⑤
University research centres	①	②	③	④	⑤
Government policy makers	①	②	③	④	⑤
Industry based associations/agencies	①	②	③	④	⑤
Trade associations/agencies	①	②	③	④	⑤

3.5 What is your assessment of the value to your firm for the development of foreign markets of these relationships?

Item	Low	Moderate	High		
Customers	①	②	③	④	⑤
Suppliers	①	②	③	④	⑤
Competitors	①	②	③	④	⑤
Government research centres	①	②	③	④	⑤
University research centres	①	②	③	④	⑤
Government policy makers	①	②	③	④	⑤
Industry based associations/agencies	①	②	③	④	⑤
Trade associations/agencies	①	②	③	④	⑤

3.6 Approximately how many relationships does your firm have to develop the following activities?

Item	Low	Moderate	High		
Product development for foreign markets	①	②	③	④	⑤
Developing foreign market supply channels	①	②	③	④	⑤
Developing foreign market intelligence	①	②	③	④	⑤
R&D for foreign market development	①	②	③	④	⑤

3.7 What is your assessment of the value to your firm of these relationships?

Item	Low	Moderate	High		
Product development for foreign markets	①	②	③	④	⑤
Developing foreign market supply channels	①	②	③	④	⑤
Developing foreign market intelligence	①	②	③	④	⑤
R&D for foreign market development	①	②	③	④	⑤

#### Section 4: Domestic Institutional/Market Factors

4.1 Please tick the option that best describes your view on the following statements.

Item	Lo w	Mo d.	Hi gh		
The domestic market for the products my firm sells is large and growing.	①	②	③	④	⑤
The domestic market for the products my firm sells faces strong competition from imports.	①	②	③	④	⑤
The competition in the domestic market for the products my firm sells is primarily based on price.	①	②	③	④	⑤
There is good financial support from banks and financial institutions for the industry my firm is in.	①	②	③	④	⑤
Governmental agencies provide good advice and support to help with the financial requirements of the industry my firm is in.	①	②	③	④	⑤
There are high costs of complying with the regulations that the industry in which my firm is.	①	②	③	④	⑤
There are no serious skill shortages in the labour market in the industry in which my firm is.	①	②	③	④	⑤



## Section 5: Overall Firm Performance

5.1 Please indicate the degree of your satisfaction with your firm's performance in comparison with your major market competitors over the past three years.

Item	Highly dissatisfied		Moderate		Highly satisfied
International sales growth rate	①	②	③	④	⑤
Cash flow	①	②	③	④	⑤
Return on investment (ROI)	①	②	③	④	⑤

5.2 How would you rate your firm's performance in comparison with your major market competitors over the past three years?

Item	Low		Moderate		High
Overall success in international markets	①	②	③	④	⑤
International market share	①	②	③	④	⑤
International customer satisfaction	①	②	③	④	⑤
International market growth likelihood	①	②	③	④	⑤
Development of technology from international activities	①	②	③	④	⑤
Knowledge acquisition of international markets	①	②	③	④	⑤
International competitiveness	①	②	③	④	⑤

## Section 6: Scope of Internationalisation

6.1 Please rank the following countries/areas as foreign markets for your firm. Use 1 for the largest foreign market. Use 2 for the second largest market and so on. Mark as 0 any of these countries/areas that your firm does not have as foreign markets.

Countries/areas	Ranking
China	( )
India	( )
Japan	( )
Southeast	( )
Asia	( )
North America	( )
Latin America	( )
European Union	( )
Australia and New Zealand	( )
Middle East	( )
North Africa	( )
Sub-Saharan Africa	( )

6.2 What mode of entry your firm chose when entering the first foreign market?

Entry mode	
Licensing	( )
Contract through overseas exhibition	( )
Exporting	( )
Importing	( )
Joint investment	( )
Establishment of office overseas	( )
Establishment of factory overseas	( )
Establishment of institute overseas	( )
Other (please specify	( )

### **Thank you very much for your co-operation!**

Please return the completed questionnaire in the enclosed addressed envelope or by fax (053 810 4652). Please attach a business card if you are interested in receiving an executive summary of the results emailed to you.

## Appendix VIII: Questionnaire (in Korean)

(※) 본 조사의 내용은 통계법 제 8 조에 의거 비밀이 보장되며 통계목적 외에는 사용하지 않습니다.

### 한국 중소기업의 해외 활동에 관한 설문지

안녕하십니까? 먼저 귀사의 무궁한 발전과 건승을 기원합니다.

저는 현재 영국의 The University of Hull 의 Business School 에서 박사과정을 공부하고 있는 학생입니다. 저는 한국의 중소기업들의 해외 활동을 촉진하기 위한 연구를 진행 중에 있습니다. 이에 본 연구를 위한 데이터를 수집하고자 현재 국내에 머물고 있으며, 무례를 무릅쓰고 귀사에 이렇게 협조를 구하고자 합니다.

수집된 자료는 분석되어 저의 학문적 연구는 물론, 향후 국내 중소기업들의 해외 시장 진출 및 활동에 의미있는 도움이 되도록 귀중하게 활용될 것입니다. 아울러 귀하께서 원하신다면 본 연구결과의 요약본을 보내드릴 것을 약속드립니다.

통계법에 의거하여 응답내용이 절대로 공개되지 않으니 귀하께서 느끼시는 바를 솔직하게 응답해 주시기를 간곡히 부탁드립니다.

설문지의 회수 속에 다시 이런 설문지를 드려서 대단히 송구합니다. 아울러 다시 한번 귀하의 협조에 감사드립니다.

2008. 2.

박 태 경

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I. 다음은 귀사의 기본적인 정보에 관한 질문입니다.

1) 회사 설립년도	( )년
2) 산업 분류	① 전기.전자 ② 정보통신 ③ 기계 ④ 바이오 ⑤ 서비스 ⑥ 기타 ( )
3) 회사 홈페이지 주소	① 있다( ) ② 없다
4) 창업자 성별	① 남 ② 여
5) 창업자 연령	( )세
6) 임원진 평균 연령	( )세
7) 종업원수	현재 ( )명
	지난 3년간 증가한 종업원수 ( )명
	지난 3년간 감소한 종업원수 ( )명
8) 연구개발 인력수	( )명
9) 총수익 대비 연구개발 비용	( )%
10) 해외 사업 (예: 수출)과 관련된 활동에 업무의 대부분의 시간을 할애하는 직원의 비율	( )%
11) 위의 직원들이 해외 사업과 관련된 업무에 종사하는 평균적인 개월수	( )개월
12) 최초 해외시장 (예: 수출, 해외직접투자) 진출 년도	( )년
13) 기업 인증 유형	① 이노비즈 ② 벤처기업 ③ 일반 중소기업 ④ 기타
14) 본 설문 응답자 직위	① 대표이사 ② 임원 ③ 부장 ④ 과장 이하

1. 귀사의 '매출액'에서 '연구개발비'가 차지하는 비율은 대략 어느 정도입니까?

①	②	③	④	⑤
0-10%	11-20%	21-40%	41-60%	60+%

**II. 다음은 귀사의 수익 비중에 관한 질문입니다.**

1. **지난3년 동안** 수익이 발생한 부분의 평균적인 비율은?

국내에서 귀사에서 생산된 제품을 단순 수출	( ) %
해외에서 제품을 수입해서 판매	( ) %
국내에서 귀사가 생산한 제품을 “국내에서만” 판매	( ) %
해외 업체와 라이선싱 혹은 로열티 계약을 맺은 제품의 국내 판매	( ) %
해외 업체와 라이선싱 혹은 로열티 계약을 맺은 제품의 해외 판매	( ) %
기타 수익원 ( )	( ) %
합 계	100 %

**III. 다음은 귀사의 최고경영자 및 경영진에 관한 질문입니다.**

1) 최고경영자의 최종 학력	① 고졸 이하 ② 전문대졸 ③ 대졸 ④ 석사 ⑤ 박사
2) 최고경영자(혹은 임원)가 구사가능한 외국어 수	( ) 개
3) 최고경영자(혹은 임원)가 구사가능한 ‘주요’ 외국어 (예: 영어)	( )
4) 최고경영자(혹은 임원)가 외국에서 공부한 경험 여부	있다( ) 없다( )
5) 외국에서 공부한 경험이 있는 직원의 수	( ) 명

1. 다음 중 가장 적절하다고 생각되는 부분에 체크(√)해 주십시오.

설문 내용	① 전혀 아니다	② 약간 아니다	③ 그저 그렇다	④ 약간 그렇다	⑤ 정말 그렇다
1) 우리 회사의 최고경영진은 해외 사업 경험이 풍부하다.					
2) 우리 회사의 최고경영진은 외국 여행 경험이 풍부하다.					
3) 우리 회사의 최고경영진은 외국어를 사용할 기회가 많다.					
4) 우리 회사의 최고경영진은 외국어를 무리 없이 구사한다.					

**IV. 다음은 귀사의 성과 및 네트워크에 관한 질문입니다.**

1. 귀사가 해외 사업을 위한 재원을 마련할 때, 다음의 각 재원에 대한 의존 정도는?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 자체 수익					
2) 은행 대출					
3) 정부의 재정 지원					
4) 기타	()				

2. 귀사의 해외시장 진출 및 활동에 있어, 다음의 관계대상들과의 접촉빈도(네트워크)는 어느 정도입니까?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 고객					
2) 공급업체					
3) 경쟁자					
4) 정부 산하의 연구센터					
5) 대학의 연구센터					
6) 정부의 정책입안자					
7) 해당 산업의 협회/기관					
8) 무역협회/기관					

3. 다음의 관계대상들과의 네트워크가 귀사의 해외진출 및 활동에 미치는 가치 및 중요도는 어느 정도라고 생각하십니까?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 고객					
2) 공급업체					
3) 경쟁자					
4) 정부 산하의 연구센터					
5) 대학의 연구센터					
6) 정부의 정책입안자					
7) 해당 산업의 협회/기관					
8) 무역협회/기관					

4. 다음과 같은 활동들을 수행하기 위해 위(질문 3)의 관계대상자들과의 접촉빈도는 어느 정도입니까?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 해외 시장을 겨냥한 제품개발					
2) 해외 시장 공급채널 개발					
3) 해외 시장에 대한 지식 및 정보 획득					
4) 해외 시장 개척을 위한 연구개발					

5. 다음과 같은 활동들을 수행하기 위해 귀사가 형성하고 있는 네트워크의 가치 및 중요도는 어느 정도라고 생각하십니까?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 해외 시장을 겨냥한 제품개발					
2) 해외 시장 공급채널 개발					
3) 해외 시장에 대한 지식 및 정보 획득					
4) 해외 시장 개척을 위한 연구개발					

**V. 다음은 귀사의 환경적 특성에 관한 질문입니다.**

1. 다음 중 가장 적절하다고 생각되는 부분에 체크(✓)해 주십시오.

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1) 우리 회사가 속한 국내 시장은 그 규모가 계속 커지고 있다.					
2) 우리 회사가 속한 국내 시장은 외국제품과 치열한 경쟁을 벌이고 있다.					
3) 우리 회사가 속한 국내 시장에서 경쟁이 발생하는 것은 가격이 그 주된 원인이다.					
4) 우리 회사가 속한 산업에 대해, 은행 및 금융기관 등으로부터 만족스러운 대출 및 재정 지원이 이뤄지고 있다.					
5) 우리 회사가 속한 산업에 대해, 정부기관은 만족스러운 자문 및 지원을 해 준다.					
6) 우리 회사가 속한 산업과 관련된 규제를 준수하는데는 많은 비용이 따른다.					
7) <b>지난3년 동안</b> , 우리 회사가 속한 산업과 관련된 규제를 준수하는데 드는 비용은 평균적으로 점차 줄어들고 있다.					

**VI. 다음은 귀사의 전반적 성과에 관한 질문입니다.**

1. **지난3년 동안**, 귀사의 전반적인 매출액 증가율은 대략 어느 정도입니까?

하락세	정체	1-5%	6-10%	11-15%	16-20%	21-30%	31% 이상

2. **지난3년 동안**, 주요 경쟁사와 비교할 때, 다음 항목들과 같은 귀사의 성과에 대해 어느 정도 만족하십니까?

설문 내용	① 매우 불만족	② 약간 불만족	③ 보통	④ 약간 만족	⑤ 매우 만족
1. 해외 시장에서의 매출액 성장율					
2. 현금 흐름 (Cash flow)					
3. 투자 수익율					



3. **지난3년 동안**, 주요 경쟁사와 비교할 때, 다음 항목들과 같은 귀사의 성과에 대해 어떻게 생각하십니까?

설문 내용	① 매우 낮음	② 약간 낮음	③ 보통	④ 약간 높음	⑤ 매우 높음
1. 해외 시장에서의 전반적인 성공					
2. 해외 시장점유율					
3. 해외 시장의 고객 만족					
4. 해외 시장에서의 성장 가능성					
5. 해외 활동을 통한 기술 개발					
6. 해외 시장에 대한 지식 배양					
7. 해외 시장에서의 경쟁력					

**VII. 다음은 귀사가 진출한 해외 시장에 관한 질문입니다.**

1. 귀사가 진출한 해외 시장의 규모에 따라 ‘1’, ‘2’, ‘3’ 등의 순서로 기입해 주시고, 만약 해당 사항이 없으면 공란으로 비워두십시오.

국가/지역	순위
중국	( )
인도	( )
일본	( )
동남아시아	( )
아시아 (동남아시아 제외)	( )
북아메리카 (미국)	( )
라틴아메리카 (중남미)	( )
유럽	( )
호주 및 뉴질랜드	( )
중동	( )
북아프리카	( )
사하라사막 이남 아프리카	( )

2. 귀사가 최초로 해외시장에 진출했을 때, 그 진입 방식은?

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진입 방식

---

라이센싱	( )
해외전시회(박람회) 참가를 통한 계약 성사	( )
수출	( )
수입	( )
합작투자	( )
해외에 지점(사무소) 설립	( )
해외에 공장 설립	( )
해외에 연구소 설립	( )
기타	( )

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**대단히 감사합니다.**

완성된 설문지는 동봉된 봉투에 넣으셔서 보내주시면 감사하겠습니다 (팩스: 053-810-4652). 만약 본 연구결과의 요약본을 받아보시고 싶으시면 귀하의 명함을 함께 넣어서 보내주시기 바랍니다.