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Abstract

There is increasing evidence of the positive role that the social capital offered by attachment to networks plays in facilitating the internationalisation of SMEs. Network social capital serves as a key platform for small firms to access resources and competencies they lack. Yet surprisingly little is known about how network social capital co-evolves with the international growth and survival of SMEs. In other words, what happens after the initial move into internationalisation and how do SME networks develop over time? The present study aims to address this gap through providing a comprehensive analysis of internationalisation patterns, network social capital development and how these two fields may co-evolve over time. Moreover, little is known about how SMEs from different institutional contexts rely on their network attachments to cope with the challenges and opportunities presented by the external environment. The study addresses this gap and compares well-established SMEs from two national contexts (UK and Egypt) which contrast in their cultures and levels of institutional development.

This study relies on comparative multiple case studies consisting of twenty UK and twenty Egyptian SMEs. These case studies investigate different internationalisation and networking patterns and identify co-evolutionary patterns of internationalisation and associated networking behaviour over time. A mixed methods approach to data analysis was used to investigate co-evolutionary patterns and inter-country differences respectively.

The study contributes to the International Entrepreneurship [IE] literature through offering a comprehensive and dynamic understanding of internationalisation and by indicating key differences in the behaviour of SMEs from emerging and developed economies. It concludes that the co-evolutionary perspective usefully highlights the dynamic interaction between
SMEs and their contexts. It shows that SMEs not only adapt to changes in their external environment but in some cases are able to influence the environment to their favour.

The thesis closes with implications and recommendations for Egyptian and UK policy makers and managers.
To

Hoda, Ibrahim and Joy
Acknowledgements

"The whole of science is nothing more than a refinement of everyday thinking"

-Albert Einstein

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<tr>
<td>PIS</td>
<td>Pre-Internationalisation Stage</td>
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<td>EIS</td>
<td>Early Internationalisation stage</td>
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<td>SIS</td>
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<td>SC</td>
<td>Social Capital</td>
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<td>PFS</td>
<td>Percentage of Foreign Sales</td>
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<td>No. of Markets</td>
<td>Number of Markets</td>
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<td>No. of Regions</td>
<td>Number of Regions</td>
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<td>Av.Net Density</td>
<td>Average Network Density</td>
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<td>Av.Net Constraint</td>
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<td>Av. Net Size</td>
<td>Average Network Size</td>
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<tr>
<td>MNC(s)</td>
<td>Multinational Corporation(s)</td>
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<tr>
<td>SME(s)</td>
<td>Small and medium-sized Enterprise(s)</td>
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<tr>
<td>IMTs</td>
<td>Intentionally managed ties</td>
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<td>SCTs</td>
<td>Semi-coincidental ties</td>
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<td>CTs</td>
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CHAPTER 1
INTRODUCTION AND OVERVIEW

Introduction

This research is concerned with examining the impact of network social capital\(^1\) on the internationalisation process of small and medium-sized enterprises [SMEs]. I became interested in this research topic after coming across an Egyptian entrepreneur who had no previous international experience and limited resources but who managed within the course of a few years to export into more than ten markets. Like most Egyptian entrepreneurs he was faced with challenges and obstacles that made it nearly impossible to operate either domestically or internationally. When I asked him how he managed to overcome such obstacles and internationalise in such a short time, he attributed the company’s success to his personal relationships. These relationships helped him to acquire the necessary capital to start up his business. Moreover, he had friends who were scattered across different middle-eastern countries and through them he managed to sell his products. At the time I started this research – before the 25\(^{th}\) January 2011 revolution – it was rare to find SMEs that were internationally successful and even more unusual to find SMEs that continued to survive after their initial start. So the question of how SMEs in my country, Egypt, can facilitate their internationalisation through networking came to interest me.

\(^1\) Network social capital refers to the resources that are made readily available through an actor’s network of relationships - family/friends, suppliers, buyers, competitors, organisations, research institutes, export promotion agencies and colleagues. In other words, these are the benefits that an actor can access through his/her network of relationships whether s/he is directly involved, semi-involved in the creation of these relationships or the tie creation as a result of a coincidence. These ties could vary in strength, type and duration
I began looking at the literature of SMEs internationalisation and found a plethora of studies on SMEs internationalisation and the importance of network social capital in facilitating their internationalisation. After reviewing different strands of literature, such as industrial networks, social network, embeddeness, social capital, internationalisation and institutional theories, it was clear that this is a mature field. Also, it is a well-established fact that networks and the social capital they create are crucial for the SMEs internationalisation. However, I also realized that almost all the research evidence gathered so far relates to developed western countries rather than to developing ones like Egypt. This raised the question of how the experience of Egyptian SMEs would compare with that of the ones from a western country such as the UK. I also began to see that there were key gaps in the literature. For example, most studies had focused on the early years of the SME life cycle. Several authors were calling for more research into what happens after the initial exporting or internationalisation stage (Jones, Coviello and Tang, 2011; Kuivalainen, Sundqvist, Saarenketo and McNaughton, 2012).

Thus, studies investigating the impact of networks on SME internationalisation had focused on the early stages of SMEs’ life cycles; relatively few had investigated subsequent stages, such as growth and maturity stages (Coviello, 2006; Hoang and Antoncic, 2003; Slotte-Kock and Coviello, 2010). These gaps in the literature pointed to the need for a dynamic perspective on how SME networking and internationalisation processes worked out over time. I was puzzled as to which one affects the other. Is an SME’s network social capital a key determinant of its internationalisation at different stages of its life cycle? Or is it, rather, the SME’s internationalisation choices which determine how its networking develops over time?
This thesis is informed by the view that these two processes – internationalisation and networking – change over time and that they are better understood through a dynamic lens. In other words, that they co-evolve together, influencing one another at different points in time, and that they are affected by the wider external environment, such as the conditions pertaining to the country where an SME is located. Entrepreneurs, as I mentioned in the opening example, have to find ways to cope with these conditions and survive. Based on my limited knowledge at the early stages of this research, the only literature in which I could find some attention to this issue was that on organisational adaptation to the environment.

The organisational adaptation literature suggests that firms adapt to the environment(s) in which they are embedded through adopting two approaches. The first is a reactive approach whereby they respond to changes in the environment as these emerge. The second approach is a proactive approach whereby companies anticipate which changes are likely to take place and plan accordingly. I struggled with this line of reasoning, especially how I could apply it to the case of SMEs. I then came across Rodrigues and Child’s (2009) book on corporate co-evolution, which uses co-evolution as a perspective to explain how the firms adapt and even change external environment through leveraging their internal processes, resources and capabilities in such a way that enables them to have superior performance compared to their competitors (see also Volberda and Lewin, 2003). I also discovered that the co-evolutionary perspective has been used by other scholars in evolutionary economics and organisational theory (see Child, 2012 for an overview).

Co-evolution has its roots in biology and it is, strictly speaking, concerned with the way two organisms co-develop and influence one another at different points in time (Anderson and May, 1982). These organisms influence and are influenced by their host environment. This
provides a perspective that crosses different levels of analysis and takes into account the dynamic nature of the processes in a firm’s development.

In other words, the co-evolution perspective can potentially serve as a guiding framework for investigating the relationship over time of an SME’s internationalisation and networking and whether both of these evolving patterns are themselves shaped by the institutional environment in which an SME is embedded.

Theoretical background

Recent studies of SME internationalisation focussed particularly on rapidly internationalising firms that seek to achieve competitive advantage through operating in multiple overseas markets immediately after their inception or soon afterwards (Oviatt and McDougall, 1994; Oviatt and McDougall, 2000; Rugman and Verbeke, 2007; Chetty and Agndal, 2007; Young, Dimitratos and Dana, 2003). These SMEs are often referred to as born globals, new ventures and early start ups (Oviatt and McDougall, 1994:2005; Prashantham and Young, 2011; Coviello, 2006). Other patterns of SME internationalisation have also been identified. For example, Bell et al. (2003) found out that certain SMEs – the so-called born again global – focus on expanding domestically and only after a certain time then begin to rapidly internationalise into overseas markets. These types of SMEs constitute challenge to the traditional internationalisation theories applied to multinational corporations [MNCs], whereby the internationalisation process is seen to be gradual and sequential (Johanson and Vahlne, 1977; Oviatt and McDougall, 2005a; 2005b; Madsen and Servias, 1997). The main premise of sequential models of internationalisation – of which the best known is the stage or Uppsala model – is that firms go through a set of rationally-based behavioural steps. They start off with a minimal resource commitment and then increase their involvement as their
level of market knowledge increases (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977; 1990). Luostarinen (1970; 1979) found similar results, arguing that the firm increases its degree of international commitment as its level of experiential knowledge increases.

Compared to MNCs, SMEs have limited resources and capabilities which in principle makes it difficult for them to engage in international operations. SMEs are said to suffer from a liability of smallness (Knight and Cavusgil, 1996; Rugman and Verbeke, 2007; Chetty and Agndal, 2007; Coviello and Murno, 1997). In addition, SMEs tend to have limited international experience and therefore suffer from a liability of newness (Aldrich and Auster, 1986; Han, 2006). This means that the success of these firms depends to a great extent on their ability to acquire relevant resources from other organizations and internalise those competencies in which they excel.

Oviatt and McDougall (1994) argue that SMEs rely on other “governance mechanisms” such as strategic alliances and networks to access valuable resources without participating in their creation. These networks of relationships serve as a key platform through which SME could access resources and knowledge they need for their internationalisation (Coviello and Murno, 1997; Bell, McNaughton and Young, 2003; Jones, Coviello and Tang, 2011; Kuivalainen, Sundqvist, Saarenketo and McNaughton, 2012). Child and Rodrigues (2011) argue that smaller firms are particularly likely to rely on the "mediation" of others in coping with external complexity and uncertainty. In other words, network relationships create social capital for the SMEs, which is a resource that fosters ease of movement and access to resources as well as helping them to spot opportunities as they emerge in foreign markets (Arenius, 2002; Coviello, 2006; Sharma and Blomstermo, 2003).
Accordingly, firm-level social capital is vital for the survival and growth of SMEs. Most of the literature to date, however, has focused on early internationalisation, providing insights on how networks of social capital influence entry mode, market selection and speed of internationalisation. In addition, they offer some understanding of how social capital evolves within the first years of SME operation. However, less is known about "how and why the network develops in a certain way" (Slotte-Kock and Coviello, 2010:51). Furthermore, empirical studies to date have tended to rely mainly on cross-sectional designs and to a lesser extent on case studies. They have treated networks either as a dependent or an independent variable, whereby they are seen either as a key facilitator for the SMEs internationalisation or as being shaped by the internationalisation choices of SMEs. They have not considered that the two may co-evolve.

Moreover, the entrepreneurial process is more meaningful when examined within its broader context, namely the institutional environment as this could assist (or alternatively hinder) internationalising SMEs. Emerging economies typically have weak institutions and tend to suffer from institutional voids. These voids result from absent or poorly-performing specialized intermediaries (such as export promotion agencies), regulatory systems and contract-enforcing mechanisms that govern day-to-day transactions (Khanna and Palepu, 1997; Khanna and Palepu, 2010). Even if formal institutional arrangements are in place, there remain significant "gaps between formal rules and norms, and their enforcement in daily practice" (Rodrigues, 2013: 14). So far, scholars have paid little attention to the implication of these domestic institutional voids on the internationalisation of SMEs and how entrepreneurs react to fill in these voids through relying on formal and informal means of support.
In particular in countries where relationships are the way of doing business – especially in collectivist cultures – entrepreneurs are more likely to rely on informal means (their personal relationships) to fill in institutional voids inherent in their domestic market. By contrast, entrepreneurs from countries that place less value on relationships and focus more on formal means of governance and support are more likely to depend on contractual based relationships. This will not only impact the SMEs domestic operations but it will have a bearing on how SMEs in general create networks of relationships in overseas markets. Accordingly, institutional differences are expected to influence SMEs’ networking and internationalisation behaviours.

Based on my identification of key gaps in the current literature, I sought a guiding framework that would allow me the flexibility to use different theories and disciplines to explain phenomenon under investigation, and at different levels of analysis. In particular, I needed a framework that would allow for investigation of the dynamic nature of SMEs internationalisation and networking processes over time and to investigate how they co-develop. The co-evolutionary perspective seemed to meet this requirement.

**Research Questions**

The general objective of this dissertation is to contribute to the international entrepreneurship literature, which is at the interface between the internationalisation literature and entrepreneurship literature. It draws from theories that touch on this interface, such as internationalisation theory, social capital theory and institutional theory. In the main, studies
have treated social capital like other forms of capital, viewing it as an asset that a firm possesses and manages in a way that allows it to extract value (Leana and Van Buren, 1999). Accordingly, the key research questions I formulated in the context of a comparison between SMEs in Egypt and the UK are:

(1) What are the different internationalisation patterns of Egyptian and UK SMEs over time?

(2) What are the network development patterns of Egyptian and UK SMEs over time?

(3) Is there co-evolution between the internationalisation and network development patterns of Egyptian and UK SMEs over time? If so, what are the underlying reasons for the co-evolution between the internationalisation and network development patterns based on the understanding and interpretations provided by the UK and Egyptian SME decision makers?

(4) What are the key antecedents or contingencies of SMEs internationalisation and networking behaviours?

**Research approach and empirical investigation**

As stated in the four research aims, the study presented in this thesis aims to understand the dynamics of the SMEs behaviour through investigating how network social capital facilitates their internationalisation process and how the internationalisation choices made by SME decision-makers may shape the firm’s network development over time. An additional interest is how key contingencies such as the domestic institutional context influence the network attachments and internationalisation profiles of SMEs.
This research draws on multiple case studies of Egyptian and UK SMEs. The companies selected for study are ones that have been in operation for at least 10 years, have less than 250 employees, and have been operating in overseas markets for a period of at least 6 years. Since the focus of this research is on subsequent years after the initial first internationalisation attempt, I focused on well-established SMEs. The study included 40 case studies – 20 from the UK and Egypt respectively – and including both manufacturing and service firms. The main method of data collection was semi-structured interviews which were conducted with founder(s) and mid-level professionals who had first-hand experience with the international operations of the firm.

There has been a tendency in the international entrepreneurship literature to focus on high-tech companies (such as software and bio-tech firms), which usually specialize on a narrow market niche and follow an accelerated internationalisation pattern. I wanted to incorporate SMEs from different sectors – both high and low-tech firms – to allow sufficient variation to appear in their networking and internationalisation profiles so as to be able to identify different evolutionary and co-evolutionary patterns.

The research is designed to capture the subjective perceptions of the entrepreneurs and adopts a retrospective view about the internationalisation history of the firm, the creation and evolution of social capital and sequence of events. It uses a mixed method approach. Firstly, I use non-parametric statistical tests to identify key patterns of association between internationalisation and networking development. Secondly, I focus on rich qualitative evidence to understand the underlying mechanisms of internationalisation and networking processes through developing novel exploratory clustering co-evolutionary taxonomies of

---

2 This was done though focusing on three structural dimensions of network and three internationalisation performance variables within and across difference stages of SME’s lifecycle.
SMEs that help to produce a deeper understanding of each of the two processes and how they co-develop together. The use of qualitative and quantitative methodologies offered complementary perspectives on the SME’s behaviour over time. The scope of my inquiry also permitted an analysis across different levels – national context, firm and individual decision-maker.

**Structure of the thesis**

The structure of thesis is shown in Figure 1.1. It divides into five main parts. The first part contains this introduction and overview. The second part, containing Chapters 2 and 3, covers theoretical background and a priori analytical framework. It also sets the scene through providing the rationale behind the choice of UK versus Egypt as research contexts. The third part discusses the key research approach and methods used (Chapter 4). The fourth part presents the key empirical findings in Chapters 5, 6 and 7. Finally, the fifth part (Chapter 8) covers the discussion of key findings, contributions and implications of research.
Figure 1.1: Structure of thesis

Theoretical Background

Chapter 2 Literature review
- Internationalisation theories/models and typologies of SMEs
- Social capital definitions vs networks, embedness and industrial networks definitions
- Social capital development
- Institutional context and national differences between UK and Egyptian contexts
- Co-evolutionary perspective

Chapter 3: Theoretical framework
- Development of research questions
- Development of a priori frameworks
- Traditional SMEs co-evolutionary model
- New venture’s co-evolutionary model

Chapter 4 Research methodology
- Philosophical orientation
- Research approach and design
- Data collection
- Data preparation and arrangement
- Data analysis approach

Chapter 5 Overall co-evolutionary patterns
- Data analysis generic framework
- Operationalisation of measures
- UK SMEs evolutionary and co-evolutionary patterns (within & across stages)
- Egyptian SMEs evolutionary and co-evolutionary patterns (within & across stages)
- Speed of internationalisation as an alternative perspective of SMEs internationalisation process.

Chapter 6 SMEs Taxonomies and Clusters
- Generic differences between UK and Egyptian SMEs
- Proposed exploratory clustering of SMEs
- Clustering of UK & Egyptian SMEs
- Taxonomies definitions and operationalisation of measures
- UK SMEs taxonomy
- Egyptian SMEs taxonomy

Chapter 7: Antecedents of SMEs internationalisation and networking processes
- Internationalisation and networking antecedents
  - Home country institutional context
  - Egyptian & UK institutional context
  - Entrepreneur’s previous international experience
  - Link between network attachments, presence of entrepreneurs’ previous international experience and internationalisation profiles of SMEs

Chapter 8: Discussion and conclusions
- Key findings in relation to the four research questions
- Contributions to the existing body of knowledge
- Methodological contributions
- Comparison between apriori and revised frameworks
- Implications for managers and policy-makers
- Research limitations and suggestions for future research

Empirical Findings
CHAPTER 2
LITERATURE REVIEW

Introduction

The central role of SMEs in driving economic development at national and international levels has been widely recognised. SMEs growth serves as an engine for promoting innovation and enhancing the economic development of countries (Reynold, 1997; Busentiz, Gomez and Spencer, 2000). SMEs grow through expanding into overseas markets. Governments and policy makers pay significant attention to entrepreneurs and small business owners. They attempt to assist and support small companies in their domestic and international growth.

There is an extensive literature on SME internationalisation that can be traced back to the 1970s. However, most of these studies have focused on a snapshot of SME internationalisation, focusing on the first exporting attempts into overseas markets (Welch and Paavilainen-Mäntymäki, 2014; McAuley, 2010). Internationalisation is not just about initial export or entry into foreign markets, rather it is a dynamic process through which an SME increases its international commitment and operations and the process by which it moves into foreign markets and adapts its operations to suit overseas markets (Welch and Luostarinen, 1993; 1998; Calof and Beamish, 1995; Johanson and Mattsson, 1993). Recent reviews of SMEs internationalisation have called for the time dimension to be incorporated and for understanding internationalisation as a process through which SMEs engage in
overseas operations (c.f. Welch and Paavilainen-Mäntymäki, 2014; Kuivalainen, Sundqvist, Saarenketo and McNaughton 2012a; Kuivalainen, Sundqvist, Saarenketo and McNaughton, 2013; Ruzzier, Hisrich and Antoncic, 2006; Harris and Li, 2005; Jones, Coviello and Tang, 2011).

Given that SMEs have limited resources and international experience, they tend to rely on network social capital to obtain resources and support they need to engage in overseas operations (Sasi and Arenius 2008; Coviello, 2006; Slotte-Kock and Coviello, 2010). Network social capital refers to resources that are made readily available through an actor’s network of relationships such as, family/friends, suppliers, buyers, competitors, organisations, research institutes, export promotion agencies and colleagues. In other words, these are the benefits that an actor can access through his/her network of relationships whether s/he is directly involved, semi-involved in the creation of these relationships or the tie creation as a result of a coincidence. These ties could vary in strength, type and duration.

This highlights that importance of networks – and the social capital they create – for the SMEs’ international growth. Furthermore, studies that investigated the impact of networks on SMEs internationalisation focused on the early stages of an SME’s life cycle, with only a few taking account of the subsequent stages, such as the growth and maturity stages (Coviello, 2006, Hoang and Antoncic, 2003; Slotte-Kock and Coviello, 2010). These major gaps in the literature indicate the need for a dynamic view of SMEs’ networking and internationalisation processes.

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3 From the above definition there are two dimensions of network social capital. These are the structural (presence of ties) and the relational dimensions. Each type of network relationship varies in strength and benefits offered to focal actor. These benefits change and/or diminish over time. Moreover, this definition covers different types of relationships with varying degrees strength and different networking logics. This is different from Huggins (2010) definition of the network social capital. He defines network social as a rational decision to invest in relationships (mainly inter-firm relationships) that enables the firm to gain access to knowledge to enhance their “expected economic gains” (p.336). Moreover, he differentiates between network social capital and social capital. The latter involves investment in social relationships through which individuals gain access to social returns (such as emotional support). Whereas the former, involves rational decision taken by the actor to invest in calculative networks to achieve economic gains and meet business-related targets.
SMEs do not operate in a vacuum; they are influenced by the domestic and international environments in which they operate. SMEs do not necessarily increase the level of their international commitment in a linear manner. They could shrink their international operations (de-internationalise) and re-internationalise at a later stage (Kuivalainen, Saarenketo, Puumalainen, 2012a; Kuivalainen et al., 2012b). SMEs are highly influenced by the broader context in which they operate and they are subject to pressures from foreign governments, and their industry and domestic institutional context (Kuivalainen et al., 2013; Dodd and Patra, 2002; Pajunen and Maunula 2008; Kiss and Danis, 2008). These external pressures are also likely to impact on how the SME uses and draws on its network social capital to access resources and on the support it needs to adapt to these external pressures (Welch and Paavilainen-Mäntymäki, 2014). This calls for a framework that allows for a "contextualised view" of the SME's internationalisation and networking dynamics and a framework that crosses different levels of analysis (Welch and Paavilainen-Mäntymäki, 2014:15; Pajunen and Maunula, 2008).

This chapter focuses on addressing these aspects through reviewing different streams of literature or theories used to inform the present research. These are primarily internationalisation, networking /social capital, institutional and co-evolutionary theories. Firstly, I summarise the key definitions and models of internationalisation and the internationalisation of different types of SMEs. Secondly, I consider different theories pertaining to networks and social capital and compare these theories with concepts such as embeddeness and industrial network. I discuss the concept of social capital in detail and the different dimensions proposed by Nahapiet and Ghoshal (1998). Thirdly, I present a brief description of institutional theory, especially its origins and key dimensions. This informs a discussion of the key contextual differences between the two countries involved in this study.
(Egypt and the UK) and the rationale behind choosing these two countries as the main research context. Fourthly, I summarize the origins and background of the co-evolutionary perspective, which will be the guiding framework for this study.

2.1 Definitions of SME internationalisation

Existing research on SME internationalisation has adopted several definitions. For instance, Nordic models of internationalisation traditionally defined internationalisation as "a process of increasing involvement in international operations" (Welch and Luostarin, 1993:156) which is usually regarded as an incremental and gradual process. A firm can increase its involvement in international operations (Luostarin 1979; Johanson and Wiedersheim-Paul, 1975) but could also at a particular point of time reduce its "international involvement and de-internationalise" (Ruzzier et al, 2006: 478; Calof and Beamish, 1995). Other scholars have focused on a firm’s international operations through analyzing its products, mode of entry and markets (Luostarin, 1979; Ruzzier et al, 2006), and applied other perspectives, such as the network perspective (Johanson and Mattsson, 1988; 1993). Some of the definitions used by different scholars are identified in Table 2.1.

Table 2.1: Internationalisation definitions

<table>
<thead>
<tr>
<th>Key authors</th>
<th>Internationalisation definition</th>
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</thead>
<tbody>
<tr>
<td>Johanson and Valhne (1990)</td>
<td>A cumulative process, in which relationships are continuously established, developed, maintained and dissolved in order to achieve the firm’s objectives.</td>
</tr>
<tr>
<td>Johanson and Mattsson (1993)</td>
<td>The process of adapting the firms’ operations (in terms of strategy, structure and resources) to international environments.</td>
</tr>
<tr>
<td>Welch and Luosteinen (1993)</td>
<td>The outward movement of firm’s international operations.</td>
</tr>
<tr>
<td>Calof and Beamish (1995)</td>
<td>The process of increasing involvement in international operations.</td>
</tr>
</tbody>
</table>
Ahokangas (1998)  | The process of mobilising, accumulating and developing resources stocks for international activities.
---|---
Lethinen and Penttinen (1999)  | It is concerned with developing networks of business relationships in other countries through extension, penetration and integration.
| It is also concerned with the relationship between the firm and its internal environment. It derives its origin from the development and utilisation process of different international activities, primarily inward, outward and cooperative operations.

*Source: Ruzzier et al., 2006.*

Johanson and Mattsson (1988) defined internationalisation as "a cumulative process, whereby by relationships are continually developed, established, maintained and broken and dissolved in order to achieve the objectives of the firm" (p.306). A major shortcoming of this definition is that it focused exclusively on relationships. Johanson and Mattsson (1993) subsequently refined their definition arguing that internationalisation process involves adapting a firm’s internal resources and strategies to international environments.

Lehtinen and Penttinen (1999) attempted to gather most of the important features of the internationalisation process into one definition based on the results of the Nordic models. They incorporated two key dimensions of internationalisation namely international orientation and commitment (Ruzzier et al, 2006). The former refers to the perceived psychic distance between overseas markets and home market (Reid, 1981) while the latter emphasises the amount of resource commitment that a particular mode of operation requires.

It is evident that some scholars have shifted their attention from international *activities* and *modes of operation* towards the *resources* needed for internationalisation, following the
resource based view of the firm. For instance, Ahokangas (1998) argues that internationalisation involves movement, accumulation and creation of resources needed to carry out international activities. He proposes that the SME’s internationalisation depends on the natural context, for example networks, in which the SME is embedded that provide it with the required resources, and he focuses to a lesser extent on the international activities of the firm (Ruzzier et al., 2006).

A holistic view of the international involvement of the firm would include selling products to overseas markets, importing products from abroad and even a joint or collaborative agreement between the firm and a foreign partner (Korhonen, 1999). This is reflected in Lehtinen and Penttinen’s (1999) definition. Others have focused implicitly or explicitly on the dynamic nature of SMEs’ internationalisation and argued that it is a multi-dimensional process which evolves over time. This process involves a number of internationalisation decisions and events (Jones and Coviello, 2005; Welch and Paavilainen-Mäntymäki, 2014). The understanding of SME internationalisation behaviour has been widely examined in the literature through focusing on the scale or scope of internationalisation.

A major shortcoming of these studies is that they focus on internationalisation at a single point of time, or on a single dimension of internationalisation (Sullivan, 1994). For example, some studies have focused on the degree of international intensity/scale, which refers to percentage of foreign sales that comes from foreign operations (Preece, Miles and Baetz, 1999). Others have focused on the extent of internationalisation, which refers to number of value-adding activities that are carried outside in foreign markets (Bloodgood, Sapienza and Almeida, 1996); or on the scope of internationalisation, which refers to the number of
countries to which the firm exports (Zahra, Ireland and Hitt, 2000; McNaughton, 2003). One study that began to focus on the multi-dimensionality of internationalisation is Fisher and Reuber (1997). They argue that the degree of internationalisation is composed of: (1) percentage of foreign sales to total sales. (2) Percentage of firm’s employees who spend more than 50% of their time on international activities, and (3) geographical scope of the SME’s activities.

The main premise of my research is that internationalisation is a dynamic process that takes place over time. Therefore, I will define internationalisation as the process through which the firm increases its level of international operations - inward, outward and cooperative - over time. Moreover, I shall measure an SME’s international performance through using Fisher and Reuber’s (1997) dimensions which are: internationalisation scale (the percentage of foreign sales to total sales) in case of outward and cooperative strategies and internationalisation scope, which is the number of countries in which the firm operates. I add a third dimension, that is the number of regions in which the SME operates, as this could be an indicator of the degree of international diversity or concentration of SME’s overseas operations (Kuivalainen, Sundqvist and Servais, 2007; Kuivalainen et al., 2012a; 2012b).

So far I have discussed the internationalisation definitions used by different scholars. Different models of internationalisation, their weaknesses and theoretical underpinnings are discussed in the following section.
Internationalisation models and perspectives

Several perspectives and models have been used by scholars. The first group of studies are often referred to as process theories of internationalisation (Andersen, 1993). The most commonly cited models are the Uppsala model (U-model) and the Innovation-related model (I-Model). The second stream of studies is concerned with a network approach to internationalisation which was initiated by the industrial marketing and purchasing group (IMP) researchers (Johnson and Mattsson, 1988; 1985). The third set of studies draw upon resource and dynamic based views of the firm, and have been used to explain the internationalisation process of different types of SMEs (mainly traditional and new ventures). The final group of studies are those on international new ventures or born global companies, which began to emerge in the early 1990s (such as Oviatt and McDougall, 1994; 1995; 1997; Bloodgood et al., 1996; Fischer and Reuber, 1997; Autio, Sapienza, Almeida, 2000; Knight and Cavusgil, 2005).

Each of these perspectives is presented in Table 2.2 and will be discussed in the following section.
<table>
<thead>
<tr>
<th>Theoretical roots</th>
<th>Uppsala and Nordic/learning Models</th>
<th>RBV/dynamic capabilities</th>
<th>Network model</th>
<th>Innovation-related models</th>
<th>New Venture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markets are in equilibrium and managers tend to avoid uncertainty.</td>
<td>Focuses on sustainable and unique imitable resources that create sustainable competitive advantage for the firm. The firm’s ability to defend its market position through attaining and keeping its relevant resources (such as knowledge based resources) and on dynamic ability to learn and develop new resources.</td>
<td>Tries to avoid uncertainty. Recognizes that the firm is dependent on resources owned by other firms in the industrial network.</td>
<td>Each subsequent stage of internationalisation is an innovation for a firm that focuses exclusively on exporting. Has fixed stages ranging from 3-6 (broadly pre-export, initial export and advanced exporting stages).</td>
<td>Markets are imperfect and the entrepreneurs’ unique set of resources (knowledge, relationships, experience and ability to coordinate resources) are the main reasons these firms succeed. Entrepreneurs are alert for opportunities.</td>
<td></td>
</tr>
<tr>
<td>Firm and environment</td>
<td>Firm resources and capabilities</td>
<td>Firm-Firm (micro level or Firm-to network (macro level)</td>
<td>Individual and firm</td>
<td>Entrepreneur (mainly).</td>
<td></td>
</tr>
<tr>
<td>Reactive</td>
<td>Proactive</td>
<td>Reactive</td>
<td>Reactive</td>
<td>Proactive</td>
<td></td>
</tr>
<tr>
<td>Experiential knowledge and learning.</td>
<td>International expansion</td>
<td>Knowledge development, resources and market position</td>
<td>Learning</td>
<td>Entrepreneurial vision</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2. Internationalisation models and perspectives
<table>
<thead>
<tr>
<th>Speed</th>
<th>Slow</th>
<th>Depends</th>
<th>Slow-fast (typologies)</th>
<th>Slow</th>
<th>Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry mode</td>
<td>Following the stages or establishment chain model. For example, firms start with direct exporting and/or agents and as their level of international experience increases they will use more advanced modes of entry such as joint ventures or wholly owned subsidiaries in overseas markets</td>
<td>N/A</td>
<td>Stages ranging from direct to indirect contingent on network (production and external networks)</td>
<td>Stages</td>
<td>Mixed entry modes.</td>
</tr>
<tr>
<td>Distance to markets</td>
<td>Low psychic distance</td>
<td>Mostly low distance markets May go for distant markets if nearby ones offer no opportunity.</td>
<td>Low psychic distance</td>
<td>Mainly distant markets (companies form emerging or developed markets)</td>
<td></td>
</tr>
<tr>
<td>Role of network</td>
<td>N/A</td>
<td>If combined with a network perspective, networks serve as means of securing access to resources. -Firms could also engage in joint development strategies of imitable unique resources.</td>
<td>Network position is a crucial asset that could be leveraged</td>
<td>N/A</td>
<td>Entrepreneurs can modify and choose the networks they need to access needed resources</td>
</tr>
<tr>
<td>Criticism</td>
<td>Deterministic (Reid, 1981) Individuals have no strategic choice (Andersson, 2000) Challenged by emergence of NVs</td>
<td>The resources must be transparent (Grant, 1991); durable and so forth. The nature of the resources tends to be vague and broadly defined with no clear boundaries between them.</td>
<td>Firms use wider network of relationships to internationalise rather than just a production network. This could be with customers, suppliers, export promotion agencies, friends, consultants and competitors (Chetty and Holm, 2000).</td>
<td>Theoretically imprecise The timing of different stages is not clear Determining the stage difference in terms of activities involved is</td>
<td>Still a new field. Considered mainly with reference to international entrepreneurship only.</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Ignores the firm decision-maker and firm characteristics when pursuing internationalisation opportunities</td>
<td>Ignores the liability side (downside) of networks.</td>
<td>subjective. Only describes the process of change rather than the dimensions on how firms develop their activities within each stage.</td>
<td></td>
</tr>
</tbody>
</table>

*Sources: (Antoncic and Hisrich, 2000; Arenius 2002; Ruzzier et al., 2006)*
Uppsala internationalisation model (U-model)

This model first emerged in the work of Johanson and Vahlne (1977), and Johanson and Wiedersheim-Paul (1975). It has its theoretical roots in the work of Penrose's (1959) growth theory of the firm and in the behavioural theory of the firm (Aharoni, 1966). The main premise of the Uppsala model is that managers are risk-averse people who tend to avoid uncertainty as much as possible. In other words, since managers lack foreign market knowledge, they perceive the risk of operating in foreign markets to be high. They therefore increase their level of international commitment in a gradual incremental manner as their level of experiential learning increase. This contrasts with the eclectic paradigm, where managers are expected to have a good level of knowledge and to be rational individuals who make rational decisions regarding the ownership and location advantages (Dunning, 1988; 2000).

Another key premise of the Uppsala model is that markets differ in terms of their psychic distance, which refers to the degree to which the culture, language, business norms and economic development of countries are different (Johanson and Wiedersheim-Paul, 1975). It is generally assumed that the more distant a market is geographically the more its level of psychic distance increases. Accordingly, it becomes difficult for the firms to understand the markets and they have imperfect knowledge about the market and the level of uncertainty is high (Arenius, 2002). Nowadays, the institutional dimension of psychic distance appears to be more significant (Child, Rodrigues and Frynas, 2009).

Johanson and Wiedersheim-Paul (1975) proposed that firms usually start to enter markets that have a minimal level of psychic distance and then incrementally move into more distant markets as their level of experiential learning increases. Moreover, the firm’s involvement in
foreign markets takes the form of an establishment chain (Johanson and Vahlne, 1977; Johanson and Wisdersheim-Paul, 1975). This means that firms start off with an entry mode that requires the minimum amount of resource commitment such as exporting. Over time, as the level of their experiential knowledge increases, they become more confident to enter new markets. This means that they can move to distant markets with an entry mode that has a greater degree of resource commitment such as establishing a green-field manufacturing facility.

Recent studies have lent some support to this model with respect to small firms. Examples are Crick and Jones (2000) and Holmlund and Kock (1998). The former found that firms follow incremental steps in internationalisation because managers tend to be risk averse and increase their level of commitment only after they gain the necessary international experience. The latter study posited that the most important modes of entry are through sales agents and direct exporting. This may indicate that small firms usually rely on sales representatives or agents as the primary mode of entry, since this requires the minimum amount of resources and carries the lowest level of perceived risk. On the other hand, Bell (1995) posited that a firm’s internationalisation process is "less deterministic than stage models imply" (Arenius, 2002: 28). In a similar vein Jones (1999) found little support for the conventional stages presented by the model.

Moreover, the Uppsala stage model follows a "causal cycle" where market knowledge and level of resource commitment in foreign markets has an impact on which mode of entry to use (commitment decision) in foreign markets and how they are going to perform their activities (Johanson and Vahlne, 1990:11). This is illustrated in Figure 2.1.
Market knowledge and market commitment represent the firm’s current state. They verify and alter the company’s commitment decisions in foreign markets (Johnson and Vahlne, 1977).

Johanson and Vahlne (1990) argued that Uppsala model applies to most companies with three main exceptions. The first is large companies which have excess resources enabling them to take bigger internationalisation steps; they tend to jump several steps in one go. This implies that the Uppsala model is more applicable to smaller sized firms. The second exception is if the conditions in the market are stable and knowledge can be easily obtained by similar companies. In this instance, the firm is more likely to obtain this knowledge through means other than through first-hand experience. Finally, if the firm operates in similar markets it can reuse its experience in those similar markets; it will have secured transferable knowledge.

**Weaknesses of Uppsala model**

Several authors have criticized process theories of internationalisation, particularly the Uppsala model (Madsen and Servais, 1997; Leonidou and Katsikeas, 1996). These scholars have questioned several theories underpinning its viability. Firstly, Madsen and Servais (1997) argued that most of the founders of new ventures tend to have prior market knowledge. This permits them to take on additional market commitments that are not specifically slow and gradual. Thus they argue that new ventures tend to follow a path of accelerated internationalisation. In a similar vein, Leonidou and Katsikeas (1996) argued that
the momentum through which the firm shifts from one stage to another and within each stage has not been taken into account by most of the stage models.

Secondly, these models tend to ignore the strategic choices of individual managers. An organisation’s position and place within a particular context is usually a result of choices made by its managers (Child, 1972). In addition, Child and Rodrigues (2011) argued that firms could alter the environment in which they operate though exerting power and influence over actors (with whom they have a relationship) in a way that creates benefits for them. This contradicts the deterministic view of the Uppsala model (Arenius, 2002).

Thirdly, other forms of learning that may be available for firms are ignored (Forsgren, 2002). This could be achieved through engaging in exploring new alternatives and ideas, copying a best practice, and so forth. The Uppsala model tends to adopt a reactive form of learning, whereby it is only through first-hand experience with the market and process of trial and error that the firm increases its learning. This allows for other patterns of internationalisation to emerge that are not necessarily slow incremental ones (Forsgren, 2002).

Finally the emergence of NVs and born global companies has cast considerable doubt on the applicability of these models. McDougall et al. (1994) presented such firms as ones that seek a competitive advantage through internationalising directly after their establishment or soon afterwards. They internationalise rapidly rather than slowly and tend to enter distant markets from the beginning.
**Innovation-related Models (I-model)**

These models have their roots in the behavioural theory of the firm (Ruzzier et al., 2006). I-models tend also to highlight the fact that firms follow a set of incremental steps because of their lack of experiential knowledge about markets and the high degree of uncertainty inherent in internationalisation decision (Andersen, 1993).

The I-model is derived from innovation theories (Rogers, 1962; Robertson, 1971). These argue that innovation consists of sequential learning steps, whereby firms start off by adopting a new product or service. They then move to the next step through accepting or refusing an innovation as a result of the decision-makers’ cognitive and behavioural processes. When applying these models to firms, the first entry to export markets is a form of innovation by itself, such as developing a new product or idea. Thus entering foreign markets is like developing a new product and so forth (Andersen, 1993). For instance Reid (1981) has divided the innovation stages of an internationalising firm into 5 stages: export awareness, export intention, export trial, export evaluation and acceptance or rejection of exporting. A key weakness of the innovation model is that there are a large number of factors that enable the firm to move from one stage to another and influence the export behaviour of the firm (Bilkey, 1978).

Both the Uppsala model and the innovation models apply to large and small firms and they both argue that firms tend to follow slow incremental steps when it internationalises. Thus they are similar in their theoretical underpinnings and suffer from similar weaknesses.
**Network model of internationalisation**

The network model focuses on industrial markets and focuses on inter-organisational relationships as the key unit of analysis. The industrial market is viewed as a network of relationships between the firm, suppliers and customers and the model emphasises some dependencies and development processes that take place in foreign markets (Johanson and Mattsson, 1988, Arenius, 2002).

This model is deeply rooted in resource-dependency theory. It emphasizes the fact that firms are dependent on other firms which have resources they need. This means that for a transaction to take place, firms need to establish relationships with other firms to access the resources they need. Firms are highly dependent on one another as they need to coordinate their activities in some way which is usually done through repeated interaction rather than a formal structure (Arenius, 2002). This is crucial for the firm’s survival and growth, whereby firms engage in cross border activities and coordinate their resources in order to secure their survival.

Johanson and Mattsson’s (1988) network model is based on some key assumptions. Firstly, within industrial networks companies are linked to one another through a web of long term relationships and that previous exchange has taken place between them. Secondly, the network ties range from knowledge, legal, technical, economic and social. Thirdly, domestic relationships tend to be more developed and well established than foreign ones. Finally, that relationships change through repeated interaction and exchanges (Arenius, 2002).

Thus, as will be discussed later, the firm’s position within the production network and in different markets depends on its existing relationships with other firms. Thus relationships are path dependent and highly contingent on the firm’s history. This has a bearing on the firm’s future activities and plans.
Mattsson and Johanson (1988) have focused on two levels of analysis: the micro and macro levels. The former refers to the individual firm’s position in the network, the volume of transaction/sales (relative importance of the firm) and the strength of relationships it has with its partners (Johanson and Mattsson, 1988). The macro level on the other hand, focuses on the role of the firm in the whole network, the weight of the network (such as market share) and firm identity.

A network position is said to be advantageous for the firm if it offers access to resources and knowledge, but the process of securing this position is time consuming and requires a lot of investment in building and maintaining relationships. When it becomes well developed and formed it is viewed as "a market asset" (Johansson and Mattsson, 1988). The assumption is that as firms internationalise they create and maintain relationships with actors/partners in other countries. Over time the strength and the number of relationships between members of the network increases. This is achieved through one or more of the following strategies:

1. Market extension: the firm forms relationships with partners in countries that are new to it.
2. Penetration strategy: firms increase their level of commitment with already established foreign networks.
3. International integration: firms combine and mix their positions in the networks in various countries.

The key underlying assumption is that firms need resources that their counterparts have and that they rely on network relationships to access these resources and to access foreign markets (Chetty and Holm, 2000). They classified the networks into two main types: production nets and national nets. The production network involves the firm’s relationships
with its counterparts in related business areas, or with firms conducting similar or complementary activities. The national network, on the other hand, involves the firm’s networks in other countries.

Accordingly, Johanson and Mattsson (1988) classified firms into four main categories along two dimensions: the degree of internationalisation of the firm and the degree of internationalisation of the market. These are the early starter, the lonely international, the late starter and the international among others. The four different positions these firms could occupy are presented in Table 2.3.

**Table 2.3: Johanson and Mattsson’s (1988) typology**

<table>
<thead>
<tr>
<th>Degree of internationalisation of the firm</th>
<th>Degree of internationalisation of the market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>The early starter</td>
</tr>
<tr>
<td>High</td>
<td>The lonely international</td>
</tr>
</tbody>
</table>

*Adapted from Johanson and Mattsson (1988)*

1. **Early starter:** The firm, its competitors and suppliers have little knowledge about foreign markets and cannot rely on their domestic relationships to gain this knowledge. SMEs rely on their foreign relationships (agents and international clients) to enter foreign markets through providing them with the required market knowledge. This reduces the costs and risks associated with uncertainty. The introduction to
foreign markets is usually done through clients or distributors in foreign markets (Chetty and Holm, 2000).

2. *Lonely international*: is a company that is highly internationalised (has operations in several markets) but its market/industry still has a domestic focus. Johanson and Mattsson (1988) referred to it as a lonely international because it is the only firm (as opposed to its counterpart) that has the capabilities to internationalise. This firm or entrepreneur is assumed to have prior international experience in dealing with foreign markets, hence the "the Lonely international firm has an edge over its domestic competitors, as it has already established a position in the business network" (Chetty and Holm, 2000: 81).

3. *Late starter*: The market or industry is already internationalised and the firm is indirectly connected to foreign markets through its suppliers, competitors and clients (who have international operations in foreign markets). It is assumed that late starter firms find it difficult to enter close markets with a lower degree for psychic distance (as they are dominated by its domestic competitors) and that they therefore try to target more distant markets. They suffer from late mover disadvantages, because it is difficult to break into existing networks while high entry barriers are present.

4. *International among others*: The firm is highly internationalised and operates in a highly internationalised market. These firms have gathered and acquired the necessary international experience over time, this makes it easier to set up sales subsidiaries in foreign markets and increases the firm’s ability to control and coordinate its operations across markets. These firms are highly involved with
networks across markets, which provide the firm with resources and information that are crucial for its foreign survival and growth.

The main premise of the conventional network model of internationalisation is to understand the context in which entrepreneurial firm operates, which includes market conditions, and the firm’s network of relationships, national and production networks (Madsen & Servais, 1997).

**Weaknesses of the Johanson and Mattsson (1988) model**

Chetty and Holm (2000) have identified several weaknesses when operationalising the Johanson/Mattson model to SMEs in New Zealand. Firstly, the criteria used to differentiate between each type of firm in the matrix tend to overlap. For instance, the early starter usually depends on introductions by clients or suppliers to enter other foreign markets. This could happen to other types of firms such as those which are already international among others. Secondly, relationships are not always an advantage because there is a liability side to relationships, as found by Coviello and Murno (1997) whereby relationships with some partners may inhibit and hinder the internationalisation of SMEs to other markets.

Thirdly, the model does not clarify how firms shift positions in the matrix. How does an early starter, for example, shift to international among others? What is the process through which a firm moves from one part of the matrix to another? What is the role of relationships and how do they facilitate or hinder the transition from one position to another? Finally, the model ignores the relationships that are outside the production net such as governmental bodies that
offer support to SMEs (through export promotion programs) and customers who could serve
as catalyst for internationalisation.

**International entrepreneurship as an emerging field**

The stage model is based on the economic perspective of internationalisation, particularly
transaction cost theory. It ignores the process aspect of internationalisation (Vahlne and
Nordstrom, 1993; Ruzzier et al., 2006). The process approach is useful in explaining key
factors inherent in internationalisation but fails to acknowledge the individual strategic
Entrepreneurs play a vital role in internationalisation of SMEs (Ruzzier et al., 2006). They
tend to think in an entrepreneurial and strategic manner and focus on creating a fit between
the firm’s strengths and weaknesses with the external opportunities and threats (Hitt et al.,
2001).

This has led to the emergence of International Entrepreneurship (IE) as a separate stream
covering a different approach to SME internationalisation and it represents an intersection
between the International Business and Entrepreneurship literatures (McDougall and Oviatt,
2000a; Antoncic and Hisrich, 2000). McDougall and Oviatt (2000) defined entrepreneurship
as "combination of innovative, risk-seeking behaviour that crosses national borders and is
intended to create value in organizations" (Ruzzier et al, 2006: 489). Although its definition
is still vague and its application has been varied, some scholars extend this definition to refer
to younger ventures -and to a lesser extent established SMEs (Acs et al., 2001; Ruzzier et al,
2006). In general, entrepreneurship can exist in large and well established firms as well as
within small firms as it is an important mechanism for any firm’s development (Ruzzier et al,
2006).

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4 This is similar to the SWOT analysis in the strategic management literature.
International entrepreneurship builds upon most of the above-mentioned approaches to internationalisation. For example, entrepreneurship is regarded as a unique resource capable of identifying opportunities as they emerge and obtaining needed resources to make use of these opportunities (Ruzzier et al., 2006; Alvarez and Busenitz, 2001; Penrose, 1959). Entrepreneurs have unique relationships, experience and capabilities that are complex and hard to imitate and copy (Alvarez and Busenitz, 2001; Ruzzier et al., 2006). They are agents of change who carry out entrepreneurial and innovative actions and tend to quickly scan the markets for opportunities (exploration) and exploit business opportunities in markets through forming cooperative ventures in foreign markets (Andersson, 2000; Ruzzier et al., 2006).

**International new ventures: a challenge to the traditional stage and process models of internationalisation**

Following the pioneering contributions of Oviatt and McDougall (1994; 1995; 1996; 1997), many studies have tried to explain the behaviour of NV using different perspectives and theories such as network theory and organizational learning perspectives. All of these have offered key insights into the phenomenon of NV rapid internationalisation. However, empirical results have shown a mix of some commonalities and some differences. Most of these studies argue that NVs follow a different pattern to internationalisation than traditional large MNCs, where the latter follow a slow and incremental internationalisation pattern and increase their level of internationalisation as more experiential knowledge about the markets is gained and accumulated. Traditional MNCs have mostly started within their domestic home country and then after years of operation expanded to various markets and increased their level of commitment (Aspelund and Moen, 2001; McDougall et al., 2003; Moen, 2002; Servais & Rasmussen, 2000; Rialp et al., 2005), whereas NVs are more capable of internationalising at inception or soon afterwards (Rialp et al., 2005; Knight and Cavusgil, 1996; McDougall et al., 1994; Moen, 2002; Oviatt & McDougall, 1997).
The most commonly used definition of new ventures is the one offered by Oviatt and McDougall (1994:72): "a business organisation that seeks from inception to create competitive advantage through use of its key resources and sell its products/services in multiple countries ". The age of the firm is a crucial feature of that definition, they argue if the firm internationalises within the first six years of its inception, this means that this took place within the formation stage of NV.

There are other factors that contribute to the accelerated internationalisation of NVs, the most critical one being entrepreneurship behaviour. International entrepreneurship involves a "combination of innovative, risk taking behaviour that crosses national borders and is intended to create value for the organisation" (McDougal and Oviatt, 2000:903). Thus NVs tend to have founders with an international orientation which is often translated into entrepreneurial behaviour that crosses national borders. This is achieved through their unique capability to scan the markets and identify opportunities as they emerge. What helps and makes one entrepreneur different than the other is her or his previous experience and a cognitive structure that evolves over time. Their cognitive structural frames of mind as well as prior experience affect the strategic choices that founders make (Arenius, 2002; Shane, 2000). Other factors have been also highlighted such as being embedded in local networks; whether these are industrial zones, scientific networks or networks of small manufacturers (Uzzi, 1997; 1999).
Different perspectives have been used to understand the behaviour of NVs, such as a knowledge-based view of the firms and network perspectives (Madsen & Servais, 1997; Zahra, Ireland, & Hitt, 2000; Zahra, Matherne & Carleton, 2003; Rialp et al., 2005). Also, the role of the entrepreneurs or managers of NVs in pursuing international strategies (especially if they have had previous international experience, which equips them with the necessary skills and competencies) to enter new markets has been argued to be one of key explanatory factors of rapid internationalisation of NVs (Ellis and Pecotich 2000; Bell, McNaughton, Young & Crick, 2003). Finally the role of serendipity in creating opportunities to enter new markets has also been addressed as a contingency (Crick and Spence, 2005).

Other factors contributing to the accelerated internationalisation of those firms have been reported by Preece et al. (1999) and Bloodgood, Sapienza, and Almeida (1996). The former posited that NVs which focus on a narrow market niche and have a short product life cycle will only survive if they seek to internationalise soon after their establishment. The latter proposed that NVs seek to internationalise rapidly if they cannot survive domestic competition and can make more efficient use of their competencies and capabilities in foreign markets.

However, other divergent studies have found that born globals are not restricted to those companies coming from high-tech industries and/or new sectors (Bell et al., 2003; Rialp, Rialp and Knight, 2005) but rather they are found in other sectors, such as services (Madsen, Rasmussen & Servais, 2000; McDougall et al., 2003; Moen, 2002; A. Rialp et al., 2005). One plausible reason for these divergent empirical results suggested by Madsen and Servais (1997) is that born globals originating from large countries with large domestic markets (such
as the USA) operate in high technology intensive industries, while born globals originating from small countries such as Denmark and Norway, operate in other sectors that are not necessarily high-tech.

One of the key reasons behind the NVs’ success and rapid internationalisation, as addressed by a large number of studies, depends to a great extent on the firms' contacts and relationships with specific networks that exist in the new markets. These networks are established and nourished by the firms' founders and key actors' interpersonal relationships with members of other networks. These contacts have been argued to offer access to needed market knowledge and complementary resources that a NV does not have (Harris and Wheeler, 2005; Ojala, 2009). This means that the quality of the relationships and the effort exerted to keep and sustain such relationships play a crucial role in the success or failure of NVs in such markets. These relationships are said to reduce the impact of psychic distance, liability of foreignness and shortage of resources (Harris and Wheeler, 2005; Rugman and Verbeke, 2007; Ojala, 2009). In addition, serendipity plays a role whereby a valuable opportunity arises without planning (for instance, the entrepreneur meets up with one of key distributors in an overseas trade fair and this serendipitous relationship could evolve into a valuable business relationship) which creates chances for SMEs to enter new markets (Crick & Spence, 2005).

In an attempt to gather together the various perspectives and factors explaining the behaviour of NVs, Oviatt and McDougall (1994) formulated an integrative model that builds on the key aspects of the classical MNC internationalisation models and applied these to internationalisation behaviour of NVs (Fletcher, 2007). These classical theories were transaction cost analysis, the resource and knowledge-based views of the firm, international
entrepreneurship, and network theory (Barney, 1991). Their model focused on three main pillars: (1) the characteristics of the NV’s founder (2) the NV’s founder(s) or management team’s early internationalisation motives and (3) the structural mechanisms that firms use to seize international opportunities as they emerge (c.f. Arenius, 2002).

Oviatt and McDougall’s (1994) model of NV’s internationalisation is composed of four main dimensions namely internalization of some transactions, alternative governance structures, foreign location advantage and unique resources. Each of these elements is described in the following section.

**Oviatt and McDougall's (1994) new venture typology**

Firstly, firms internalise some of their transactions during their start up stages\(^5\). This is based on transaction cost theory, which argues that firms are formed when market imperfections exist (Williamson, 1985) and that MNCs internationalisation depends on choosing an entry mode that selects the least costly location to operate and involves minimal transaction costs (Buckley and Casson, 1976; Fletcher, 2007). Transaction costs are incurred when the firm devotes a significant amount of time and effort in organizing and controlling transactions across borders. Firms might find it cheaper to internalize these transactions than organizing and carrying out these cross-border transactions at arm-length (Fletcher, 2007). By doing so, the firm accumulates and owns key valuable resources that serve as the basis for future economic transactions. In the case of traditional MNCs these foreign transaction costs are minimized through FDI in the foreign markets.

Therefore, Oviatt and McDougall (1994) argue that although "ownership of foreign assets" is not a key distinguishing feature of NVs, both MNCs and NVs need to have ownership of key

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\(^5\) In their original article Oviatt and McDougall (1994) used the term international new ventures [INVs]. In this chapter I will use just new ventures [NVs].
valuable assets that serves as a source of economic exchange. Therefore, NVs need in their early start-up stage to have some key assets (accumulated assets) that are internal to the firm and serve as the basis for economic transactions.

Secondly, newly established firms suffer from limited resources and power. They tend to "own or internalize" (Oviatt and McDougall, 1994:53) only a limited number of key valuable assets or competencies that are essential for their survival and rely on other means of acquiring those assets that they lack. Therefore, NVs rely on alternative control and governance mechanisms such as network ties, licensing, franchising and alliances with other partners to acquire and have access to those resources needed in order to succeed in new markets. This is argued to be the key distinguishing feature of NVs as opposed to traditional large MNCs.

Although, there is always the risk of opportunistic behaviour by one of the partners or an appropriation of NV proprietary knowledge and other competences, NVs still need to rely on these collaborative agreements to compensate for their poverty of resources (Oviatt and McDougall, 1994). Social networks and their inherent informal aspects play a significant role in reducing this opportunist behaviour (such as trust and cooperation).

Thirdly, locating the operations of the firm in a foreign market is what differentiates an international firm from a domestic one. Firms strive to locate transferable resources (such as knowledge and raw materials) in those locations where they can combine non-transferable resources (such as market and location specific resources). This provides MNCs with an advantage over local competitors who lack such transferable resources. However, operating
in a foreign market creates some challenges for the international firm as opposed to domestic competitors, such as non-tariff trade barriers that are imposed by local governments, language and cultural barriers. Here large MNCs have the advantage of economies of scale that the NV lacks.

Accordingly, NVs rely on other resources and competencies to overcome such challenges. One of the key resources is the NV's proprietary knowledge, which is easily transferred, reproduced and combined with other non-transferable resources in many locations. Private knowledge can create either differentiation or cost advantages for the NV in foreign markets over their domestic rivals. This can even occur concurrently in several locations (Oviatt and McDougall, 1994).

This provides an explanation of why knowledge intensive industry internationalises rapidly, and more specifically why knowledge intensive NVs internationalise directly or shortly after their inception (Oviatt and McDougall, 1994; Fletcher, 2007). Given the recent increase in the efficiency of international markets, the competition process became more rapid. Thus, for a NV to succeed, it has to internationalise directly after inception.

The first three elements— namely ownership of foreign assets, ownership or acquiring resources through other means of governance and location decisions – set the foundation for a NV to enter and operate in foreign markets. However, for a NV to compete and sustain a competitive advantage it has to have a unique set of resources that are imitable, unique and hard to copy by their rivals (Barney, 1991). Therefore, Oviatt and McDougall (1994) claim that the fourth element, namely unique resources, is vital for the NV’s sustainable
competitive advantage. After a while, the knowledge-base of the firm can be easily copied and disseminated to others. This intimidates the NV’s "rent-earning opportunities" as the knowledge is no longer firm-specific and unique to the NV. Hence its ability "to reproduce and transfer this knowledge at a zero marginal cost is a simultaneously beneficial and troublesome property" (Oviatt and McDougall, 1994:56).

NVs can prevent the requisition or takeover of their knowledge resources through use of direct proprietary rights (such as patents and copy rights); creation of imperfect limitability of firms resources (where the firm’s rivals find it difficult to copy a product or highly embedded firm-specific capability that has an indirect relationship with the firms competitive advantage, such as history of organization and its management style); and forming licensing, network or strategic alliances, with partners who have complementary capabilities in order to tap in the ventures or network knowledge base and unique resources. Moreover, members of the same network share risks and profits (Oviatt and McDougall, 1994; Fletcher, 2007). It is argued that across border networks and alliances should be built on trust and commitment (mutual gain and reciprocity aspects) so that the opportunistic behaviour and risk of expropriation of the unique resources is minimized.

These elements are important for the sustainability of NVs but they are manifested in different ways. Oviatt and McDougall (1994) identified four main types of NVs based on two key dimensions, namely; the number of value-chain activities that are coordinated across countries and the number of countries involved as shown in Figure 2.2.
### Figure 2.2: Types of new ventures

1. **Export/import start-up**: These are NVs with few coordinated activities across countries and are involved in few countries.

2. **Multinational trader**: These NVs are involved in many countries with only few coordinated activities across these countries.

3. **Geographically focused start-up**: These are NVs that have many coordinated activities across countries but are involved in few countries.

*Source: adapted from (Oviatt and McDougall, 1994; Porter, 1985)*
4. Global start-up: These are NVs which are involved in many countries and have many coordinated activities across these countries.

Both export/import start-ups and the multinational traders are called new international market makers, where they tend to focus on coordinating a small number of important value chain activities mainly systems and knowledge found in inbound and outbound logistics, and coordinate the rest of the value chain activities through other governance mechanisms such as networks and alliances. These international market makers keep foreign direct investment [FDI] to a minimum and tend to uncover "imbalance of resources between countries" and create market opportunities that were not there before" (Oviatt and McDougall, 1994:58). Moreover, they tend to achieve a sustainable competitive advantage through their ability to develop and maintain key reliable networks relationships and their exclusive ability to scan various markets and identify those opportunities and have a first mover advantage. The multinational player tends to scan markets, identify opportunities fast and establish needed business networks fast enough before its rivals come into the markets and reap the benefits of the first mover.

The geographically concentrated start-ups focus on satisfying the needs of specific regions of the world and coordinate more value-chain activities across countries than the export/import start-up. In addition to inbound and outbound logistics, they coordinate imitable resources- that are highly tacit and complex in nature such as human resources and technological development- and might benefit further through forming alliances and networks with other partners (Oviatt and McDougall, 1994).

The global start-ups tend to be the most complex type of NVs. They tend to have no geographical constraints and focus on their "proprietary networks" to continuously access and know about the market opportunities as they arise (Oviatt and McDougall, 1994: 60).
Figure 2.2 presented four "ideal type" categories of NV along two main dimensions. However, Oviatt and McDougall (1994) argue that there are mixed types of NVs between these extremes. Furthermore, this model of NVs is rather static and NVs could change over time through entering additional or fewer foreign countries and coordinating to varying degrees value chain activities across countries.

Based on the above discussion, firms need to have ownership of key valuable resources, depend on alliances and networks to secure access and control over other vital resources, such as market knowledge, and also possess unique resources and competencies that are transferable or reproduced in other foreign locations. Accordingly, NVs benefit from first mover advantages and sustain a competitive position.

However, Oviatt and McDougall’s (1994) model has been criticized because it focuses mainly on knowledge-based NVs and adopts a static rather than a dynamic view. In other words, they focused on the first internationalisation attempt(s). This criticism has led to new ways of classifying NVs (Bell and McNaughton, 2000; Oviatt and McDougall, 2005b)

**Other SME typologies**

Bell and McNaughton (2000) classified NVs into "knowledge intensive and knowledge-based firms" (Rialp et al., 2005: 159). The former refers to those firms who rely extensively on acquired knowledge in developing their products, services and improving their productivity and innovativeness but do not rely on creating new knowledge as their basis for operations
and processes (Rialp et al., 2005). Software-writing firms tend to fall within this category. In other words, they have an exploitation-based competitive advantage (March, 1991).

By contrast, "knowledge-based" refers to those firms that emerge as a result of new technological developments and new sectors in the economy (such as biotechnology) and the complex knowledge inherent in the company processes. This is the basis of their core competencies and they have a so-called exploration-based competitive advantage (Rialp et al., 2005).

Bell, McNaughton, Young and Crick (2003) suggested a similar typology but added another type of firms which they referred to as "traditional firms". Clothing firms offer an example of the traditional type. They classified SMEs based on variations in novelty, complexity and sophistication of knowledge which are the key drivers behind the speed of an SME’s internationalisation. Traditional firms are firms that tend to bring a well-established technology into a new context or market (Oviatt and McDougall, 2005b:543). Accordingly, countries with diverse technological sectors would experience the emergence of NVs that vary in the knowledge and service intensity of their operations. In other words, NVs are not restricted to those companies operating in high-tech knowledge-based sectors but rather they may prevail as well in other sectors. Child and Hsieh (2014) suggest that these three types of SME – traditional, knowledge-intensive and knowledge-based – will tend to vary in their decision making on internationalization as well as in their use of information and network attachments.
The internationalisation process (or speed of internationalisation) of these three types is likely to be different. Traditional firms tend to follow the traditional Uppsala model whereby the firm internationalises gradually and slowly. On the other hand, the other two types tend to have a faster and accelerated rate of internationalisation, whereby the knowledge-intensive firms tend to internationalise faster as their key competency can be transferred and used in several countries. Knowledge-based NVs tend to internationalise very fast as their whole existence depends on "new complex knowledge" which can be deployed and sustained in multiple locations (Oviatt and McDougall, 2005:543). The characteristics of knowledge-based NVs are best explained by Oviatt and McDougall’s (1994) integrative model.

To sum up, most studies have ignored the mode of entry that is employed by different types of SMEs and how it changes or evolves as the SME becomes more mature and well established in foreign markets. Thus, knowledge-based firms might start off with licensing or forming alliances with local partners in foreign markets then later increase their market commitment as they develop a larger customer base and need to have most of their value chain activities coordinated and carried out in foreign markets. This could be done through having a green-field subsidiary to be near their customers for example, to offer after-sales services (Hashai and Almor, 2004). Also, a knowledge-based SME might start off by exporting some of its key products or services or becoming a supplier of a key component to large multinationals in various markets.

The internationalisation process of SMEs deserves further empirical investigation aimed at uncovering some of its complexities (Fletcher, 2007; Oviatt and McDougall, 2005a; Autio, Sapienza and Almeida, 2000). SMEs "have different routes and follow different patterns of
internationalisation depending on the level of knowledge acquired prior to the birth of a NV and the existing and new networks’ that offer access and complementary resources’ to the firm (Christensen and Jacobsen, 1996:7; Madsen and Servais, 1997). The SME’s network ties and relationships in foreign markets need to be taken into account as do other potential influences including national context, sector and previous experience.

**Summary of internationalisation models and perspectives**

Ahokangas (1998) posited that SMEs internationalisation models can be viewed from three different angles: the market, firm or entrepreneurship perspectives. The market perspective has focused mainly on MNCs and their diversification strategies that are deeply rooted in economics (Dunning, 1988). The firm perspective has been the focus of stage models of internationalisation and the entrepreneurship perspective has only recently emerged.

Both innovation models and Uppsala model have been applied to small and large firms, arguing that firms follow an incremental process of internationalisation and they increase their level of commitment and involvement as their level of experiential learning increases (Ruzzier et al., 2006).

The network perspective and resources based view are closely connected. Both perspectives focus on the internal and external resources (obtained through the firm’s network) that the firm needs in order to successfully internationalise. A firm can cooperate vertically with other firms at different stages of production. For instance, it could cooperate with a supplier and with a distributor. It could also collaborate with its competitors through forming horizontal network relationships (Ahokangas, 1998; Ruzzier et al., 2006). There is also a
close link between entrepreneurship and network perspectives. An important component of entrepreneurship is the creation of social capital through forging network links which assist internationalisation.

Based on these considerations, networks and the social capital they create are important for the survival and growth of SMEs, not least in terms of their internationalisation. The following section provides detailed background of networks and social capital theories.

2.2. Theories of social capital

The concept of social capital is not a new one. It has been used by academics since the early 1900s. It is deeply rooted in the work of sociologists such as Bourdieu (1986) and Coleman (1988). The former was the first to offer a detailed definition of social capital: "it is the aggregate of the actual or potential resources which are linked to possession of durable networks of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu 1986: 248; Portes, 1998).

Coleman (1988; 1990) on the other hand offers another comprehensive definition of social capital that has been widely used by scholars in the field. He argues that social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common. They all consist of some aspects of social structure, and they facilitate certain actions of individuals who are within the structure. Like other forms of capital, "social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence" (Coleman, 1990: 302).

Another key sociologist who took a different view of social capital is Burt (1992). He introduced the concept of structural holes, whereby an actor is said to be occupying a structural hole if he or she is connected to a group of unconnected actors. The actor then
occupies a brokerage position that gives him control over the flow of information and resources and the option of building bridges between groups of disconnected actors whenever needed (Burt, 1997). In later publications, Burt (2008) argued that being connected to a broker provides access to structural holes which provides the actor with new sources of information and resources that he does not have access to through his/her own network. Burt’s (1992) work is built upon the concept of weak ties (Granovetter, 1973; 1974) and the power that sole partners possess (Freeman, 1970; 1979; Burt, 1997).

In this case, the network is sparse - consisting of a few redundant ties - resulting in new sources of information and other resources, creating social capital for the actors who have access to structural holes. This view is contrary to the view adopted by Coleman (1988), who argues that closed networks (which are dominated by strong ties) provides access to crucial sources of information. Both these authors, however, have highlighted the fact that actors (whether individuals, groups or organizations) obtain and have access to resources through their external relationships (Burt, 1992; Coleman, 1988).

However, the application of the social capital concept has extended beyond the field of sociology. There have been studies of its impact on career success (Burt, 1992; Burt, 1992; Gabbay & Zuckerman, 1998; Adler and Kwon, 2002), how it creates a pool of candidates for recruitment purposes (Fernandez, Castilla, & Moore, 2000), and how it facilitates resource and knowledge exchange between different business units (Gabbay& Zuckerman, 1998; Hansen, 1999; Tsai & Ghoshal, 1998). Other applications concern how entrepreneurs use their own networks or social capital to seize opportunities (Ellis, 2010; Chong & Gibbons, 1997), how social capital facilitates a new venture’s establishment (Coviello, 2006; Coviello
and Munro, 1995; Walker, Kogut, & Shan, 1997) and how it assists inter-firm learning and reduces the likelihood of a firm’s disbanding and termination (Pennings, Lee and Witteloostuijn, 1998; Adler and Kwon, 2002).

The complexity of social relationships and their different types has been highlighted by Adler and Kwon (2002). They argue that one type of relationship (for example, a former colleague and friend) could serve other purposes (such as offering emotional support and non-professional advice). This has been referred to by Coleman as the "appropriability" of social structure (1988: 108). In other words, gathering under one concept are several related theories that have been addressed by scholars over the years such as social exchange theory, trust, role of informal social structure, structural and relational embeddedness and social networks (Alder and Kwon, 2002).

Hirsch & Levin (1999) have referred to the use of social capital to cover several theories and perspectives as an "umbrella concept". This has led to several criticisms of the use of social capital as an all-encompassing concept (Lappe & Du Bois, 1997; Narayan & Pritchett, 1997; Adler and Kwon, 2002). Accordingly, Adler and Kwon (2002) argue that there is a need to understand the sources of social capital, the benefits accrued from it, and its risks and contingencies. With this in mind, the following section discusses the different definitions of the concept, its sources and dimensions, different theoretical perspectives underpinning the concept, and the benefits and costs of social capital.

**Social capital definitions and perspectives**

There is much debate among scholars on the way they define social capital. Some definitions have emphasized certain aspects of social capital, while other scholars have attempted to find
a general and holistic definition of social capital (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002). Several definitions have been used by different researchers. For example, Bourdieu & Wacquant (1992) defined social capital as "the sum of resources that an individual or a group will accrue as a result of being in a network of relationships" (p.119). Hitt and Ireland (2002) emphasized that an organization’s and an individual’s "set of relationships creates value and facilitates action" (p.5). However, these authors have focused on the individual's perspective and regarded social capital as a private good that benefits only the person who possesses it.

On the other hand, social capital can benefit groups of people and even society as a whole (Putman, 1993). This has been reflected in recent studies that have viewed social capital from an organizational perspective. Social capital plays the role of a public good, where it is an organizational resource that benefits all the members of an organization and consists of a set of social relationships within an organization (Ratten and Suseno, 2006). It facilitates the spread of information and at the societal level it is a fruitful division of labour.

Social capital has been further viewed from two different perspectives; egocentric/bridging; and socio-centric/bonding. The former emphasizes that individual actor’s social capital is characterized by her/his direct and indirect relationships with others in a social network (Ratten & Suseno, 2006). The distinction between bonding and bridging social capital is unclear and sometimes confusing (Prashantham, 2005; Arenius, 2002). Bonding social capital is concerned with bringing together people who are similar to one another in one or more aspects (such as ethnicity, age, gender and social class). By contrast, bridging social capital is concerned with bringing together people who are dissimilar (Putnam and Goss, 2002). In
other words, bonding social capital is represented in homogenous groups (sharing the same demographics or some common characteristics, for instance relationship with parents or kinship) and bridging social capital is represented in heterogeneous groups (relationship with social milieu) (Putman, 2000).

One distinction between bonding and bridging social capital that has been proposed by Adler and Kwon (2002) is that bonding social capital refers to intra-firm relationships whereas bridging social capital resides outside the organization (inter-organizational linkages or external relationships). However, caution must be applied when using the latter distinction as both external and internal relationships tend to overlap. 6

Bridging social capital helps in understanding why some individuals are more successful than others and why some firms are more competitive than others. As noted earlier, in Burt's (1992) view an individual can have access to valuable information due to brokering opportunities inherent in his/her location in a network of structural holes (where s/he is a focal actor who is associated with a mediator between two unconnected groups). This means that individual social capital plays the role of a private good or asset that benefits the actor or individual or organization who possesses it and is often reflected in his/her personal success (Ratten & Suseno, 2006). Bonding social capital focuses on "the social structure of the collective actors, whether these actors are groups, organizations or communities rather than individual actors per se" (Ratten & Suseno, 2006:62). This is evident in Colman’s (1988) view that closed networks (usually characterized by strong ties) are a vital source of

6 The distinction between bonding and bridging social capital in this research will follow that of Putman and Goss (2002).
information and resources. In the context of an SME’s social capital can often take the form of close personal bonds.

Despite the differences between Burt (1992) and Colman (1988), it is clear that resources could be obtained and accessed via the network relationships of an actor or an organization (Prashantham, 2005). Therefore, the presence of an actor’s set of relationships creates an opportunity for this actor as opposed to its absence (Arenius, 2002; Burt, 1997).

Given the different conceptualizations of definitions of social capital, three important considerations need to be addressed. Firstly, social capital consists of two aspects which are the networks of relationships and the resources that are accessed through the presence of these relationships (Arenius, 2002). Secondly, the divergent views and classification of social capital as a private versus public good and the emphasis on internal social capital (bonding social capital) versus external social capital (bridging social capital) needs to be incorporated in an integrative definition of social capital (Adler and Kwon, 2002). Thirdly, the distinction between the private versus public good aspects of social capital needs to be incorporated in the definition.

Accordingly, the working definition of social capital used in the present study is adapted from Nahapiet and Ghoshal (1998): "social capital is the sum of actual and potential resources that are embedded within and made available or derived from a network of relationships possessed by an actor or a social unit" (1998:243). Thus it is the individual actor

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7 Social capital is different from intellectual capital which focuses on the individuals (or organization’s) abilities and skills and is different from human capital which refers to stock of employees that an organization have and others do not have (Adler and Kwon, 2002).
8 The distinction between public and private good of social capital is not used in this study as the focus is primarily on the private good view. In other words, it is concerned with the social capital of the SME decision maker that makes his more (un)successful compared to other SME decision makers from the same context.
(entrepreneur) or social unit’s (SME) network ties that provides "access to valuable resources" and information (Nahapiet & Ghoshal, 1998:252). This could involve relationships with family members, friends, government agencies, clients, competitors, business partners, suppliers and distributors that provide the entrepreneurial firm with access to the resources needed over time and helps the firm to survive and grow. It involves both bonding (for example family and friends) and bridging social capital.

Nahapiet and Ghoshal (1998) have identified three main dimensions of social capital namely, structural, relational and cognitive dimensions. The structural dimension refers to actual configurations of the network, number of ties and other structural aspects. The relational dimension refers to the nature of relationships and the resources that could be obtained from these relationships such as trust and cohesion, identification and respect (Tsai and Ghoshal, 1998). The cognitive dimension refers to the set of resources that provides common "meaning and understanding to network members "such as shared goals, norms, common understanding, shared language" (Inkpen & Tsang, 2005:158; Nahapiet and Ghoshal (1998:251).

Several authors have employed different aspects and facets of social capital in their analyses. The most important distinction highlighted by Granovetter (1973) is between the structure and the quality of ties (Arenius, 2002). The quality of ties could be classified into weak and strong ties. The former refers to relationships that are characterized by a limited frequency of interaction, while the latter refers to the relationships that are characterized by high frequency of social interaction (Woolcock, 1998; Granovetter, 1973). However, certain ties could be
characterised as a weak tie even with high frequency of interaction if it is merely contractually based and both parties meet only to discuss business related matters.

The quality of relationships incorporates both the relational and cognitive dimensions of social capital. The present study focuses on both the structural (network) aspect of SC and the quality of relationships which includes the relational aspect only. The cognitive dimension is excluded because this study focuses on firm-level social capital (using an egonet perspective) rather than a dyadic view (which would be necessary to assess if both parties have the same shared understanding and norms).

**Benefits and costs of social capital**

Given the above conceptualizations of social capital, several benefits can be obtained from individual and organizational social capital (in most cases they tend to overlap). Organizational member relationships can help the company to seize opportunities in the market without participating in obtaining or creating them. Social capital provides informational, solidarity and influence benefits (Adler and Kwon, 2002). Market knowledge is vital to conduct business in foreign markets and to access new and diverse information and referrals (Gulati, 1999; Burt, 1992). Social capital also enhances the legitimacy and goodwill of actors (Burt, 1992; Arenius, 2002).

However, social capital is not without costs and negative aspects. There is the cost and time involved in maintaining relationships (Prasthantham and Dhanaraj, 2010). There is also the risk of closure, which means that the focal actor becomes blinkered and enclosed within his/her closely knit network and becomes unable to recognize or access new sources of information (Coleman, 1988; Adler and Kwon, 2002). For example, members of the same
rotary club share the same jokes and information day after day and they sometimes become so focused on themselves that they do not mix with other members outside their social group and do not hear about new jokes and information. These closely knit networks serve as a source of redundant ties (Burt, 1992).

In addition, there are risks associated with uncertainty regarding how business relationships will evolve, especially if the focal firm has limited market knowledge and the local partner is "powerful enough to exercise leverage within that location" (Child and Rodrigues, 2004:96). Another set of costs would involve the leakage or learning race referred to by Hamel (1991), whereby a focal firm’s key knowledge assets (Boisot, 1998) and resources are acquired by the local partner and this partner develops a superior learning ability than the other firm and may even find it unattractive to maintain the relationship (Child and Rodrigues, 2004).

Some studies have used the terms social networks and sometimes social capital interchangeably. In her study Coviello (2006) did not make a clear distinction between networks and social capital. It can be argued that a network by itself does not necessarily convey social capital. Social capital is only created when benefits or value can be extracted from a network of relationships. The following section discusses networks as a key component of social capital, followed by how both the structural and relational dimensions of social capital evolve over time.
Networks and social capital

Networking means that an actor connects with one or more actors within a given collectivity in order to gain access to needed resources. The connection between actors can be viewed from various levels of analysis. The micro perspective focuses on the dyadic level which is the connection between two actors (Hanneman and Riddle, 1998), whereas the macro perspective focuses on the overall network. The former is the smallest social unit and is characterised by the presence or absence of ties (between a pair of actors). The latter – the whole network – is composed of a set of dyadic structures between actors (Hanneman and Riddle, 1998).

There are three possibilities regarding the tie formation: no tie actually exists between actors; there is a uni-directional tie; or there is a reciprocated tie. These possibilities indicate the degree of cohesion and social capital that may be present (Hanneman and Riddle, 1998).

In addition, dyads are said to be embedded in local social structures or sub-structures with which they share a common attribute or membership. This is called embeddedness in a local social structure (Hanneman and Riddle, 1998). The purpose of my study is to understand the variation of the behaviour of the entrepreneurial firms as the focal point of analysis. The main premise of ego-networks is to understand how individual actors are embedded in their local structures and how this is reflected in variation of their behaviour (Hanneman and Riddle, 1998). An ego network perspective will be used in this study in order to understand and note the variation across focal firms in terms of how they are embedded in their local context and how this is reflected in their differential internationalisation performance.
An ego-network revolves around a particular person or organization (Arenius, 2002). This individual or firm is referred to as the "ego" and the persons or firms to which he/she is connected are often referred to as "alters" (Hanneman and Riddle, 1998). For the sake of simplicity, the entrepreneur’s set of relationships will be referred to as entrepreneurial networks and the entrepreneurial firm's set of relationships will be referred to as organizational networks.

Uzzi (1999) differentiated between embedded and instrumental ties. The former refer to "the degree to which commercial transactions take place through social relations and networks of relations that use exchange protocols associated with social, non-commercial attachments to govern business dealings" (Uzzi, 1999:482). These ties are private and personal in nature as opposed to the instrumental or professional ties which are found in the task or business environment in which the firm operates (Arenius, 2002). However, instrumental ties are arm's length ties similar to market/business ties. This distinction is closely linked to the strength of the tie proposed by Granovetter (1973). The tie is weak if the actors interact infrequently, and is strong when actors interact frequently. Strong ties could exist between friends and family members (Granovetter, 1973). However, as mentioned earlier, frequency of interaction is not necessarily the only indicator of a weak tie. Partners could have weak ties that involves frequent interactions primarily focused on business related aspects rather than a personal or social reason.

**Ego networks**

The egonet consists of a set of dyadic relationships between actors and different alters (Arenius, 2002). For instance, assume that company X is the focal actor (ego) in this case and
has a relationship with actors B and C respectively, the ego’s network could be visualized as in Figure 2.3. These ties could be embedded ones (strong personal tie) or weak impersonal/arm's length ties. In addition, the ties could serve more than one purpose and ego’s net could be composed of multiplex set of ties. This is depicted by the density of ties (lines) in Figure 2.3.

![Diagram of ego net](image)

**Figure 2.3: An example of ego net (adapted from Arenius, 2002)**

The blue circle refers to ego (focal firm) and the red circle refers to the alters (A, B and C) with whom the focal firm has a direct contact. Each of these alters are connected to other networks such that the focal firm is only linked to through the main alter. In addition, the red and blue circles refer to the first order network which is composed of ego’s alters. Alters’ connections (boxes) refer to second order network (Arenius 2002; Hanneman and Riddle, 1998, Burt, 2010). In addition each one of those alters’ alters could be connected to one another. However, this last possibility is beyond the scope of the present study.

In order to understand how the network evolves and the processes underlying its evolution, it is important to understand what happens at the individual dyadic level (if possible) and then with the accumulation of dyads into a broader network. Thus the evolution of a network
depends on the evolution of the individual dyads that constitutes the overall network (Hanneman and Riddle, 1998; Arenius, 2002, Slote-Kock and Coviello, 2010).

Accordingly, it is important to focus on:

(1) General network measures of the overall ego network such as network density and size (Coviello, 2006; Arenius, 2002).

(2) Structural hole measures such as network constraint (Burt, 1992; Coviello, 2006)

The first measure is network size which refers to the number of contacts present in ego’s network; this reflects the degree of involvement of the actor in relationships (Arenius, 2002; Coviello, 2006). In other words, the higher the ego’s network size the more likely that the ego will have more opportunities and options, and hence greater social capital. This creates a degree of self-sufficiency whereby the actor becomes less dependent on a restricted number of actors. It also creates more power to the ego (Arenius, 2002). The second general measure is network density, which refers to the percentage of total ties that are connected to one another taking into consideration the number of potential pairs of ties (Borgatti, Jones and Everett, 1998; Coviello, 2006).

The impact of high density networks is debated. One line of thought is associated with Coleman (1988) who argues that network closure (high density) is characterized by a higher degree of trust and reciprocal interests providing better sources of information. A second line of thought is associated with Burt’s (1992) notion of structural hole, and argues that the higher the density of ego’s network the more likely there will be redundant ties and less social capital. In other words, these redundant ties only offer redundant sources of
information and resources. If the actor (ego) has access to structural holes or connects between unconnected actors he is in a better position and thus has higher level of social capital (Burt, 1992; 2005).

These views appear to be contradictory. One favours closure as opposed to a sparser network. I shall assume in this thesis is that they are complementary, and that it is functional to have closely connected ties characterized by high degree of trust as well as some weak (non-redundant ties) to serve as new sources of information (Burt, 2000; Coviello, 2006; Han, 2006).

This leads to the second set of measures which are the structural holes measures. The key requirement here is to minimize the number of redundant ties, which will create more entrepreneurial opportunities to the SME (Greve, 1995). Following Coviello (2006) and Borgatti et al. (1998), network constraint will be used as a measure of structural holes. It measures the extent to which ego (the SME) has invested (is connected to) in a single group of actors (Burt, 2009). In other words, it refers to the extent to which all ego’s (the SME’s) ties directly or indirectly involve only a single actor (Borgatti, Everett and Freeman, 2002; Coviello, 2006). This means that there are more opportunities to act for the ego, if there is a low degree of constraint (Coviello, 2006).

The role of social capital in facilitating SME internationalisation and leading to improved performance is amply recognized in the literature. However, the ways through which social capital develops over time are not clearly understood (Prashantham and Dhanaraj, 2010).
Specifically, the processes that enable social capital to develop and those that constrain its development and how this balance is reflected in the firm's performance are unclear (Mauer and Ebers, 2006).

Social capital could escalate or depreciate like most forms of assets, making it important to understand its development and evolution over time (Prashantham and Dhanaraj, 2010:967). It has been shown that social capital is important for the firm’s international expansion. However, little is known whether over time social capital will be sufficient for successful growth and survival of an entrepreneurial firm. Relationships do not remain in their current form, but rather they tend to appreciate and depreciate over time. Some relationships (such as business relationships) are restricted to a given economic purpose, and once their utility expires, the tie decays (Arino, Ragozzino and Reuer, 2008; Doz, 1996; Ring and Van de Ven, 1994; Prashantham and Dhanaraj, 2010). Thus as the entrepreneurial firm evolves and develops, the significance of different types of relationships will differ as it moves from one developmental stage to another (Coviello, 2006). This implies that the firm’s social capital evolves as it moves from one stage of internationalisation to another. The following section discusses the evolution of social capital.

**Evolution of social capital**

The evolution of social capital involves the evolution of the overall network and the individual dyads that make up the firm’s ego net. Building on the international entrepreneurship literature, some useful insights can be drawn for conceptualizing the dynamics of network evolution. Larson and Starr (1993) and Hite and Hesterly (2001) have advanced two differing views on how the networks of small entrepreneurial firms evolve over
time. The former argue that the firm starts with an uncomplicated, one-dimensional set of
dyadic relationships that are dense and close, moving subsequently into a set of multiplex and
multifaceted organizational relationships. They argue that usually the firm starts off with a set
of largely but not exclusively social relationships (friends/family or previous business
connections), then in later stages they are converted into combination of both business and
social relationships. This adds a compound effect on the firm resulting in a more solid
integration of dyadic relationships and an increased number of business ties (Coviello, 2006).

On the other hand, Hite and Hesterly (2001) claim that firms start off with a set of
interconnected relationships (consisting only of social relationships) on which the firm relies
heavily for its growth; and as the firm moves into its growth and stability stages its network
comes to comprise both "embedded and arm’s length" business ties. In other words, the
firm's network moves from a self-based, path dependent one to a consciously evaluated and
intentionally managed one (Coviello, 2005:715).

These two studies have a common base. Both maintain that firms will start off with strongly
connected social relationships and will develop in a linear way. However, they differ in that
Larson and Star (1993) argue the network will evolve into a denser and highly integrated
structure composed of both social and business relationships, which overlap as the SME
moves between the early stages of the firm's lifecycle and later stages. Whereas Hite and
Hesterly (2001) suggest that firms will move into a sparser, open network, which will be
composed of more business ties in the later stages of development. A final point of departure
between the two studies is that Larson and Star (1993) implicitly suggest that networks are
intentionally managed, whereas Hite and Hesterly (2001) argue that they are not necessarily
intentionally managed from conception.
Although these two studies focus primarily on early-stage entrepreneurial firms, they offer important theoretical conceptualization of how networks evolve over time. Coviello (2006) has examined the evolution of the overall network in terms of its density, size and centrality over time, concluding that the early-stage entrepreneurial firm’s network size will increase but their network density will decrease over time and the firm’s network will be dominated with business ties during the initial and early growth stages of firm’s lifecycle. Prashantham and Dhanaraj (2010) focused on individual ties and how they evolved in terms of expansion versus decay. They argued that the firm starts off with an initial stock of social capital (through a set of ties) and that over time it evolves and creates dynamic social capital. They also explained how this creates network learning crucial for the firm’s growth.

Building on the above arguments, the present study aims to examine the evolution of an SME’s network as a whole and the individual dyads that make up that whole network. This will represent the structural dimension of social capital. It involves focusing on key structural measures (Borgatti et al., 1998; Coviello, 2006) and the patterns of development of individual ties (expansion, contraction), and how and why such patterns occur.

**Research on networks and the internationalisation of SMEs**

To date, numerous studies have emphasized that networks have a positive impact on the internationalisation of SMEs and on the speed of that internationalisation. Two major reviews by Hoang and Antoncic (2003) and Slotte-Kock and Coviello (2010) identified three main categories of research on the use of networks in the entrepreneurship literature. These three categories were (1) studies that focused on how networks impact entrepreneurship processes and outcomes (treating networks as an independent variable); (2) how the entrepreneurship process affects network development (treating networks as a dependent
variable); and (3) studies that treated networks and internationalisation as inter-dependent. The literature addressing networks and SME internationalisation can be grouped into three main streams as shown in Table 2.4.

These reviews suggested that future research taking networks to be an independent variable, should use longitudinal studies to understand how networks shape opportunities being pursued. Whereas researchers who view networks as a dependent variable should investigate how inter-organizational relationships are developed at the dyadic level. Both recommendations are embedded in the notion of process within the context of change (Slotte-Kock and Coviello, 2010). Hoang and Antoncic (2003) suggested that researchers should use an integrative approach instead of positioning network as a dependent or independent variable. This is has been evident in studies that have focused on social capital and immigrant entrepreneurs. It represents the third category, treating networks and internationalisation as inter-facing and inter-dependent.
### Table 2.4. Key themes examining the importance of networks in SME internationalisation

<table>
<thead>
<tr>
<th>Main themes/streams of literature</th>
<th>Key aspects/ theoretical lens</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Networks as an independent variable</td>
<td>These studies focused on the SME's or entrepreneur’s perception of network; whereby they examined how the networks impact the SMEs internationalisation processes and outcomes. For example, some scholars focused on the usefulness and quality of ties, the functions or benefits of relationships (c.f. Harris and Wheeler, 2005; Uzzi, 1997; 1999; Loane and Bell, 2006). Generally, key benefits and functions offered by network relationships to SMEs are not precisely specified nor thoroughly researched.</td>
<td>Depended mainly on cross-sectional studies to try to understand how networks facilitate the internationalisation of SMEs and/or few case studies (between 3-9 case studies).</td>
</tr>
<tr>
<td>Dynamics of networking process through positioning networks as an independent variable</td>
<td>Few studies focused on how networks facilitate internationalisation process of SME over time (Hoang and Antoncic, 2003; Coviello, 2006; Slotte- Kock and Coviello, 2009; Jack, 2005; Coviello, 2006). These studies have addressed this aspect drawing on structural dimensions of networks such as network cohesiveness and reliance on bridging relationships (Coleman, 1988; Burt, 1992), strength of relationships and embeddness of the SME in its social context (Granovetter, 1973; Uzzi, 1997;1999). Or they compared the structural evolution of SME networks over the early stages of the SME life cycle (for example, Coviello, 2006). The structural configuration of networks serves as a proxy for the SME’s access to resources and information which are made readily available through its membership of a particular network. Other studies focused on individual network tie characteristics through addressing the question of what is the best combination of ties (weak or strong, business or social) that could create benefits for the company (Bulter and Hansen, 1991; Hite and Hesterly, 2001; Steier and Greenwood, 2000). These studies focused on how SMEs network develop over time through addressing the evolution of the ties from social to business ties.</td>
<td>These studies were either conceptual in nature (e.g., Hite and Hesterly, 2001; Larson and Star, 1993; Han, 2006) and/or they focused on a narrow perspective of network evolution over time through using simple grouping of relationships to social and business relationships; or broad types of networks such as support networks, professional networks; and/or weak and strong ties.</td>
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and/or multiplex ties and how the strength of ties evolve over time.

Finally, others define network change in terms of how, for example, exchange relationships between an SME and its partners ties become dormant or cease to exist (Prashantham and Dhanaraj, 2010; Jack, 2005).

A few scholars began to investigate the key benefits offered to SMEs and how these impact on the entrepreneur’s ability to spot and seize opportunities in overseas markets (Ellis and Pecotich, 2000; Blomstermo, Eriksson, Lindstrand and Sharma, 2004).

<p>| Networks as a dependent variable | There are fewer studies in this category than in the first one. It is concerned with how an SME's network is affected by entrepreneurial action (Hoang and Antoncic, 2003; Slotte-Kock and Coviello, 2010). In other words, how the strategies of SMEs shape and change networks over time. This stream of literature draws heavily upon the industrial networks literature introduced by Johanson and Mattsson (1994) that focused on how companies manage their inter-organisational networks or inter-firm networks. Hence the focus is on the overall network of relationships. These studies draw attention to the importance of managing important relationships in a way that maximizes benefits for the firm and that reflects a rational economic logic on the part of managers or entrepreneurs (Slotte-Kock and Coviello, 2010). | The focus is on overall networks of inter-firm relationships. Moreover, the key assumption is that the ties they contain mainly reflect a rational choice on part of the exchange partners Haong and Antoncic (2003). |</p>
<table>
<thead>
<tr>
<th>Dynamics of networking process through positioning networks as a dependent variable</th>
<th>These studies focused on assessing how exchange partners work together to make best use of resources through collaboration and co-optation. Also, how different partners try to improve their position through gaining preferential access to strategic partners and how partners try to maximize trust as a key means to reduce competitive behaviour and achieve a win-win situation for all actors involved (Hakansson and Snehota, 1995; Slotte-Kock and Coviello, 2010).</th>
<th>These studies focused on interaction between exchange partners and how, at the level of dyadic relationships, the whole network could change as a result of adaptation to external influences (Johanson and Mattsson, 1994; Slotte-Kock and Coviello, 2010).</th>
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<tr>
<td>Studies that position networks and internationalisation on the same interface and treat them as inter-dependent</td>
<td>The final stream has adapted a network approach or view on internationalisation in a unique way through arguing that SMEs’ entry to foreign markets is heavily influenced by the contacts and relationships they have in their portfolio of relationships. The internationalisation process should be understood through the process by which SMEs enter into overseas networks. For example, Jansson and Sandberg (2008) introduced the entry node concept whereby the SMEs entry to overseas markets is contingent upon ties in their networks and these ties are the key way through which companies manage their overseas operations and enter new markets. Hence they are equivalent to the entry mode strategies adapted by the company. Others like Hilmersson and Jansson (2012) have examined the process through which SMEs establish an insidership position in overseas networks.</td>
<td>These studies focused on either identifying key nodes or viewed internationalisation as process of entering new markets through development of particular types of network.</td>
</tr>
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</table>
The present study will primarily focus on the interface between both internationalisation and network development over time. It will also examine the benefits accruing from the social capital provided by those networks.

The SMEs to be studied are located in contrasting institutional environments. The following section discusses the background to institutional theory, including its cultural dimension, and how it applies to my research.

### 2.3 Historical evolution of institutional theory

Institutions have been a major interest of social scientists for over a century. Table 2.5 provides a summary of influential contributions to the development of institutional theory.
Table 2.5: The development of institutional theory

<table>
<thead>
<tr>
<th>Time period</th>
<th>Authors</th>
<th>Description</th>
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<tbody>
<tr>
<td>Early 1900s</td>
<td>Max Weber (1906/1946), Merton (1936).</td>
<td>The roots of institutional theory can be traced back to the concept of bureaucracy introduced by Max Weber's (1906/1946) essays in sociology. His work on bureaucracy and behaviour in bureaucracies was further developed by Merton (1936). Merton argued that formal and rigid organisational rules and formal procedures could hinder the achievement of an organization's goals giving rise to bureaucratic dysfunctions (Merton, Ailsa and Hockey, 1952; Scott, 2001).</td>
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<tr>
<td>1930-1960</td>
<td>Selznick, 1948; Parsons, 1956; Simon, 1945/1997</td>
<td>Selznick (1948), building on Merton’s work, treated institutions as a variable phenomenon and a process. He argued that organisations are similar to living organisms, they have to adapt to changes in the environment and it is shaped by the choices and actions of its members. He argued that over time an organisation creates a distinctive set of standards and ideals that result in a separate structure or identity. It then could be viewed as a standalone entity and treated as an exogenous variable rather than a process, where institutions change over time (Selznick, 1948; 1957; Scott, 2001). Parsons (1956) added a new dimension to the early definition of institutions, namely the cultural-cognitive dimension. He argued that shared norms and values govern the individual and organisations behaviours and defines the appropriate course of action. In other words, he argued that individual and organisations actions are regulated by a set of normative and cultural values that if individual and organisations measure up to these values they would gain legitimacy and have a higher share of the societal resources (Parsons, 1953; [1956]1960; [1934] 1990; Scott, 1995; 2001). This is closely linked to the concept of institutional isomorphism, which is the process by which firms follow common standards and practices that become legitimised as a result of confirming to norms and values set by their institutional context (Kiss and Danis, 2008; Meyer and Rowan, 1977; DiMaggio and Powell, 1983). Herbert Simon [1945] 1997] added the concept of bounded rationality where he argues that individuals’ decision making is contingent upon some value premises that guide the decision making process. within the context of organisation organisational routines, targets and rules equip and sets the framework upon which employees make rational decision regarding how to organisational goals. It is important to note that Simon [1945] 1997] challenges mainstream economic thinking that individual are full rational decision makers but argues that individuals have cognitive boundaries that are contingent upon the information available, values and routines present in a particular context. For example, an employee’s decision on how to repair a particular machine is governed by the training and procedures set by his supervisor.</td>
</tr>
</tbody>
</table>
Neo-institutionalism is rooted in the work of political economists and sociologists (such as North, 1989; 1990; March and Olsen, 1984; Moe, 1990; DiMaggio and Powell, 1991; Nelson and Winter, 1982; Thelen and Steinmo, 1992; Moe, 1990). The best-known contributor is North (1990), who applies transaction cost theory and argues that the economic exchange between economic actors is dependent on the institutional context or framework they are embedded. He argues that wider institutional context such as that of the country sets the "rules of the game" (North, 1990:3; Scott, 2001). This has a bearing on the exchange that takes place between people and organisations. These constraints consist of actions that individuals are forbidden to do and the prerequisites that allow individuals and organizations to take on certain activities. This creates the "institutional framework within which any kind of human interaction takes place" (North, 1990: 4).

Evolutionary economists- adhering to neo-institutionalism- argue that only those organisations belonging to a particular population will survive if they have the best fitting characteristics to the external environment. These characteristics become internalised into the organisation and in the form of routines and procedures that affects future adaption behaviour of the organisation. These routines and procedures are one form of institutionalisation (Nelson and Winter, 1982; Scott, 2001; Child et al., 2013).

By contrast, political sociologists have focused mainly on what Scott (2001) referred to as historical institutionalisation and rational choice theorists. The former group argues that regulatory institutions are not separate from the informal institutions that are constructed by the social actors but rather they are interrelated. They argue that institutions are composed of formal and informal systems that govern individual and organisational behaviours (Thelen and Steinmo, 1992; Scott, 1995:2001). They emphasise that the institutional framework could constrain or facilitate the individual actors behaviour.

The latter emphasises the importance of the regulatory aspect of institutions and argues that social actors are rational human beings and that they build political and regulatory institutions that help in governing and protecting their interests (Moe, 1990; 1984; Scott, 1995, 2001). These institutions take the form of rules and regulations that governs sanctions and empowers individuals within a particular context.

Some organisational sociologists have added a further dimension to the definition of institutions. This is the cultural-cognitive dimension whereby symbols and values are seen to form a unique social institution that shapes individual and organisational behaviours. These cultural values are institutionalised through the process of socialisation (social interaction between actors). Over time they become internalised to societies, forming part of the cultural heritage of countries and communities (Scott, 2001; Berger and Luckmann, 1967).
From the above discussion it is evident that institutions have more than one dimension and could be understood as a process (institutionalisation over time) or an exogenous variable. Scott (1995; 2001) created an analytical framework that encompasses different dimensions of institutions and divided them into three interdependent pillars, namely the normative, cognitive-cultural and regulatory pillars. The following section discusses Scott’s (1995; 2001) framework.

**Institutions: definition and Scott’s institutional pillars**

According to Scott, institutions can be regarded as relatively stable entities which may be "subject to change" by social actors. They consist of three main pillars – regulatory, normative, and cognitive-cultural – which are present at both micro and macro levels. Each of these pillars signify important aspects such as rules (regulatory), norms (normative) and beliefs (cognitive) which are usually disseminated through different types of "carriers" such as formal, relational, and symbolic systems (Scott, 2001: 48).

Furthermore, institutions can be classified as both formal and informal. At one extreme lie formal institutions, which articulate formal rules, constitutions, specific bylaws and contracts defining the terms and boundaries of a specific transaction or exchange between concerned parties (North, 1990; Scott, 1995; 2001). At the other end of the spectrum lie the informal institutions, which are bearers of "codes of conduct, norms of behaviour and conventions" (North, 1990: 36). Informal institutions are often not as obvious and clear as in the case of formal institutions. They emerge as a consequence of the imperfect information that is diffused within society. This gives scope for individuals to interpret information based on their experience and in this way informal institutions tend to reflect the culture of the country in question (North, 1990). Moreover, informal institutions are represented by a set of
expectations and norms that govern business practices and codes of conduct within particular "localised interpersonal relationships" or groups of actors (Scott, 1995; 2001:48).

Scott (1995; 2001) offers an encompassing analytical framework that covers both the formal and informal aspects of institutions. The formal/regulatory institutions which have to do with laws, regulations and sanctions are coercive mechanisms that encourage or discourage certain behaviours (Scott, 1995; 2001; Busenitz, Gomez, and Spencer, 2000). By contrast, informal institutions are composed of values, norms, beliefs and symbols that define desirable or expected behaviours, shared and cultural supported beliefs, and the ways of doing things embedded in society, which are passed on from one generation to another (Boyd and Richerson, 1985; North, 1990; Scott, 2001).

Informal institutions in Scott’s (1995) terms encompass both cultural-cognitive and normative dimensions. He differentiates between culture and normative dimensions, and argues that culture involves the diffusion of knowledge sets, values and norms of behaviour from one generation to another through the process of copying and instructing (Boyd and Richerson, 1985; North, 1990). These shared understandings and norms are the framework through which individuals and organisations make rational decisions and choose a certain course of action. However, normative values and norms are more related to moral obligations that are deemed desirable or undesirable by a particular group of people such as a certain religious groups, members of a professional body. These normative institutions stipulate the appropriate course of action and whether this course of action is likely to be "certified or accredited" by the members of a social group (Scott, 2001:52).
Scholars from different disciplines have discussed the impact of institutions on the level of innovation within countries, on how international partnerships evolve, and on how entrepreneurial activities differ from one context to another (Kiss and Danis, 2008, Schumpeter, 1926). Within the international entrepreneurship literature, studies have focused on how social networks influence entrepreneurial initiatives in countries like China which are characterised by a collectivist culture and low level of institutional development. According to Kiss and Danis (2008) there is still limited understanding about the impact of different national contexts on the internationalisation process of the firm and the extent to which firms rely on their social networks (Jones et al., 2011).

**Institutions, social capital and the entrepreneurial behaviour of firms**

Countries differ in their level of institutional development. This disparity has implications for the extent to which entrepreneurial behaviour is encouraged or restricted. In addition, it is well established within the network literature that relationships are context specific and that they are embedded within their local context or environment (Kiss and Danis, 2008; Dodd and Patra, 2002; Jones et al., 2011). This means that the country’s level of institutional development is likely to determine the extent to which entrepreneurs rely on social relationships to do business and whether local institutions (formal or informal) encourage or discourage entrepreneurial internationalisation activities. Table 2.6 provides an explanation on how the different levels of institutional development affect the SMEs internationalisation and networking behaviours.
### Table 2.6 Relevance of institutional development for internationalisation and networking

<table>
<thead>
<tr>
<th>Institutional Dimension</th>
<th>Definition</th>
<th>Level of institutional development</th>
</tr>
</thead>
</table>
| **Regulatory**          | Refers to governmental policies and regulations that govern the cross border activities of firms (Busenitz et al., 2000). It also identifies other formal institutions that play a crucial role in offering support for firms such as equity markets and banks (Kiss and Danis, 2008; Busenitz et al., 2000). | High: Well established legal and monetary conditions demonstrated in effective law enforcement and efficient banking systems and efficient support provided through government supporting agencies to internationalising firms. Thus creating a favourable business environment (Bruton et al., 2005)  
Low: It is difficult for entrepreneurs to internationalise with unfavourable regulatory conditions, such as export restrictions and restrictions on finance. |
| **Normative**           | This sets the standards and values shared by members of a group or organization regarding the preferable way to do business (Scott 1995; 2001; Kiss and Danis, 2008; Burton, Fried, and Manigart, 2005). Moreover, it also involves the expectations and accreditation of informal professional groups such as members of the same industry. In the context of entrepreneurship, normative institutions, such as export promotion agencies, potentially influence the importance that entrepreneurs place on internationalisation and view it as an integral aspect of their overall business (Kiss and Danis, 2008). | High: Internationalisation is stressed as a desirable behaviour and an important means of business development.  
Low: Internationalisation is less valued and there are limited normative values supporting internationalisation. |
| **Cognitive/ cultural** | This identifies cultural values and norms that govern the way entrepreneurs generally do business (in terms of honesty, integrity and how to deal with foreigners). It also reflects the importance of relationships in society and more specifically as a means of doing business (Bruton et al., 2005; Kiss and Danis, 2008). | High: Relationships may be important. However, international expansion and firms success is more the primary concern/ in other words, the entrepreneurs would not focus on creating strong relationships first with their business partners before they start talking about business. Hence the focus on weak ties is prevalent (Dodd and Patra, 2002; Dodd, Jack and Andersson, 2002).  
Low: Personal relationships are more important than doing business. Hence strong ties are crucial for doing business (Dodd and Patra, 2002; Dodd et al., 2002). |
The lower the institutional level of development the more likely it is that firms will rely on strong personal ties to compensate for intuitional voids. Conversely, the higher the level of institutional development, the more they will rely on weak ties (Kiss and Danis, 2008; Dodd, Jack and Andersson, 2002; Dodd and Patra, 2002). However, this raises an important question: if this is the case during the formation stage or early establishment of the firm, will it apply to later stages?

The constraints that a country’s institutional framework imposes on individual or organisational actions are the sum of both formal and informal institutions. It is important to note that not only do institutions create opportunities and constraints that influence the entrepreneurial firms’ behaviour over time but also entrepreneurs (political or economic) influences and alters the institutional framework in a way that benefits them. This triggers institutional change that is incremental and stable in nature, whereby laws are revised and altered in a gradual manner. In some instances this process of change could be on a discontinuous (revolutionary) basis whereby, a dramatic change occurs to formal or informal institutions (North, 1990; Scott, 1995; 2001). The main focus of this study is on how the institutions facilitate or hinder entrepreneurial (internationalisation) activities and how entrepreneurs alter and influence the institutional framework in a way that creates value for them. Institutional change and paths through which it evolves is beyond the scope of the current study.

The present study focuses on two different national contexts which exhibit contrasting levels of institutional development, namely UK and Egypt. The above discussion suggests that the
level of institutional development will impact on SME internationalisation and networking behaviour. The following section briefly reviews the contextual differences between the two countries.

**National institutional differences between the UK and Egypt**

The emerging literature examining the impact of institutional contexts and national differences on entrepreneurship has been controversial. Some scholars argue that different institutional frameworks and logics have a strong impact. Others – often referred to as Universalists – adopt a generic view of entrepreneurship which assumes that entrepreneurs from different countries share more behavioural similarities than exhibit national differences (Dodd and Patra, 2002; McGrath and MacMillan, 1992; McGrath, MacMillan, Yang and Tsai, 1992).

The latter group argues that a universality of entrepreneurship behaviour is grounded in the fact that entrepreneurs have some generic characteristics and behaviours which prevail across different contexts. However, several empirical studies have challenged this view, especially ones covering Chinese and Asian entrepreneurs (Kiss and Danis, 2008). Asian entrepreneurs and SMEs are strongly embedded in collectivist relationship-based cultures, where being a member of a certain social network is a primary key to success (Dodd and Patra, 2002; Kiss and Danis, 2008; Hofstede, 1983; 1991). In these contexts "guanxi”, or connections with people in senior positions such as governmental officials, play a significant role in facilitating and supporting SMEs' international survival and growth (Kiss and Danis, 2008).
The former set of scholars argue that differences in institutional frameworks and contexts affect the way firms operate in the home market as well as having a significant consequence for their internationalisation (Boddewyn, 1988; Boddewyn and Brewer, 1994). Scholars have noted that home country institutions, both formal and informal, shape how firms do business in domestic markets. SMEs have to conform to bureaucratic rules and policies laid down by local institutions, as well as relying on their support to internationalise overseas (Buckley, Clegg, Cross, Liu, Voss and Zheng 2007; North 1990). These scholars emphasise the importance of different contexts and institutional frameworks in shaping the nature of SME internationalisation behaviour (Kiss and Danis, 2008; Dodd and Patra, 2002; Shane, Kolvereid and Westhead, 1991). Furthermore, Powell and DiMaggio (1991) argue that institutions within home and overseas markets can hinder firms’ internationalisation through enforcing laws and ways of doing business that could obstruct their internationalisation. Whereas others argue that the institutions in local and overseas markets are crucial in assisting SMEs’ internationalisation (Child and Rodrigue, 2005; Whitley, 1999; Buckley, Clegg, Cross, Liu, Voss and Zheng, 2007).

**Institutional theory and its dimensions**

The most widely used framework of institutional dimensions is that advanced by Scott (1995). The dimensions he identifies overlap and are not mutually exclusive (Hirsch and Lounsbury, 1997; Bruton, Fried and Manigart, 2005). As discussed above, these are the regulatory, normative and cognitive "pillars" of institutions.

Bruton et al. (2005) compared the three dimensions in different regions and/or continents and examined their impact on the expansion of venture capital companies in the US/UK, Asia and continental Europe. They argued that in mature and strong institutional contexts
entrepreneurship is highly regarded and that firms rely to a lesser extent on social networks. On the other hand, in weak and less mature contexts (such as Asia and most African countries) entrepreneurs occupy a relatively low status and they tend to focus aggressively on social connections to fill in institutional voids inherent in their respective contexts. In such contexts, entrepreneurs and small business owners tend to have strong inter-personal relationships within key networks embedded in their domestic institutions as an alternative route to enact and implement contracts and sometimes even to impose "sanctions on violators" (Bruton et al., 2005: 743; Perkins, 2000). Hence, entrepreneurs are more likely to spend more time nursing and nurturing these key relationships than on building new ties or focusing on short term profits (Chen, 2001; Bruton et al, 2005; Dodd and Patra, 2002).

To date, few studies have examined the impact of different institutional conditions on SME internationalisation and networking behaviours (Kiss and Denis, 2008; Dodd and Patra, 2002), and these studies have focused on developed countries and hardly tackled any emerging economies. Emerging economies are more likely to suffer from institutional voids which refers to absent or weak specialized intermediaries, regulatory systems and contract-enforcing mechanisms in their product, labour and capital markets (Khanna and Palepu, 1997; Khanna and Palepu, 2010). They often manifest as ‘gaps between formal rules and norms, and their enforcement in daily practice’ (Rodrigues, 2013: 14). Most attention to institutional voids in emerging markets has been given to the challenges and opportunities they offer to firms seeking to do business in such markets. The effect of domestic institutional voids on internationalising SMEs has received next to no attention.
According to the Global Entrepreneurship Monitor's extended report (2011), entrepreneurship levels vary significantly between what it terms factor-driven and innovation-driven economies. The former consist of African and Middle Eastern countries such as Egypt and Tunisia, and the latter consists of developed western countries such as the USA and UK.

An indication of the level of institutional voids in various emerging and developed economies is provided by the World Justice Project’s Rule of Law Index (Agrast et al. 2013; Rodrigues, 2013). Table 2.7 shows the scores for UK and Egypt.\(^9\)

**Table 2.7: Indicators of the extent of institutional voids in Egypt and the UK**

<table>
<thead>
<tr>
<th></th>
<th>Open government</th>
<th>Regulatory enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>0.48</td>
<td>0.42</td>
</tr>
<tr>
<td>UK</td>
<td>0.78</td>
<td>0.79</td>
</tr>
</tbody>
</table>

These scores indicate that Egypt has considerably greater voids in its institutional system than does the UK. This is consistent with data for 2010 obtained by the World Economic Forum (2011) from its Executive Opinion Survey, which score Egypt considerably higher than the UK for indicators of institutional voids such as corruption, irregular payments and bribes, favouritism in decisions of government officials, and lack of transparency in government policymaking.\(^{10}\)

Accordingly, an important rationale for the design of this study is that different institutional frameworks are likely to have an impact on the international and networking behaviour of

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\(^9\) Data are for 2012, since earlier information was not available for Egypt. The index is constructed so that 1=the highest possible score and 0=the lowest. ‘Open government’ is assessed by three indicators reflecting whether laws are publicised, stable and accessible. ‘Regulatory enforcement’ is assessed by three indicators indicating whether regulations are enforced effectively, without improper influence and unreasonable delay.

\(^{10}\) The reason for using data representing the situation of Egyptian economy in 2010 is that these are the latest scores before the 25\(^{th}\) January 2011 revolution and because this also approximates the time (December 2010) when interviewing was completed in Egyptian SMEs.
SMEs and those different levels of institutional development are key contextual features. The next section describes in further detail differences between UK and Egyptian institutions, including their cognitive-cultural aspects, and how their anticipated relevance for SME internationalisation and networking.

**Contextual differences, SME internationalisation and networking**

As mentioned before, Scott’s (1995; 2001) institutional pillars could be grouped broadly speaking into two main categories which have formal and informal institutional pillars. Where the former refers to the regulatory dimension and the latter refers to normative and cognitive-cultural dimensions.

**Cognitive-cultural informal institutions**

These aspects of institutions consist of the cultural and normative values that shape entrepreneurs' behaviour, and establish understandings as to what constitutes fair and acceptable business practice.

SMEs and entrepreneurs usually rely on networks and contacts to compensate for the scarcity of resources and limited experience in order to survive and grow inside and outside their home country. These relationships could be purely of a business nature such as those with suppliers, customers, and agents and supporting agencies; or they could be social relationships such as those relationships with family, friends and colleagues. These relationships are highly likely to be informed by cognitive understandings and cultural values. Although cognitive-cultural similarities might exist at the national level, such as among so-called developed Anglo-Saxon countries, differences between groups of countries may be expected to shape networking behaviour in addition to variations due to the unique
background and idiosyncrasies of each individual entrepreneur (Birley, Cromie and Myers, 1991; Dodd and Patra, 2002).

Over the last decades, Hofstede’s (1983; 1991; 2001) five cultural dimensions have been widely used to explain variations in national cultures. He suggests that each nation or country exhibit at least some different cultural and social characteristics. These cultural dimensions are power distance, uncertainly avoidance, masculinity, Long term orientation and individualism.

**Individualistic versus collectivist cultures**

Individualistic societies are loosely tied to groups of individuals, whereby "I" is emphasised and dependence on groups of people is not common. On the other hand, collectivist societies are those that typically have tightly or closely linked groups of people (in-group). Also, being part of this group offers safety and is usually characterised by strong loyalty and trust. Each member of this tightly-knit web of relationships is expected to look after the interest of the whole group rather than his or her own interest. The UK Scored 89 on this dimension, ranking it along with the United States, one of the most individualistic cultures Hofstede (2001) 11 On the other hand, Egypt scored 25 which indicate that it is a collectivist culture.

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Egyptian culture has for decades focused on the importance of having close and strong relationships with members of family, friends, acquaintances and members of a particular group or club. Establishing personal long term relationship with key strategic individuals and others who might occupy a senior position in the government (and/or have good connections with gatekeepers in crucial organisations) is considered one of the most important means of doing business. Nurturing and maintaining strong close relationships with members of one’s social network is a key characteristic of a collectivist relationship based culture (Hofstede, 2001).

Hence, Egyptian entrepreneurs are assumed to have a stronger tendency towards maintaining long term relationships over maximizing short term profits. The entrepreneurs’ network is more likely to be composed of strong social ties with family members, friends and/or members of a particular group. Alexandria, the second biggest city in Egypt, is well known for its closely knit community, especially between businessmen from the high income class. In this closely knit community everyone knows everyone else and the exchange of tacit and strategic information is common. For example, non-members of the Alexandria Rotary Club are greatly disadvantaged and they do not enjoy the same privileges as members of the club which is mainly composed of high class well educated business men. Other parts of Egypt, Cairo for instance, are characterised by larger and less integrated communities. However, entrepreneurs tend to form ties with well-connected individuals who either know or have a direct relationship with individuals in senior/strategic positions in government, public sector companies and/or key gatekeepers in different organisations. Broadly speaking, Egyptian entrepreneurs rely on strong trust-based relationships they have with family members,

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12 Key membership advantages – such as helping the company to grow and to obtain necessary licences and registration quicker than its counterparts – was emphasized by three entrepreneurs from my Egyptian sample. Moreover, the closure effect was reported by another Egyptian entrepreneur interviewee.
kinship, colleagues and acquaintances in order to obtain support and access to key information and resources that are crucial to business survival and growth. In Egypt the term ‘wasta’ refers to finding someone in a high position to get things done faster and even to obtain approvals and facilitate the processing of necessary documentation (Hutchings and Weir, 2006).

Given the collectivist nature of the Egyptian culture, it expected that entrepreneur networks will be interconnected where alters in an ego’s network know one another. Friends of friends know one another; this is typical characteristic of closed (dense) networks. These strongly interconnected dense networks have been found to have a positive impact on SME growth (Hansen, 1995). The type of information accessed and exchanged through these network ties is likely to be tacit in nature and is expected to be transferred quickly between members of a given network. These relationships take a long time to develop and are characterised by high levels of trust and cohesion (Naphabiet and Ghoshal, 1998; Coleman 1988).

This is similar to the findings of Dodd and Patra (2002) who found that Greek entrepreneurs (Greece is considered a collectivist culture) tend to invest a lot of time nurturing close and strong webs of relationships in their networks which makes it difficult to find enough time and resources to build new ties. Moreover, they argue that entrepreneurs who are not members of these close-knit networks are disadvantaged by not being able to gain access to important support and information. This is closely linked with Coleman’s (1998) closure phenomena, whereby exclusion is a key disadvantage for people who are not connected to such a closed network (Han, 2006).
Egypt is highly corrupt and suffers from a weak institutional framework, which makes it difficult for Egyptian entrepreneurs to survive. One way to compensate for institutional voids is to rely on bridging ties or brokers (Burt 1992; Estrin, Bhaumik and Peng, 2008). These are usually weak business ties that serve as a bridge for the company to gain access to crucial resources such as key governmental support.

By contrast, the UK is considered a highly individualistic culture whereby people tend to be more idiosyncratic and value their privacy over social relationships. In other words, being a member of an "in-group" is not as important as with the case of collectivist cultures (Hofstede, 1991; 2001). It is a norm of British culture that each person should contribute in a unique and individual way to the society.

Since the UK has a strong and mature institutional framework (Bruton et al, 2005), British entrepreneurs are expected to focus more on weak contractual ties to gain access to resources and information and to protect against opportunistic behaviour and risks. Transaction related aspects are made explicit in formal contracts and documents. Relationships with different clients, suppliers and so forth are mainly business relationships, whereby personal and work related aspects do not overlap as it is the case in a collectivist culture (Dodd and Patra, 2002). Also entrepreneurs tend to be more competitive and individual success is their primary goal in life. Hence, membership of a certain group or network is not their primary aspiration but rather the short-term profit and growth of their companies (Hofstede, 2001; 1991).
The entrepreneurs’ network is more likely to be a loosely knit network composed mainly of weak short term business ties. Individualistic societies tend to place lesser value on maintaining relationships compared to collectivist cultures. This might be loosely linked to the usefulness cycle or utility life cycle concept, whereby once a relationship has fulfilled the purpose for which it was initially established, the relationship ceases to exist (Prashantham and Dhanaraj, 2010).

Furthermore, it is less problematic for British entrepreneurs to choose their partners or relationships as there are comparatively fewer institutional voids than in Egypt. They are more likely to choose the tie that will offer the best benefit for them. On the contrary in collectivist cultures, favours and social aspects of relationship tend to be a priority over economic benefits. Finally, British entrepreneurs are expected to have more time to nurture and establish new ties as their networks are mainly composed of weak business ties. Therefore, are expected to have more sparse but large networks compared to collectivist cultures.

Power distance

High power distance cultures are ones that tend to acknowledge hierarchy and in which members of the society accept that it is appropriate for some individuals to occupy higher status or privileged positions while others do not. In other words, they are more understanding and tolerant towards inequality within society (Hofstede, 1991; 2001).

In high power distant countries entrepreneurs might perceive that opportunities and support are available only to certain people. In Asia and the Middle East entrepreneurship is considered something that only the elite of the society undertake, especially owners of big
firms. This makes average entrepreneurs (leaders of small firms) more reluctant to seize new opportunities as they emerge either domestically or internationally (Mitchell, Smith, Seawright, and Morse, 2000; Dodd and Patra, 2002). By contrast, low power distant cultures tend to de-emphasize status and other hierarchical differences between people, and strong preference is given to minimizing inequalities in the society.

Egypt had a score of 70 which makes it a relatively high power distant country (Hofstede, 2001). This is evident in the way entrepreneurs do business and how they approach opportunities, conflicts and problems as they arise in the domestic environment. They tend to think in terms of "who do I know or do any of my friends and/or family know someone who could help me" rather than "what are the formal guidelines I should follow" (Dodd and Patra, 2002). Egyptian entrepreneurs tend to spend more time socialising and nurturing key strong relationships which limits their ability to have large-sized networks. On the other hand, they might need over time to form several weak brokerage ties in order to obtain access to other closely connected networks to which they are not linked to so as to gain access to support, information and other resources not available in their closed networks (Burt, 1998; Han, 2006; Dodd and Patra, 2002).

By contrast, the UK scored 35 which makes it a low-power distant country, where inequality in the society is minimized and hierarchy is so not dominant (Hofstede, 2001). This suggests that British entrepreneurs are less likely to form relationships with partners who are well
connected or occupy a prominent position in the society. In other words, it does not matter which position their partners occupy; what matters is the business at hand.¹³

**Uncertainty Avoidance**

Uncertainty avoidance has to do with the extent to which members of a particular society are risk takers or risk averse in terms of dealing with the uncertain future. Some people feel at ease with uncertainty and ambiguity. People in countries typified by a high level of uncertainty avoidance tend to avoid change and innovation and prefer to be guided by clear rules and guidelines; although these rules may not necessarily be fully enacted (Hofstede, 1991; 2001)

Egypt scored 80 which indicate that Egyptians tend to be risk averse individuals and prefer to avoid ambiguity (Hofstede, 2001). Egypt suffers from continuous change in its laws and regulations as well high level of corruption. This is a strong indication of a weak institutional framework. To compensate for this, Egyptian entrepreneurs are more likely prefer to establish strong long term relationships – characterised by a high degree of trust – with alters in their network. These alters are more likely to have had a history of positive interaction with entrepreneurs, which makes it easier for the entrepreneur to assess whom to get in touch with when a particular problem arises or an opportunity or favour is warranted (Dodd and Patra, 2002).

¹³ This point was mentioned in the second pilot interview, which was in a British oil and gas company.
Given the personalised nature of these ties the entrepreneur will find it easier to seek resources, exchange favours and seek tacit and sensitive information than is the case with weak ties. However, in order to keep these relationships enacted and maintained, the entrepreneur is more likely to spend more time nurturing these relationships than with weaker ties. Moreover, they tend to become more rigid in terms of changing their existing social networks (Dodd and Patra, 2002).

Furthermore, most Egyptians are known to be risk averse by nature and tend to prefer to deal with the familiar and to maintain the status quo. Egyptian culture is a fatalistic one (Elbanna and Child, 2007). Entrepreneurs would prefer to choose opportunities that involve low-medium risk and to operate in similar environments. 14 Hence, Egyptian SMEs are expected to internationalise to nearby markets or to ones with which there is a low psychic distance (such as other Middle Eastern countries). Similar environments or countries with a low-psychic distance have some commonalities in consumer tastes, language, laws and so forth. In addition, Egyptian SMEs are expected to depend on direct or indirect exporting rather than having overseas agents and/or wholly owned subsidiaries. This is attributed to their preference to keep risk to a minimum. Alternatively, they may resort to personal contact(s) or relationship with Egyptian immigrants in overseas markets as an alternative way to enter new markets.

By contrast, the UK scored 35 which is a low uncertainty avoidance score. This implies that British entrepreneurs tend to be risk takers and more tolerant of uncertainty and ambiguity (Hofstede, 2001). Accordingly, one would expect that they tend to be more innovative and

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14 This is a general tendency and there are exceptions to it. Some Egyptian entrepreneurs are opportunistic and risk takers.
accommodating to change. They are willing to take on board risky opportunities when it comes to internationalising into overseas markets. They are more likely to internationalise to a diverse number of markets and in markets where psychic distance is high.

Moreover, the UK institutional framework is more mature and stronger than that of Egypt and this provides more formalized ways of avoiding uncertainties and opportunistic behaviour on part of their partners, such as soundly-based contracts. This is enhanced by the individualistic nature of British entrepreneurs whereby they are more likely to rely more on weak business ties of shorter duration (Dodd and Patra, 2002). In other words, the utility life cycle of some of the ties is short (Prathanham and Dhanaraj, 2010). For example, if an entrepreneur has a relationship with a manager of a MNC and both companies are working on a medium term project, once this project is finished and there are no further opportunities coming out from this relationship, the tie with the MNC manager is more likely to decay as its usefulness has finished. On the contrary, if an Egyptian entrepreneur has a close personal relationship with the project manager, the relationship is more likely to continue even after the project finishes.

Masculinity

This dimension has to do with drive to excel at work and being success driven. Being more of a feminine culture, means that there is a stronger need for support and compassion and enjoyment from being a member of the overall group (Hofstede, 2001).

The UK had a score of 66 which makes it a relatively masculine culture. British entrepreneurs are expected to have a strong drive for success (Hofstede, 2001). Hence striving to win or be highly successful is a key characteristic of British entrepreneurs. This is closely linked to the individualistic nature of British culture and its risk taking propensity, whereby entrepreneurs
are more likely to focus more on business and on creating business relationships that yield the best benefit(s) and provide access to key resources than are their Egyptian counterparts.

Egypt has a score of 45 which makes it a relatively feminine culture (Hofstede, 2001). In Hofstede’s terms it is a culture that values support, solidarity and relationship quality. Moreover, conflicts are solved via reaching compromising solutions and through diplomatic efforts rather than winning over. This implies that Egyptian entrepreneurs are more likely to value the social aspect of their relationships and seek supportive ties rather than merely business relationships. This is closely coupled with the collectivist nature of Egyptian culture and its risk avoidance tendency, whereby trustworthy, strong personal relationships become the key characteristics of Egyptian entrepreneurs’ networks.

**Long-term orientation**

This dimension has to do with certain cultures being more focused on long-term goals and the future rather than short term goals. Also, preference is given to conventional traditions and history (Hofstede, 2001). The UK scored 25 on long-term orientation, indicating that it has a short term oriented culture focusing on short to medium term goals. However, Hofstede did not provide any scores on this dimension for Egypt or any other Arab country.

Egyptian entrepreneurs are likely to be fatalistic and believe that the future is based on one’s destiny (Elbanna and Child, 2007; Trompenaars, 1973). This is reflected in the way they view and seize opportunities as they arise. Egyptian entrepreneurs are more likely to be slow in deciding the future course of action. This is more likely to result in a gradual internationalisation into new overseas markets.
However, one would expect British entrepreneurs tend to focus on achieving short term goals and to be more proactive in creating opportunities (Hofstede, 2001). They are more task and short term oriented than Egyptian entrepreneurs. The sense of achievement and being the best is a key cultural driver. This is more likely result in leapfrogging or accelerated internationalisation of the firm.

Hofstede’s five cultural dimensions are interrelated and influence one another. The scores ascribed to Egypt and UK is summarised in Figure 2.4.

To summarize: in view of their national cognitive-cultural characteristics, Egyptian entrepreneurs are more likely than those in the UK to have a dense network composed of strong and close long term ties. It is expected that they draw heavily on friends, family, kinship, colleagues and acquaintances to gain access to knowledge and resources and to solve problems that they encounter as a result of the institutional voids inherent in the Egyptian
institutions. If they cannot find the solution or what they are looking for in their tightly knit network, they would rely on brokers or referrals (usually through friends or family members) to form weak ties with individuals in key positions and/or who are key gatekeepers to access the needed support and resources. Maintaining and nursing these strong relationships is expected to constrain the entrepreneur from forming new ties (Dodd and Patra, 2007; Burt, 1998; Coviello, 2006).

Egyptian entrepreneurs are also likely to be risk averse and fatalistic. They would prefer to take gradual reactive steps when it comes to dealing with risks associated with internationalisation. They are more likely to expand into similar markets which are characterised by low psychic distance and who are culturally similar to Egypt. Moreover, they are expected to opt for the least risky mode of operation in overseas markets and/or to depend on their strong network ties to enter foreign markets. Some may draw upon the immigrant population in overseas markets that are largely dissimilar to the Egyptian context.

One key disadvantage of Egyptian entrepreneurial networks is that they are composed largely of people who share same attitudes, information sources and ideas. This creates redundancy in their main information sources and might result in the closure effect highlighted by Coleman (1988). They are less likely to have access to new sources of information and opportunities (Burt, 1992).

By contrast, UK entrepreneurs are more likely to have sparse, non-cohesive networks composed mainly of weak business ties. They will draw heavily on contracts and other means of hedging themselves against the risks associated with internationalisation. They are more
likely to be less constrained than their Egyptian counterparts and have more time to build and establish new ties and have access to diverse sources of information and resources.

They are more proactive and risk taking, responding quickly to opportunities as they arise in overseas markets. This makes the overall entrepreneurial network less rigid and open to new sources of information, either through proactively creating new weak ties or through relying on brokers to fill in the structural holes inherent in their network (Burt, 1992).

**Normative informal institutions**

Normative values and shared patterns of behaviour within a particular context influence and shape the behaviour of organisations and individuals (Scott, 1995a; March, 1981). SMEs embedded in a particular context are importantly shaped by normative institutions in the form of professional or governmental institutions and financial institutions. These institutions can help promote entrepreneurship or hinder it. This is closely related to the way a particular society values entrepreneurship.

According to the Global Entrepreneurship Monitor report (2010), the total entrepreneurial activity (TEA) rate in Egypt was 7.01%. However, the TEA rate in the UK was 12.7%. This indicates that there is a higher percentage of entrepreneurship in the UK than there is in Egypt. Nevertheless, Egyptians strongly believe that they can succeed and run a small entrepreneurial business. This is an inherent norm among recent graduates or young adults who think it is better to start their own business and be their own boss rather than working for

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15 Total entrepreneurship activity (TEA) is the "percentage of total adult population (aged between 18-64 years) who have either recently started a business, have been running a business (for three and half years) or planning to run a business” (GEM Egypt Report, 2010:6).
someone who might control him or her.¹⁶ Young adults strongly believe that they will succeed and their business continue to grow, but they also think that the society and particularly professional bodies - such as local chambers of commerce - will not support them and might even impose restrictions on them. Many Egyptians want to be entrepreneurs but the institutional environment does not offer enough normative support to foster entrepreneurship.

In the UK, entrepreneurs are highly regarded and many young adults have the drive and determination to try new innovative ideas and are proactive in creating opportunities (Dodd and Patra, 2002).

The financial support available to SMEs – whether from public or private sources – varies in both countries. According to the GEM score for the degree of financial support offered to SMEs, Egypt was ranked 27th and UK was ranked the 34th, which places both countries in the middle range of the 59 countries examined in the GEM (2010) report. It suggests that the financial support offered to SMEs is relatively inadequate in both countries, although venture capital and private equity companies are not as common in Egypt as they are in the UK (GEM Egypt report, 2010).

In general, overall social norms and values might hinder or foster entrepreneurship (GEM Egypt report, 2010). Egypt occupied 51st position (alongside Turkey which had the lowest score) making it one of the most constraining environments for entrepreneurship. By contrast

¹⁶ Based on interviews conducted in 2006 with some recent graduates from the Faculty of Commerce English section, Cairo university – the researcher’s former employer – as a part of a project on young adults’ career prospects.
the UK occupied 19th position which is a relatively high score, indicating an encouraging environment for entrepreneurship. This type of informal institutional context is difficult to investigate and to separate from cultural-cognitive dimensions. For the sake of simplicity in this research I will use informal institutions in their broader sense and focus on how entrepreneurs perceive the institutional environment as favourable or unfavourable. It is argued that the abundance of institutional voids and the ways SME decision makers cope with them become institutionalised over time as part of the culture and norms of the society.

**Formal institutions**

Formal institutions refer primarily to government policies, laws and property rights that have an impact on SME behaviour. Government policies and provision to support SMEs could also be regarded as part of the formal institutional field (GEM Egypt report, 2010).

The efficiency of government support programmes to help and offer support to SMEs contrasts between the two countries. According to the GEM (2010) report Egypt occupied 41st position in terms of the efficiency of the government support programmes which indicates a rather poor effectiveness of these support programmes. On the other hand, the UK occupied 20th position which is an indication of relatively strong governmental support programmes.

In the UK over the last decade there has been a growing interest in supporting SME development and growth. Part of the government initiative is to help and support British SMEs to export and internationalise through the UK Trade and Investment teams [UKTI] and their close links with the network of local chambers of commerce. The UKTI organization is that part of British government focusing on offering help and support to UK based SMEs to internationalise in overseas markets. It has a network of international trade advisors who
work closely with local chambers of commerce across the UK and also have links with overseas embassies/consulates and high commissions. Several programmes and opportunities are available to exporting SMEs and some are targeted to experienced exporters. Examples of key programmes and support offered to the UK SMEs are summarized in Table 2.8.

**Table 2.8: Examples of government programmes and support offered to UK SMEs**

<table>
<thead>
<tr>
<th>Services /Programmes</th>
<th>Details /comments</th>
<th>Targeted at</th>
</tr>
</thead>
<tbody>
<tr>
<td>UKTI general advice from international trade advisors</td>
<td>Help SMEs to have access to information, advice from UK based staff and in overseas consulates, help in identifying business leads in overseas markets, sources of funding available for SMEs to participate in trade fairs and other financial assistance programmes.</td>
<td>Mainly new exporters but some advice is also given to established and experienced exporters.</td>
</tr>
<tr>
<td>Passport to Export programme</td>
<td>A yearly programme to help companies to create their unique export strategy; cultural awareness and documentation. It also offers advice on assessing the demand for a company’s product in overseas markets</td>
<td>New exporters</td>
</tr>
<tr>
<td>Gateway to global growth</td>
<td>A kind of strategic review of the firm’s export strategy and performance. It offers more advanced advice on enhancing overseas sales growth, training and information about different modes of operation and what each of them entails.</td>
<td>Experienced exporters</td>
</tr>
<tr>
<td>Overseas market introduction scheme</td>
<td>A service that offers help to exporters to get in touch with overseas consulates and embassies; market knowledge and links with key potential buyers; and financial support that helps SMEs to participate in overseas trade missions and specialised fairs.</td>
<td>Both new and experienced exporters</td>
</tr>
</tbody>
</table>

Source: UKTI and West Midlands Chamber of Commerce brochures and website (2010)

Table 2.8 shows that a diverse range of services and support programmes is offered to SMEs and points to a strong regulatory framework that helps and fosters entrepreneurship.

During the last decade (up to the Egyptian revolution of early 2011), the Egyptian government has been increasingly interested in promoting SMEs. Law (no.141/2004) was introduced and focused on developing small enterprises. It states that the Social Fund for Development (SFD) is a primary source of governmental support for SMEs. The SFD has the
legal responsibility to network with local chambers of commerce to offer support for SMEs across Egypt. The SFD offers some help to SMEs in general in terms of giving advice on successful projects; offering assistance in preparing feasibility studies; financial support; and referrals of its beneficiaries to key governmental banks. These banks offer the SFD’s beneficiaries subsidized loans.

Moreover, SMEs which are eligible for financial support receive a five year tax exemption and the right to become partially sponsored to participate in the trade fairs organised by the SFD. Exporting SMEs get some support in terms of partial sponsorship towards the cost of participating in local trade fairs to which local and overseas clients are invited. There is also partial sponsorship towards the cost of participation in overseas Egyptian product fairs; these are non-specialist fairs that display a broad range of Egyptian products in a particular overseas market.

Other governmental supporting agencies are closely linked to the Ministry of Investment namely Expo Link and IMC. These agencies are different from the SFD in that they are sponsored by overseas sources of aid such as Japanese or European aid, and usually they have both local and overseas management. They target some sectors and industries, and they offer financial assistance towards the cost of international certifications, overseas trade fairs, and so forth. Thus Egyptian governmental policies and regulatory environment offer some help to SMEs. They are still inefficient but have some potential (GEM Egypt Report, 2010).

To highlight key differences between the UK and Egyptian institutional frameworks, some of the GEM entrepreneurial framework conditions (EFC) are presented in Table 2.9.
Table 2.9: GEM entrepreneurial framework conditions (EFC)

<table>
<thead>
<tr>
<th>Entrepreneurial support</th>
<th>UK</th>
<th>Egypt</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of financial support</td>
<td>Ranked 34th</td>
<td>Ranked 27th</td>
<td>Both are within the middle range of 59 countries examined in the GEM (2010) report, suggesting that the financial support offered to SMEs is relatively inadequate</td>
</tr>
<tr>
<td>Effectiveness of government entrepreneurship programmes</td>
<td>Occupied the 20th position which is an indication of a relatively effective governmental support programme</td>
<td>Occupied 41st position in which is a poor indicator of the efficiency of these government support programmes.</td>
<td>Significant difference between Egypt and the UK.</td>
</tr>
<tr>
<td>R&amp;D transfer*</td>
<td>Occupies 18th position which is an indication of ease of R&amp;D transfer and collaboration between national research centres and SMEs</td>
<td>Occupies 50th position which indicates poor collaboration between national research centres and SMEs</td>
<td>Significant difference</td>
</tr>
<tr>
<td>Social and Cultural Norms</td>
<td>Occupies 19th position which is a relatively high score, implying an encouraging environment for entrepreneurship.</td>
<td>Occupies 51th position alongside Turkey (which had the lowest score) indicating the most unfavourable environments for entrepreneurship</td>
<td>Significant differences</td>
</tr>
</tbody>
</table>

Source: Adapted from GEM Egypt report, 2010

* R & D transfer measures "the extent to which national institutions and research centres transfer easily R&D to SMEs and help them create new opportunities" (GEM Egypt Report, 2010: 43). Although this measure focuses on new and growing SMEs it gives a general indication of the relative support offered by national research centres and universities.

Based on the above discussion it is evident that there are significant differences between the UK and Egyptian institutional context. Both countries have a different institutional logic that is likely to have a strong impact on the SME’s behaviour in terms of both internationalisation and networking.

The next section discusses co-evolution which is the guiding framework for this research.
2.4 The co-evolutionary perspective

The idea of co-evolution can be traced back to the work of Charles Darwin (1859). Darwin argued that members of a particular species face pressures from their environment which challenge their existence, and that only those species possessing characteristics best fitting that environment survive. Through the process of natural selection, only those species posing the best survival genes are likely to be retained and others will cease to exist. These survival genes are passed on to the next generations which becomes part of their genetic inheritance that is hard to change or adapt to new environmental pressures, creating what Darwin refers to as inertia. The whole population of species evolves as new species emerge creating a variation in the features of these species Darwinism stresses that members of a particular species are passive and have no influence over the host environment (Darwin, 1859; Lewin and Volberda, 1999; Child, Tse and Rodrigues, 2013).

Other biologists such as Baldwin (1896) advanced Darwin's evolutionary theory, arguing that species learn through deliberately adjusting to the changes in the environment as they emerge and through finding new means of adaptation that are not necessary inherited from previous generations. This adds intentionality to the classic evolutionary theory and challenges the idea that organisms are passive in adapting to changes in environment. Instead, it addresses the possibility of intentional learning through finding ways to fit and adjust to environment.

This highlights two contrasting views regarding the relation between organisms and their environments. The first proposes that the environment is the key determinant of which organisms are likely to survive through the process of natural selection, whereby organisms are passive and have no role in responding to external pressures imposed on them. The
second view proposes that organisms respond to the external pressures imposed on them, learn for their past experiences and find new ways to adapt to environment (Child et al., 2013; Rodrigues and Child, 2008).

This debate among biologists is also present among management scholars who use evolutionary theory to explain how forms of organisations change in accord with changes in the external environment. Organisation selection-adaptation studies, evolutionary economics, institutional theory and population ecology adopt this perspective when attempting to explain how firms, industries and societies response to changes in different environments be these institutional or international environments (Volberda and Lewin, 2003). Scholars from these areas focus on different levels of analysis ranging from macro, mesco and micro levels, pertaining respectively to societies, industries, institutional contexts and individual firms.

Co-evolution of firms and external environments

Adherents of Darwinism believe in the survival of the fittest. They assume that the environment is the key determinant of the firm’s survival and that firms play a passive role in response to external pressures. Furthermore, others argue that firms belonging to a particular sector, industry or institutional context face pressures to which they have to conform otherwise they will cease to exist.

These scholars ignore the role of decision maker’s strategic choice in finding the best way(s) to adapt to the environment and overlook the possibility of learning from past experiences and findings new ways to adapt to future challenges or pressures as they emerge. This creates a form of "adaptive learning" whereby firms learn how to adapt and find ways to fit their
organisations to the changes in external environment, through leveraging their strengths to make use of opportunities as they are emerge from environment (Child et al., 2013: 6). Firms may also find ways to overcome threats arising from the environment.

More recently, scholars such as Child (1997), Lewin and Volberda (1999) and Volberda and Lewin (2003) view the Darwinian and strategic choice perspectives as complementary rather than competing explanations of how firms co-evolve with their environment. The former focuses more on the macro level (on whole population) addressing the pressures imposed by the external environment (such as sector or country) on members of a particular group. The latter is mainly concerned with the firm (micro) level at which adaptation to external stimuli is a strategic choice made by individual decision makers. Child (1997) argues that strategic choice involves both reactive and proactive actions on the part of a firm's decision makers as to how to overcome constrains imposed on them by the environment.

This suggests that both firms and their environments are interrelated and co-evolve together (Murmann, 2010; Lewin and Volberda, 1999). Firms are influenced by pressures from external environment that threaten their firm’s survival, while at the same time decision makers reactively or proactively seek to finds ways to adapt to the environments and in some cases they shape the external environment to maximise their benefits. Child and Rodrigues (2011) have argued that how decision-makers in firms can cope with complexities in their environments depends on their power, with small firms having as a result of their limited power to rely on outside support ("mediation"). Hence the importance to them of networking.
Co-evolution could take several modes, such as a naïve reactive and intentional adaptation mode. The “naïve” or purely reactive mode, refers to the case where the environment is the key determinant of which of firms survive (Lewin and Volberoda, 2003:2116; Child et al., 2013). This mode is similar to the prefect competition concept; where it is mainly the competitive forces that decide which firms would survive and which ones will cease to exist (Volberda and Lewin, 2003; Baum and Singh, 1994). The key premise of this mode is that managers do not intentionally adapt or change their companies to the changes imposed on them from external environment. This presupposes blindness on part of the managers to any learning and opportunity to differentiate their firms from others (Volberda and Lewin, 2003).

Another mode involves intentional adaptation on part of the firm’s managers, who focus on adapting to the changes in external environment as these emerge. This perspective emphasises the role of managerial intentionality, where managers of firms follow a conscious cycle of "variation, selection and retention" (Volberda and Lewin, 2003:2118; Campbell, 1994). This means that managers intentionally tend to differentiate themselves from their competitors through continuously adapting, adjusting their firms to changes as they emerge in their external environment. They also tend to learn from past experiences and these experiences tend to shape the way they behave in the future. This mode of co-evolution could, however, still involve a largely reactive choice on the part of managers in response to external stimuli.

Child et al. (2013) highlight a third co-evolutionary mode which emphasises the proactive adaptation-manipulation of the environment by the decision-maker. This environmental manipulation involves anticipation of future changes in the environment and choosing the
best approach to adapt and even change the environment to maximise the firm’s benefits and overcome threats and risks before the emerge.

Co-evolution of the firm and the environment could be explained by the firm’s response to external changes through the processes of exploitation and exploration. Exploration involves searching for new opportunities offered by the creation of new knowledge through innovation, whereas exploitation refers to the use of existing knowledge to enhance the existing processes, products and capabilities (March, 1991). Levinthal and March (1993) argue that to survive companies they need adopt a balance of exploration and exploitation, where the former helps the company to find new opportunities that are vital for their future growth and the latter constructively utilizes existing knowledge to be able to survive at the present time.

This means that companies need to avoid either being blinkered by past experiences and processes arising from structural inertia or focusing primary on findings new opportunities and dismissing the importance of learning from past experiences (Volberda and Lewin, 2003). Hence, the need for a balance exploration and exploitation approach whereby decision makers take into account previous experiences and reproduce them in future courses of actions. Also, decision makers should continually engage in finding new ways and opportunities to ensure the future growth and survival of their firms (Volberda and Lewin, 2003).
It is important to note that co-evolution is different from the organisation adaption-selection theory in that it does not just imply that firms adapt to the environment so that it is the environment that shapes the firm behaviour, but rather the firm could also shape and change the environment through leveraging its capabilities and resources to its advantage. For example, Rodrigues and Child (2003) showed that firms can influence the institutional context in this way.

At the heart of the co-evolution concept is the idea that two phenomena interact and influence each other’s evolution and development. This interdependency and the interaction do not have to be proportional (Lewin and Volberda, 1999; Murmann, 2003; Pajunen and Maunula, 2008). Thus, in the main, the way the environmental changes influences the firm’s evolution is more significant than the firm’s impact on environmental change. According to Murmann (2003) and Pajunen and Maunula (2008:249), the primary purpose of the co-evolutionary perspective is to spot the outcomes of the "co-evolutionary interaction between processes" (Volberda and Lewin, 2003). In other words, as Lewin, Long and Carroll (1999) stated, "organizations and their external environments and populations are interrelated outcomes of the firms' managerial actions, institutional influences and extra-institutional changes (such as technological, socio-political and other environmental phenomena" (p. 535). The co-evolution perspective tends to focus on how the business firms and their environments evolve in relation to one another.
Co-evolution and SMEs internationalisation and networking behaviours

There is only a limited number of studies applying the co-evolutionary perspective to the evolution of firms and their environment and some are mainly conceptual in nature (e.g. Lewin and Volberda, 1999; Zettinig and Benson-Rea, 2008; Child and Rodrigues, 2011). A common theme among the few empirical studies is the focus on a single case study or industry. For example, Rodrigues and Child (2008) focused on a large Brazilian company and studied how it co-evolved with its political and institutional environment over a long period of time.

There appear to be just as few studies using the co-evolutionary perspective to explain SME internationalisation. Exceptions such as Pajunen and Maunula (2008) used a co-evolutionary perspective to study the evolution of new ventures with their industry and external environment. Jones and Coviello (2005) offered a conceptual model integrating SME co-evolution with external environment over time based on a set of critical events that SMEs respond to through leveraging their resources and capabilities. In the study of SME internationalisation, the co-evolution perspective offers a "balanced" way to consider the combined outcomes of environmental selection pressures and how managers respond to such pressures through relying on network social capital or changing their internationalisation template (Pajunen and Maunula, 2008:248).

It is a framework that crosses different levels of analysis and encompasses the use of different theories with the aim of understanding how firms co-evolve and adapt to the changes in the environment in which it operates over time; whether these changes be at the industry level, or institutional or country level (Lewin and Volberda, 1999; Lewin et al., 1999; Rodrigues and Child, 2008). It serves an integrative framework that takes into account both internal
processes of the firm and the key drivers/forces inherent in its environment, focusing on the way they interact over time.

The main premise of the present research is that SMEs have limited resources and capabilities and tend to rely on network social capital to access these resources that are crucial for its growth and survival. SMEs find it difficult to cope with constraints and challenges imposed on them by the external environment. These constraints and challenges could be inherent in the domestic institutional context and SMEs need to find ways to adapt to these pressures through leveraging their resources and capabilities in a way that accommodates to such challenges and at the same time conforms to the regulatory and institutional pressures imposed on them. One of the key platforms through which SMEs access resources is their network social capital. This is embodied in the relationships that serving as the main conduit through which SMEs can access the resources and knowledge they require, but lack.

One way through which SMEs can grow and ensure survival is to diversify to overseas markets, which brings with it internationalisation-related costs and risks. SMEs need to find ways to minimise these risks through leveraging their resources and capabilities. Network social capital can provide one lever available to SMEs seeking to enter new markets and access key resources that are crucial for the firm’s internationalisation. SMEs may also be able to reduce the risks in their international business by changing the foreign locations they currently supply through looking for opportunities to enter new overseas markets.

This suggests that the way through which SMEs adapt and manipulate the external environment is contingent upon two key processes. The first is the internationalisation


process which is concerned mainly with SMEs' international operations through directly operating in overseas markets or dealing with an overseas client in the domestic market. The second process is network development which is concerned with the network relationships that SMEs create or re-activate in order to access resources and support to grow domestically and internationally.

I have already argued that these two processes are inter-related and influence one another at different points in time. The present research develops a new application of the co-evolutionary perspective, whereby firms (SMEs) use and adapt two internal processes to the conditions imposed on them from their external environment. Figure 2.5 illustrates the logic of the co-evolutionary perspective as a guiding framework to explain the study the development of SME internationalisation and networking over time.
Figure 2.5 the co-evolutionary perspective as a framework to study the development of SME internationalisation and networking over time.
While the above framework depicts key linkages between internationalisation, networking and the wider institutional context, the co-evolutionary perspective by definition requires a focus on how these linkages play out over a period of time.

**Summary and Conclusion**

The approach taken in this research is eclectic, in that it draws on four different streams of literature as discussed in this chapter. Based on the review of the International Entrepreneurship [IE] and the SME internationalisation literature, little is known as to what happens after the initial internationalisation attempt. Moreover, there is a limited understanding and explanation as to why an SME follows a particular internationalisation pattern and why this might change over time.

Some of the internationalisation models highlighted in the first section in this chapter suggests that there are two types of SMEs namely, traditional and international new ventures. The former are small firms that focus initially on the domestic market and as their level of experiential learning increases they start to internationalise into similar overseas markets – with low degree of psychic distance – and gradually expand into more distant overseas markets. The latter are born global companies that internationalise into a large number of overseas markets immediately or soon after their inception. These two types of SMEs differ in terms of their internationalisation speed and focus.

Empirically, scholars have attempted to understand the internationalisation process of the firm through focusing on: (1) the number of overseas markets in which the SME operates; (2) the percentage of foreign sales to total sales and/or (3) a composite measure reflecting the degree of internationalisation. However, internationalisation is multidimensional and
focusing on one measure per se or on a composite measure could result in over simplification of the of internationalisation process (Kuivalainen et al, 2012).

Also, there is increasing evidence of the positive role that the social capital offered by attachment to networks plays in facilitating the internationalisation of SMEs. Network social capital serves as a key platform for small firms to access resources and competencies they lack. However, the ways in which SMEs obtain benefits from their network social capital is under researched.

Based on the review of studies that were particularly concerned with the role of networks in facilitating the internationalisation of SMEs, it became evident that these studies focused on:

1. The structural dimension of networks, covering aspects such as the number of contacts in a SME network.
2. General network characteristics such as type of ties, functions offered by different types of relationships, role of weak and strong ties.
3. To a much lesser extent, the quality of relationships, in terms of benefits and costs associated with different types of networks.

In addition, the networking process that an SME might follow and how an SME’s network change over time remains unclear in this literature.

Most IE studies have treated networks either as a dependent or an independent variable, whereby either networks are regarded as the key facilitator of SME internationalisation or networks are shaped by the internationalisation choices of SME decision makers. The possibility that network and internationalisation co-influence one another has not been considered. For example, at one point an SME might decide to enter a certain overseas
market and choose an agent from a list of potential agents to help set up a representation office in this market or an overseas client might come across the company’s website and place an order. These two scenarios could occur simultaneously at a given point in time. Therefore, SME internationalisation and networking behaviours are likely to co-evolve over time. They do not necessarily follow a uniform or linear co-evolutionary pattern but rather they may move in a cyclical pattern whereby the presence of a key contact in a given overseas market could be the primarily reason why SME decides to enter this market and at the same time the SME might decide to enter another market and search for a good contact in that market to help establish its operations.

Previous research has indicated that institutional and cultural contexts significantly influence firm behaviour, because they set the rules of the game and define appropriate and acceptable behaviour. In other words, the institutional context facilitates or constraints the firm’s behaviour. Yet, little is known about how SMEs from different institutional contexts rely on their network attachments to cope with the challenges and opportunities presented by the external environment.

Based on the review of these three streams of literature, it became clear to me that a comprehensive and holistic understanding of the SME internationalisation and networking behaviours over time is warranted. In addition, understanding how an SME responds to changes in external environment and how the SME might influence the environment for its own advantage is crucial.

The co-evolutionary perspective served as an important guiding framework. It allows the researcher to focus on different levels of analysis and integrate different perspectives and
theories. Empirical studies that have used co-evolution are relatively rare. They have focused mainly on understanding how the firm responds to changes in external environment and to a lesser extent on how the firm influences the environment to its advantage. However, to the best of my knowledge using co-evolutionary perspective to explain how two processes within the scope of the firm’s decision-making co-evolve together over time would be novel.

To conclude, this comprehensive review of literature provides a general understanding of the variables and measurements used in this study. Moreover, it helps to identify key gaps in the literature and debates - such as whether to treat network as a dependant or independent variable. However, to the best of my knowledge, the extant literature does not explain the co-evolutionary trajectories of the SME internationalisation and networking behaviours. Also, it offers only a limited understanding of how SMEs respond to changes in external environment (institutional and cultural contexts) and how SME decision-makers might even influence the environment to their advantage.

With the above considerations in mind, I deduced two co-evolutionary frameworks for two types of SMEs namely, traditional SMEs and new ventures. These frameworks, presented in the following chapter, are a priori and generic in nature. I propose that traditional SMEs and new ventures follow different internationalisation and network patterns over time and that the institutional context and external environment are expected to shape SME behaviour over time. These are generic rather than precise models and serve as guiding frameworks for data collection and analysis. Based on empirical findings, I shall aim to formulate a revised and more precise framework that provides a comprehensive understanding of the co-evolutionary trajectories of SMEs over time.
CHAPTER 3
PROPOSED THEORETICAL FRAMEWORK

Introduction

In an attempt to integrate the temporal dimension, behavioural processes and internal resources Jones and Coviello (2005) formulated a general model to explain the internationalisation of the firm. Following a similar logic, this chapter develops a framework for the present study which focuses on two firm-level processes (internationalisation and networking) that co-develop together and are also seen to co-evoolve with the external environment. Two theoretically driven models describing the co-evolution of entrepreneurial firms are developed for this purpose. Each considers co-evolution over three stages of SME internationalisation. The models are *a priori* in nature having been derived from the existing literature reviewed in Chapter 2. These models are in effect consolidated representations of the propositions that guide the present research. The two models are:

1. The new venture co-evolution model (see Figure 3.1 below).
2. The traditional SME co-evolution model (see Figure 3.2 below).
Figure 3.1. New venture co-evolutionary model
Figure 3.2. Traditional SME co-evolutionary model
New venture co-evolutionary model

When founders decide to start their own business, this may be due to a change in their career or a result of business opportunity that arises for them to capitalise on a unique business idea or know-how they possess. This opportunity could be identified through a friend or an ex-colleague who suggests the idea to the entrepreneur and then becomes the co-founder of the NV. This trigger point or trigger event is denoted in Figure 3.1 as T1 and E1, where T1 refers to time one and E1 refers to critical event one. The internationalisation process of an NV is assumed to comprise three main stages; the pre-internationalisation stage [PIS]; the early internationalisation stage [EIS], and the subsequent internationalisation stage [SIS]. The model proposes that entrepreneurs will rely on their social capital differently at each stage.

The pre-internationalisation stage [PIS]

The pre-internationalisation stage of the NV is where the concept or business idea is formed, and the firm is legally established. This is similar to Hite and Hesterly’s (2001) start up stage. The entrepreneur begins operations with the strategic goal of how to ensure firm’s survival and growth. The firm would explore the existing opportunities within local market and any opportunities to grow outside the home market, often at the same time (Winter and Szulanski, 2001; Barkema and Drogendijk, 2007; McGrath, 2001). Empirical studies have showed that NV founders usually have the capability to scan international markets for opportunities and have an international orientation from the start of their business (Ellis, 2010). However, such firms at this pre-internationalisation stage suffer from limited resources (such as lack of market knowledge, limited financial and non-financial resources) and they also suffer from a liability of newness (Harris and Wheeler, 2005; Chetty and Agndal, 2007; Coviello and Murno, 1996; 1997; Knight and Cavusgil, 1996; Rugman and Verbeke, 2007; Ojala, 2009).
Thus the firm will start looking for other ways to secure access to needed resources. This is done through the assessment of the entrepreneur’s initial stock of network social capital.

**Initial network social capital**

The entrepreneur’s initial set of relationships consists of the pre-existing relationships of entrepreneur and that of co-founder, which may enable existing social capital to be redeployed (Prashantham and Dhanaraj, 2010). S/he may resort to reusing or redeploying pre-existing relationship into a new context. For example, a previous client or colleague who used to work in a similar field of business may cooperate with the entrepreneur in the new business. This is referred to as transfer of social capital from one context to another. Finally the entrepreneur may engage in forming new relationships with suppliers, customer and clients and even supporting agencies in order to start the operations. The dichotomy between the entrepreneur’s social capital and that of the firm tends to overlap as the firm becomes operational.

The NV relies on two types of relationships that provide it with crucial resources needed to start the operations and for the establishment of the firm. The first type consists of weak ties, which are often low cost information sources, require less time to develop and provide access to valuable complementary knowledge (Tsai and Ghoshal, 1998). These loosely tied relationships are dominated by business relationships. The second set of relationships is characterized by ties that are deep and strong, in which the actors tend to interact and communicate frequently (such as ties with family and friends). These relationships are often referred to as closed networks (Coleman, 1988; Granovetter, 1983; Harryson et al., 2008).
Strong relationships are resource consuming and costly to maintain and develop, as opposed to weak relationships. They are very important, however, especially in the case of individuals enjoying "high power status" (Han, 2006: 103) who have access to highly embedded (tacit) knowledge vital to the NV. The optimal combination of "productive relationships" would be several weak relationships and few strong relationships (Han, 2006: 104).

Open networks are more important during the early internationalisation stage, where weak relationships offer new opportunities for searching and accessing complementary knowledge and resources. Weak ties play a significant role in speeding up the development time of the NV in the foreign market, while few strong relationships are important to provide access to more complex tacit knowledge (Harryson, Dudkowski and Stern, 2008). For instance, an entrepreneur may be given a reference to a local contact in a particular market through a friend, who is knowledgeable about that market. This is a cheap source of information and does not require much time and effort to maintain. However, if the host country is known to be a very risky business environment, a strong relationship with a local partner or a client may offer the entrepreneur knowledge that is confidential and highly tacit on how to overcome such risks. Therefore, weak relationships offer NVs market knowledge necessary to enter foreign market at relatively low cost, while a few strong relationships are required especially if highly complex and tacit knowledge is essential.

Contextual effects

The NV is embedded within its local context (home country) and this has an impact on the speed of internationalisation. The institutional context tends to shape "the rules of the game" (North, 1990:1) and define rules and regulations that foster and impact the entrepreneurial activities and outcomes. In addition, the culture of home country has an impact on the extent
to which the entrepreneur values relationships when doing business (Kiss and Danis, 2008). For instance, in countries like China relationships are crucial for doing business in contrast to western societies where the business tends to be more important than relationships. That does not necessarily mean that relationships are unimportant, but is does mean that people can do business with each other even after just one meeting. Accordingly, the institutional context and culture of the home market has an impact on the speed and outcomes of internationalisation as well as on the extent to which the entrepreneur relies on different types of relationships.

**Early Internationalisation stage [EIS]**

Oviatt and McDougal (1994) proposed that new ventures usually internationalise directly after their inception or soon afterwards. Empirical studies have normally used six years as a cut-off point such that a company is said to be a NV if it internationalises within the first six years of its operations (Oviatt and McDougall, 1994; Arenius, 2002). The initial or first market entry could be triggered by the presence of a critical event (E2 in Figure 3.1). This critical event could be based on a rational decision of the entrepreneur to internationalise, having engaged in an active search and exploration of new markets (Barkema and Drogendijk, 2007). Or it could result from a serendipitous event such as an unexpected opportunity arising in a particular market, whereby one of the company’s client moves into a new foreign market and the company follows him or whereby the entrepreneur meets someone at a business dinner or at a social club who proposes a business opportunity (Crick and Spence, 2005).

Accordingly, SME entrepreneurs will assess their portfolio of relationships and the growth strategy of their firm (Han, 2006). They will then engage in developing new relationships (within the local context or in foreign markets) that are needed to provide the firm with the
various resources and information needed for its growth or they may redeploy an existing relationship from one market to other similar markets. For instance, if a sales agent in an Asian country proves to be a successful partner, the firm may ask him to be responsible for assisting entry into a nearby country that has similar market conditions. In this case, the entrepreneur would focus on the further development of existing relationships which retain the potential to increase the firms’ growth and survival in their respective positions (markets).

Over time the initial network social capital will change and evolve, with the weak ties becoming stronger and well established because of repeated interaction (Adler and Kwon, 2002). Furthermore, the more the firm engages in international operations and expands into new markets the more it develops business ties. This would create for the NV an evolving network social capital. It may be composed of multiplex relationships composed of both business and social ties (Larson and Starr, 1993).

The subsequent Internationalisation Stage [SIS]

The subsequent internationalisation stage involves further internationalisation of the firm and is usually characterised by extensive international involvement and perhaps the use of more advanced modes of entry, such as joint ventures. This is usually an intentional decision taken by SME decision makers to aggressively internationalise. This could be a proactive decision or as a result of an external stimulus (i.e. reactive decision).

With the passage of time, if an opportunity or threat (critical event E3 in Figure 3.1) emerges from the extra-institutional context of host countries, the NV is forced to consider expanding into more distant markets as well as to increase its involvement in existing markets. Thus, it is likely to focus on securing its market position in existing markets (exploitative
internationalisation) and expanding its knowledge base about these markets (exploitative internationalisation)\(^\text{17}\). As the firm becomes more established in international markets, it becomes a global player focusing mainly on exploiting its well-developed knowledge base to increase its market share in existing markets, with minimal attention given to further exploration of new markets.

It is a fact of life that relationships decay, grow and change (Prathanham and Dhanaraj, 2010). The NV’s network social capital will change and evolve with the evolution and internationalisation of the NV. This evolution can occur to both structural capital and relational capital.

**Structural capital evolution**

Structural capital evolution can occur at both the overall network level and at the individual dyadic level.

**Structural capital evolution at the overall network level**

The inter-firm relationship literature has highlighted the fact that firm’s social capital may increase or decrease over time (Doz, 1996; Ring and Van de Ven, 1994; Prashantham and Dhanaraj, 2010). In her study Coviello (2006) found that NV network social capital increases over time as the network’s size and density increases. Its network increases in size as the NV

\[^{17}\text{Exploitative internationalisation refers to the case where the firm expands into nearby and low psychic distance markets, where the firm can exploit its resources and current knowledge base about a country’s institutional context – this includes rules, procedures and standards - and culture into a similar context. This involves expanding and enhancing the company’s current knowledge base in a similar context. Moreover, internationalising SMEs could exploit their current technical and market knowledge (related to their products and services) to similar contexts and this is another form of exploitation (Barkema and Drogendijk, 2007). By contrast, the firm may internationalise into psychically distant markets. These markets have new ways of doing business, different cultures and institutional contexts. Accordingly, the firm needs to actively engage in searching for new knowledge and opportunities in these markets through “the process of planned variation and experimentation and is more uncertain in terms of its outcomes” (Barkema and Drogendijk, 2007:5; Baum et al., 2000). Thus, exploratory internationalisation involves entering into far and distant markets, this involves active search for new sources of information and opportunities through the process of planned testing and disparity.}^\text{}
engages in forming new relationships. Firstly, the SME will form relationships with supporting agencies such as its local chamber of commerce and export promotion agencies. Secondly, it will form relationships with clients and suppliers (value-chain networks) through joint and collaborative agreements (Andersson, 2000; Ruzzier et al., 2006). Finally, the NV resorts to forming relationships with distributors in foreign markets. Relationships with distributors are the form of network connection most discussed in literature due to their strategic position as main entry paths into entering new markets. A high degree of trust and commitment needs to be established and nourished with them.

Accordingly, the NV becomes more established and its legitimacy increases. The overall network will evolve following either of the following scenarios: the whole network will evolve into a sparse, weak configuration dominated mainly by business ties; or it will evolve into a closed network with strong and deep relationships based on personal and social ties. These alternatives are expressed in the differing views of Hite and Herstley (2001) and Larson and Starr (1993). Hence, it is expected that the NV will end up with different types of networks having varying degrees of strength.

**Evolution of dyadic relationships**

It is a fundamental assumption of the present study that tie evolution can take a wide variety of forms. As a firm evolves it will establish and expand its network social capital through the creation of new relationships (Prashantham and Dhanaraj, 2010). This is crucial for the firm in order to gain access to the market, together with technical and other support required for it to succeed in foreign markets. However, not all ties remain the same and the NV’s network social capital could decrease or depreciate over time (Adler and Kwon, 2002). This is evident in Burt’s (2002) exceptional study which focused on bridging ties that ceased to exist within
a year’s time. In other words, “the strength and value of tie may diminish with passage of
time” (Soda, Usai and Zaheer, 2004:893; Prashantham and Dhanaraj, 2010).

The reasons for the depreciation of social capital can range from unlawful acts, lack of
commitment, tie decay, and reduction in tie utility (Burt, 2002; Prashantham and Dhanaraj,
2010). A tie decays (ceases to exist) if it diminishes, becomes more fragile and has not been
used for some time (Burt, 2002; Bourdieu, 1986). It can result from the focal actor becoming
preoccupied with other actors (Burt, 2002; Putman, 2002; Prashantham and Dhanaraj, 2010)

Another possibility is reduction in tie utility even to the point of obsolescence. A certain tie
may not produce or generate any further business opportunities (Prashantham and Dhanaraj,
2010). In their study Prashantham and Dhanaraj (2010) found out that with passage of time
some ties between the software companies (focal firms) and some foreign clients could not
yield any further growth opportunities, which meant that they failed to meet the expectations
placed by focal firms on these key actors. If a tie becomes obsolete, this means that its
effectiveness is highly dependent on a particular context (Jack, 2005). Obsolescence could be
due to changes in the context of the relationship such as when an actor retires or leaves his
position. While there may be a strong relationship between the focal firm and this actor, it is
no longer beneficial because his circumstances have changed.

In some extreme cases, the government of the foreign country may prohibit the production
and/or sale of certain goods. If the NV sells this product through a distributor, this
development will force the NV to retire this business relationship because the reason for the
collaboration has ceased to exist (Helfat and Peteraf, 2003). This could happen even though the relationship between the focal firm and these actors is still being frequently enacted and is valued by the focal firm (Ring and Van de Ven, 1994).

Finally, the NV may actually decide to retire or retrench some ties for other reasons. A learning race may develop between the firm and others, in which case the latter become a threat rather than a support (Hamel, 1991). One of the focal firm’s partners may demonstrate lack of commitment by failing to meet his/her obligations. A third possibility is that a large client may place restrictions on the NV, such as an MNC on which it is "piggybacking" for its foreign sales (Coviello and Munro, 1995). In some cases there might be a decline in customer demand or the emergence of new competitors, which could force the NV to shrink its operations, thereby reducing the number of its business relationships – the retrenchment of existing relationships – to a few suppliers and/or customers. Accordingly, the NV would focus on strategic relationships and reduce (divest) those relationships that are less important.

In addition to tie appreciation and depreciation, or the expansion and contraction of ties, there are other patterns that could take place on dyadic level. The focal firm (NV) may recombine several relationships to create a specific network, redeploy or reactivate existing relationships, and keep relationships in dormant mode until needed. New relationships may need to be established with key customers, suppliers or distributers which could be crucial for the NV’s growth and survival. The NV may reactivate past relationships in order to seize an opportunity that arises. For example, an entrepreneur may know someone who is an expert on the Brazilian market – this expert used to work with the entrepreneur but the contact was lost because the entrepreneur opened his own business. When an opportunity arises for the
company to enter Brazil the entrepreneur may re activates this relationship in order to access knowledge about the market.

In the case of restrictions on the production of a certain products or components, the NV may redeploy or reuse this specific relationship to access other niche markets within the same country or enter new markets. For example, the government may prohibit use of a certain component of a final product, in which case the NV may use the business relationship with this supplier to produce another component to meet another target market. Another possibility would be to redeploy the contact or business relationship to enter another foreign market.

Finally, in times of crisis, the NV might form inter-firm collaborations with its key suppliers and/or competitors, responding to challenges in the business environment through forming a specialized network that has a portfolio of complementary resources enabling it to overcome emerging threats. Another possibility is that the emergence of new technology might oblige the NV to form a collaborative agreement with some of its partners in order to make use of such new technology and improve its profitability.

Some of these options could follow one another. For example, at a time of crisis some of the potentially profitable relationships might be kept on hold, whereby minimal effort and time is required to maintain them. Later on, those relationships could be reactivated to realize opportunities or to help overcome prevailing threats. In other words, letting existing relationships lie dormant might be followed by their reactivation. In similar vein, existing
relationships might be kept to a minimum (retrenchment) for a period of time, and then intensified again.

It is sometimes not possible to connect directly with a particular contact, but this has to be done through creating a *bridge relationship* between them (Hakasson, 1992). For example, a British company wants to form a partnership with a key Chinese supplier. However, negotiation with this supplier has proven to be very difficult and a consensus on managing this venture is problematic, due to different leadership styles. The British company approaches a key customer of its Chinese supplier and forms a cooperative technical project with that customer. This helps the British company to approach the supplier through an intermediary or bridging relationship. Another bridge could occur if a key employee of the British firm has previously worked with an established client of the Chinese supplier. These are examples of bridging relationships that an SME could create to connect to networks they do not have direct access to.

Such networking development patterns differ from one situation to another and the way they evolve is likely to depend to a great extent on several factors such as the history of the relationship, the perceived benefits for each partner (reciprocity), the costs inherent in developing and maintaining such relationships, and external factors within the NV's institutional and economic contexts. These factors are assumed to have a moderating effect on the tie development process.
Relational social capital development

With the passage of time, frequent interaction and meeting expectations of different actors within the network enhances the level of trust and mutual commitment. In addition, positive reinforcement on the part of NV can repair and maintain those ties that are weakened or are problematic. A high level of trust and mutual commitment between partners may lead to exchanges that often go beyond what is specified in formal contracts, and it helps to reduce the risk of opportunist behaviour by the partners (Kilpatrick and Bell, 1998). In addition, trust eases the transfer and acquisition of tacit knowledge that is crucial for the firm’s survival.

All in all, over time the NV is expected to enhance its internationalisation learning process and its networking capability which in turn should lead to improved sales performance and growth at the present time (Tn in Figure 3.1.) This is reflected in feedback loops in Figure 3.1. Thus, both the NV’s internationalisation and network evolution processes evolve together in such a way that they influence one another, giving rise over time to better firm growth and survival through adaptation to changes in the external environment. Nevertheless, the co-evolution of internationalisation and networking does not necessarily lead to improving performance if, for example, the internationalisation proves to be ill-judged or the choice of a problematic overseas relationship (for example, an agent) which might cause the company to de-internationalise.

In addition, the NV evolves with its external environment by reaching accommodations with that environment. Its leading entrepreneur may be able to use her or his network relationships to lobby or negotiate the enactment and enforcement of laws and regulations beneficial for the firm. In addition, s/he may collaborate with supporting agencies and obtain beneficial
forms of support. The dotted line at the top of Figure 4.1 denotes the co-evolutionary frontier between the NV and the external environment.

Figure 3.1 also highlights a cyclical loop where each of the above mentioned processes influences and evolves with one another and with the external environment. Not only does the NV adapt to changes in environment through responding to critical events but also the firm in some cases through its position in network can influence the external environment and trigger some changes that have future effects on firm’s growth and survival in the long run.

**The traditional SME co-evolutionary model**

The traditional SME tends to internationalise through incremental and gradual steps following the traditional process models of internationalisation. SMEs may not pass through all the stages described in the Uppsala model; it may even skip steps (Barkema and Drogendijk, 2007; McGrath, 2001).

However, it will most probably start off with supplying to the domestic market, and then expand to nearby low psychic distance markets (especially if these SMEs come from emerging or developing economies). Then, as its level of experiential knowledge increases, it starts internationalising into further-distance markets. Also, it may use multiple entry modes such as licensing, joint ventures or even forming local subsidiaries in foreign markets (Johnson and Mattsson, 1988; 1985). Another possibility would be, once SME’s home market becomes saturated, the only option for SMEs is to expand overseas. At this stage the SME would explore new markets in far and distant markets as well as exploit its current knowledge base in nearby markets. These two actions occur concurrently. This is likely to
depend on the type of product and industry in which the firm operates the level of experience the firm has gained from its domestic operations and the local context in which it is embedded. These propositions are depicted in Figure 3.2.

The local institutional context in developed markets tends to foster and encourage entrepreneurs and firms to internationalise through offering needed sources of support (Kiss and Danis, 2008). Also, the presence of mature institutions in these markets encourages entrepreneurial behaviour and firm internationalisation more than is likely to be the case in less developed markets (Dodd and Patra, 2002). However, if the local institutional environment is restrictive this could encourage the SME to internationalise as a more attractive outlet for their business (Boisot and Meyer, 2008).

**Start-up and domestic expansion stages**

Accordingly, during the start-up stage the firm follows the same scenario as in the case of NV when forming the business, but it tends to rely mainly on strong local ties and few weak domestic ties. As time passes, the SME’s initial network social capital will evolve in a way that helps the firm to expand locally. The firm’s network social capital evolves into a closed network (composed of both strong local business and social ties).

**International expansion stage**

The firm becomes well established and well known in domestic market and perhaps in nearby markets. A critical event might then arise in the firm’s extra-institutional (market) environment that leads the SME to internationalise. This could be a new opportunity in a foreign market, including a serendipitous event. Or it could be a pressure to go abroad such
as domestic market saturation. It is likely that traditional SMEs would start by exporting to low psychic-distance overseas markets (Welch and Luostarinen, 1993; 1998; Calof and Beamish, 1995; Johanson and Mattsson, 1993). As those SMEs learn more about overseas markets and gain confidence, they would start to enter more distant markets and perhaps use more advanced investment-based modes of entries (such as joint ventures or wholly owned subsidiaries). This suggests that the traditional SME might engage first in exploring similar overseas markets and that once their level of experiential knowledge increases they would exploit this knowledge and use it in other overseas markets (Barkema and Drogendijk, 2007). Thus, the traditional SME entrepreneur would engage in both explorative and exploitative internationalisation.

If the firm consciously planned to internationalise or extend its existing foreign involvement, it would then assess pre-existing relationships (if any) in local and foreign markets that could offer access to required resources and support. In addition, it would need to develop new relationships in those markets and with relevant supporting agencies (such as export promotion agencies) in order to gather acquired needed market knowledge.

The SME may transfer or redeploy an existing relationship from one context to another. For example, a friend or a relative of the entrepreneur may have helped the entrepreneur in starting his business and later they may agree that this relative would represent the company in another market. Over time the internationalisation level of SME increases, as well as its international experience and level of experiential learning. This may encourage the firm to increase its level of international commitment through using several modes of market entry.
The SME’s network social capital is seen to evolve in the same way as suggested previously for the NV's subsequent internationalisation stage [SIS]. The structural social capital evolves at both the overall network level and that of individual dyadic relationships. Overall networks develop into more sparse and multiplex networks composed of both strong and weak ties (social and business ties). The individual dyads will also follow the above mentioned patterns of tie development: some ties may depreciate, appreciate, enter into dormant mode and then become reactivated or recombined (Jack, 2005).

Relational social capital will evolve. Increased frequency of interaction and positive outcomes, lead to an enhanced level of trust and commitment between the focal firm and its partners. Over time, the SME's level of learning increases in terms of network learning and experiential learning, giving rise to an enhanced level overall performance and growth at Tn.

The SME will also co-evolve with its environment through responding to changes inherent in both its local environment and in its extra-institutional market environment (Lewin and Volborda, 1999). It will also interact with its institutional environment through initiatives taken by its entrepreneur to change certain laws or circumstances which have a bearing on the firm’s future growth and expansion strategies (Child, Tse and Rodrigues, 2013). The possibility of securing support for such initiatives depends on whether the entrepreneur occupies a structural hole or has access to structural holes.

In short, Figures 3.1 and 3.2 identify somewhat different co-evolutionary processes, depending on the type of SME – new venture or traditional.
Conclusion

As explained in Chapter 2, the present research aims to understand the co-evolution between SME internationalisation and network processes over time, and to compare the co-evolutionary patterns of UK and Egyptian SMEs. The UK is an example of a developed economy with a strong institutional context and Egypt is an example of a weak emerging market with a weak and inefficient institutional context.

I propose two different models of co-evolution pertaining to traditional new ventures and traditional SMEs. The literature reviewed in Chapter 2 indicated that each of these two types of firm is likely to follow a different path of internationalisation. New ventures networks may start off with a set of interconnected social relationships. Over time their network is likely to be composed of both weak and strong ties and it will evolve from being a identity based, path dependant network to a deterministic/path dependent intentionally managed one (Hite and Hesterly, 2001; Coviello, 2005; 2006). By contrast, traditional SMEs may start off with a one-dimensional set of relationships comprising either social or business relationships. This evolves into a multifaceted combination of both social and business relationships (Larson and Starr, 1993).

These types of ventures or SMEs are likely to be present in the two countries – Egypt and the UK – in which they are to be sampled. However, since each country differs in terms of culture and level of institutional development, the networking behaviour of their SMEs is expected to be different in ways also indicated in Chapter 2. The generic framework I am proposing allows for variation in the networking behaviour of the two types of SMEs from both countries. That is why I have not proposed a particular network social capital development pattern but rather used generic terms such as initial network social capital and
*evolving network social capital* (composed of both structural and relational social dimensions), which allows for an empirical investigation of variations in patterns of network development.

Moreover, it is important to note that the SME lifecycle stages differ in the two models. The NV model in Figure 3.1 proposes three stages namely (1) the pre-internationalisation stage [PIS], (2) the early-internationalisation stage [EIS], and (3) the subsequent internationalisation stage [SIS]. By contrast, the traditional SME’s model proposes three somewhat different stages to allow for a different internationalisation pattern. These are (1) the start-up stage, (2) the domestic expansion stage, and (3) the international expansion stage.

To recap, both co-evolutionary models described in this chapter offer a general overview of the likely co-evolutionary patterns of NVs and SMEs from both countries. The models are *a priori* in nature having been derived from findings and discussions in the existing literature. The intention is later to formulate a revised model based on my empirical findings which will offer a more precise understanding of SME co-evolution.
CHAPTER 4
METHODOLOGY

Introduction

This chapter discusses the methodology used in this research. It starts by discussing the theoretical orientation of the research, followed by a description of the qualitative research strategy and methods used in data collection. Finally, the process through which data was prepared and analysed is presented

Theoretical Orientation

This study combines two theoretical orientations. The first relates to the fact that this research deals with a phenomenon that draws heavily on the real experiences (in terms of internationalisation and networking behaviours) of social actors (SME decision makers). Some scholars in the international entrepreneurship field argue that understanding the real experiences of entrepreneurs requires the researcher to adopt an interpretivist or phenomenological stance (Lamb, Sandberg and Liesch, 2011; Coviello, 2005).

A phenomenological stance suggests that understanding the real experiences of social actors, should be based on the interpretation and perception. Since internationalisation and networking behaviours are idiosyncratic to entrepreneurs, they are better understood through the eyes of those actors who created them (Lamb et al., 2011).

On the other hand, the mainstream SMEs internationalisation literature adopts an economic perspective on internationalisation and suggests that the degree of SME’s internationalisation

18 Several parts of this chapter were submitted as research methods assignment during the author’s first year of PhD studies (Narooz, 2009).
can be understood through focusing on a few pre-defined variables. In a similar fashion, the networking behaviour of SMEs has been viewed by some scholars from a structural point of view, reducing this to a set of structural/quantitative variables (c.f. Coviello, 2006).

One of my research objectives is to investigate how the internationalisation and networking behaviours of SMEs co-evolve with one another over time. The only way to investigate the correlation between these two processes is to rely on codified variables (representing structural network and internationalisation performance measures) at different points in time and to test if there is a correlation between the two processes using statistical techniques. This meant that I had to adopt methods and an orientation that approximates to the natural sciences, in other words, a positivist stance.

This inherent tension regarding which philosophical position I should take evolved with the different stages of research. I started with an interpretivist position, viewing the world as purely socially constructed, since I am dealing with the real life experiences of entrepreneurs. However, through the process of data collection I began to realise that I was being drawn towards a positivist view, because the evolutionary patterns of SMEs could only be traced through narrowing down my focus to measurable outcomes of internationalisation and network structures. However, as I became more immersed in analysing the data I could see that if I only focused on these few measurable variables I would lose the important and rich qualitative insights into the reasons why internationalisation and networking developed together; insights that each entrepreneur expressed through his or her own interpretation were highlighted.
Eventually, I realised that I am neither adopting a purely positivist nor purely interpretivist stance, but a position that lies somewhere between the two. The theoretical stance that I felt close to is the critical realist position suggested by Margret Archer (1995; 2003). According to Blundel (2007), this helps researchers to cross the bridge from the natural sciences, with its focus on objectivity, to the social sciences with their recognition of the role of perception and interpretation. The following section describes the epistemological and ontological orientations consequently adopted in this study.

**Epistemological and ontological orientations**

Methodology has to do with how the researcher carries out the research and it is clearly influenced by the way the researcher views reality, either as an independent entity or socially constructed by actors (Ryan, Scapens and Theobald, 2002; Potter, 2000; Johnson and Duberley, 2000; Descartes, 1639; 1641). The way the researcher views reality represents his or her ontological orientation.

Also, the research process is influenced by how researchers verify that their knowledge of reality is true and acceptable, and that the sources through which knowledge is obtained are valid. This is referred to as the epistemological orientation (Ryan et al., 2002; Potter, 2000; Bryman and Bell, 2003). Accordingly, it is important to identify the appropriate epistemological and ontological orientations to guide the research methodology and methods chosen to investigate a particular phenomenon.

I hold the view that the reality is not purely an independent entity but it is also perceived and constructed by the social actor’s experiences and descriptions. For example, the internationalisation of SMEs embedded in a particular institutional context (Egypt) is influenced by same set of challenges and dysfunctionalities, which are real independent
circumstances. However, one entrepreneur could perceive these dysfunctionalities as an opportunity that he can change and influence to his advantage. Another entrepreneur might perceive these challenges as a major obstacle for his firm’s growth and survival. Here each one of them holds a different view about the challenges inherent in the Egyptian context and a different way to respond to it. It is an established fact that the Egyptian context is full of institutional voids, but whether we see these as a challenge or an opportunity is socially constructed by our experiences and perceptions of this real independent condition.

Moreover, I tend to hold the epistemological view that not only is entrepreneurship (in terms of internationalisation) an individual act, shaped by the decision-makers’ choice of which path to follow, but that there are also certain observable patterns of such actions that could be investigated to provide an overview of the generic behaviour of entrepreneurs. Moreover, entrepreneurs tend to respond to changes in external environment that are imposed on them and to some extent this determines the way they will respond to these external stimuli.

Accordingly, my perspective brings together two epistemological orientations: positivist and interpretivist. These alternatives can be understood by reference to Burrell and Morgan’s (1979) representation of the assumptions underlying nature of social sciences, see Figure 4.1.
In essence, social and organizational reality exists independently of human consciousness and cognitions.

Reality is simply a product of our minds, a projection of our consciousness and cognition with no independent status.

It is possible to observe the empirical world in a neutral manner through the accumulation of objective sense-data.

It is not possible to observe the empirical world in a neutral manner through the accumulation of objective sense-data.

Sees human behaviour as determined by the situation, as necessary responses to external stimuli.

Human action arises out of the culturally derived meanings they have deployed during sense-making.

Located in the unity of the sciences and applies protocols and procedures derived from the natural sciences.

Attempts to uncover the internal logics that underpin human action by deploying methods that access cultures.

*Source: Johnson and Duberley (2000: 78)*

**Figure 4.1: Burrell and Morgan’s (1979) assumptions underlying nature of social sciences**
So rather than being at one of the extremes in the four dimensions highlighted by Burrell and Morgan (1979), my position lies somewhere in the middle. As mentioned earlier, the closest theoretical orientation that allows for this combined view is critical realism (Bhaskar, 1975; Archer, 1995; 2003).

Bhaskar argues that "what we can know sets the ground of how we know something exists" (1978:36). At the heart the critical realist view is that social scientists cannot be absolute subjectivists (relativist) or absolute realists, but rather they are transcendentalists. Critical realists argue that there is some middle ground between the positivist approach which follows a reductionist approach and tends to pay little or no attention to the depth and richness of social phenomenon and the interpretivist approach which argues that the social phenomenon can only be understood through the eyes and perceptions of social actors. Furthermore, critical realists suggest that it is important to allow room for social constructivism and at the same time to understand that reality is independent from the researchers/observers.

More recent critical realists such as Archer (1995; 2003) suggest adopting a morphogenesis\(^1\) approach to understanding the nature of social reality. At the heart of Archer’s (1995) argument is that structure is a social reality which exists at a given point in time. While it may have been created by agents’ previous actions, in the present time it has properties and exercises an influence that is independent of the agent. However, what agents decide to do have implications for future structures – the agents may to some degree be able to shape future structures (Archer, 1995; 2003; Mole and Mole, 2010).

\(^{19}\) Morphogenesis according to the Oxford Dictionary is the branch of biology that studies the forms and structures of living organisms.
She holds the view that structure exists as an objective reality that materialises as a result of actions of past agents, it is a reality that is recursive and that it has "causal power that are independent of agents" (Mole and Mole, 2010:235). These emergent structures could constrain or empower agents. Agents are spontaneous and fallible they could make right and wrong choices and they learn from past experiences.

In other words, from an ontological point of view Archer argues that social reality exists independently from the agent and can be observed. It is also a product of the agent’s past action and over time it materialises and has its own properties that are independent from the agents (Archer, 1995; 2003; Mole and Mole, 2010). Moreover, we can observe this social reality as a structure and also we can understand the agents and their actions and the interaction between the structure and the agent.

Archer builds on Burrell and Morgan’s (1979) human nature assumption that agents are influenced by stimuli from the external environment and that they respond to these changes but also they are capable of making decisions that might change future structures and sometimes even shape it (Mole and Mole, 2010). She suggests that to better understand the interaction between the structure and agent a dualism analytical lens should be used. She argues that agents and structures change over time. Sometimes the structure determines the agents actions and in other times it is the agent who shapes or respond to these changes in structure, the interplay between them moves in a cycle and neither agents or the structures has precedence over the other (Mole and Mole, 2010).

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20 This is different from Gidden’s (1979; 1984) duality concept. He argues that structure and agents are inseparable and cannot be understood independently from the other.
In methodological terms, Archer (1995; 2003) argues that in order to understand the interaction between agents and structures, qualitative and quantitative methods could be used to capture the objective observable reality of structure and at the same time highlight the agent’s choices and roles in responding and perhaps shaping the future structure.

Archer’s critical realist view is similar to the theoretical orientation guiding this research. The first assumption of this research is that one way to understand an SME’s pattern of internationalisation through observing their internationalisation performance (in terms of number of markets and regions and percentage of foreign sales) at different points in time. These internationalisation performance measures are structured in nature, structured in patterns, and can be observed to exist at a given point in time. Likewise an SME’s configurations of network links as well as the network itself are structured in nature. In other words, the SME’s structural network configuration and attributes can be observed to exist at given points in time and structured in terms of network development patterns.

The second assumption is that the wider institutional environment is also structural in nature. In other words, it exhibits a structure of rules, norms, organisation and officials that are independent of the SME. The institutional environment is an example of an independent structure that enables and constrains the agent’s actions (in this case the SME decision maker).

At the same time there are agents (SME decision-makers) who relate to these structures and for whom the structures are meaningful. Moreover, the agents have the ability within certain limits of their knowledge and power to make changes in their future internationalisation and
their networking structures. Thus the changes in those structures over the course of time are assumed to an important extent to result from the agents’ actions.

For instance, SME decision-makers can decide to enter new foreign markets or withdraw from a foreign market; similarly they can change their network links. Some of the characteristics of the foreign markets and the network “others” may independently change over time as well. These actions taken by the SME decision-makers-focal actors- can be assumed to constitute the main source of any co-evolution between internationalisation and networking. Since the focus of this study is concerned with the internationalisation and networking processes of SMEs that are managed by agents (decision makers).

This critical realist theoretical orientation has three important implications for the methodology used in this study. Firstly, the structured features (internationalisation and network links) can be regarded as potentially observable objective facts. They are therefore amenable to a positivistic research methodology, although in practice it may not be feasible to observe them directly but rather the source of information on them that can be practically accessed, as can actors whose description of the structured features could be coloured by interpretation and rationalisation. The fact that these features are structured means that they are open to classification, codification and quantitative measurement.

Secondly, the actors’ rationales regarding their internationalisation and networking decisions are subjective and interpretative in nature. They are necessarily informed by their understanding of their situation, both in aspects specific to a particular decision and the general situation. Therefore, the appropriate research methodology here is qualitative, which
allows for interpretation and understanding of the subjective decisions and rationales of SME’s decision makers.

Moreover, using a qualitative methodology would provide the information on internationalisation and networking behaviours of SMEs that could be codified and quantified.

To do this, I adopted a specific methodological approach, whereby I depended mainly on multiple case studies to collect data about the different SMEs experiences. I collected data from forty SMEs in UK and Egypt, which is arguably a sufficient number of cases to enable me to identify key patterns of development in each country.

When analysing the data I followed the "bi-focal" or mixed method approach suggested by Coviello (2005). Her approach enabled me to focus on the key internationalisation and network variables and trace their change over time from each sample and compare the behaviour of the UK and Egyptian SMEs. I was also able to test for possible correlation(s) between internationalisation and networking as will be reported in Chapter 5.

In addition, I wanted to understand how these two processes evolved and co-evolved over time and what were the rationales that entrepreneurs’ articulated for the actions they take. This was done through closely examining the individual experiences and interpretations of actors\textsuperscript{21} to understand why a particular entrepreneur chose to follow a certain internationalisation path or build a relationship with a particular network contact. These processes could only be extracted from the narratives provided by entrepreneurs as will be reported in Chapters 6 and 7.

\textsuperscript{21} Although some studies define entrepreneurs as risk takers and are proactively seeking and creating opportunities. In this study the term entrepreneur is used interchangeably with SME decision maker. Both refer to the individuals in charge of SMEs.
The next section explains the different research strategies and methods used to collect and analyse the data.

**Research strategy**

A quantitative research strategy emphasises the use of measurement and quantification of data. Hence, it resembles the use of scientific methods used commonly in the natural sciences. It falls under the umbrella of a positivist epistemological position; and has an ontological orientation that views social world as "an external, static and objective reality" (Bryman and Bell, 2003:25; Gill and Johnson, 2010; Bryman and Bell, 1988). The main advantages of quantitative research are that it enables the researcher to quantify qualitative data which makes it easy to co-relate to other quantitative data, and hence to infer causality; and to generalize the findings of a representative sample to the wider population and replicate the findings in other studies (Bryman and Bell, 2003).

Quantitative research is a strategy that involves the use of two main approaches. One is the deductive approach that deals with formulating hypothesis about the cause and effect that would be empirically tested and out of which "explanations of laws and theories are to be assessed" (Bryman and Bell, 2003:14).

The other is the inductive approach which deals with gathering facts and data that form the basis for formulating theories and laws. The argument for induction is that only through observing phenomena in real life that explanations and predications can be reached in a valid and objective way.
Adherents to a quantitative approach are more likely to use research methods that emphasize objectivity, repeatability (transferability in the case of qualitative research) and generalizability (in the case of quantitative research). Although this position tries to simplify complex phenomena into more concrete and measurable laws based on cause and effect relationships, it suffers from the difficulty of controlling for all the factors in the environment of social world as opposed to the natural sciences (Rehan ul-Haq, 2005; Bryman and Bell, 2003). Moreover, a quantitative research strategy suffers from key shortcomings which are summarised in Table 4.1.

By contrast, qualitative research tends to focus on processes and non-quantifiable data, through the use induction and theory building rather than theory testing. It focuses on the "ways individuals make sense of their social world" from an interpretive epistemological position. Moreover, it belongs to the ontological orientation that views social world as processual and socially constructed by the actor (Bryman and Bell, 2003:25; Bryman and Bell, 1988).

<table>
<thead>
<tr>
<th>Shortcoming</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignores the fact that any social phenomena could be socially constructed</td>
<td>It tends to ignore people's interpretation of their social world. The researcher is detached from the social phenomena and his role is only to observe it from a distance (Johnson and Duberley, 2000)</td>
</tr>
<tr>
<td>Low ecological validity</td>
<td>Ecological validity tend to be lower than in qualitative research in the sense that the instruments and measures used by researcher may be his/her own artefacts that does not represent the actual phenomena under investigation (Bryman and Bell, 2003).</td>
</tr>
<tr>
<td>Fails to identify the underlying mechanisms behind causal relationships</td>
<td>Quantitative research can help “infer and identify that a certain variable causes another rather than how this causality is produced by the people to whom it applies” (Bryman and Bell, 2003: 86).</td>
</tr>
</tbody>
</table>
The main advantage of qualitative research is that it allows the researcher to view the social world though the social actor’s own eyes. Also, qualitative research tends to be highly context and process specific, and it places a high significance on “how events and patterns unfold over time” (Bryman and Bell, 2003:296). Finally, this strategy allows for a high degree of flexibility and limited structure which more readily uncovers social actors’ perspectives without limiting the research to a predefined rigid structure that does not allow for taking into account people’s perspectives that researcher has not anticipated a priori.

However, this strategy also is not without shortcomings, which are presented in Table 4.2.

Table 4.2: Shortcomings of qualitative research

<table>
<thead>
<tr>
<th>Shortcoming</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suffers from subjectivity</td>
<td>It could be overly subjective because the findings are based on researcher’s own interpretations of social phenomena and the rapport/relationships the researcher creates with the people being studied (Bryman and Bell, 2003; Lamb et al., 2011)</td>
</tr>
<tr>
<td>Difficult to replicate and suffers from lack of transparency</td>
<td>This is attributed to the fact that qualitative research is highly unstructured and that data collection and analysis is a product of researcher’s own disposition, which makes it difficult to fully understand how data has been gathered and how conclusions have been drawn (Bryman and Bell, 2003).</td>
</tr>
<tr>
<td>Focuses on theoretical generalisations and cannot be generated to the wider population</td>
<td>Focuses on analytical inference of the findings gathered from the qualitative research for theory (Saunders, Lewis &amp; Thornhill, 2006; Ryan et al., 2002).</td>
</tr>
</tbody>
</table>

Other important considerations that need to be taken into account while choosing which research strategy to use are validity, reliability and replicability considerations.

Validity, reliability and replicability

There are three main criteria that are commonly used to evaluate different research methods and designs. Firstly, the reliability of research is concerned with the extent to which the questions or measures used will yield the same results whenever repeated (Kirk & Miller, 2011). Although some authors like Yin (2008) argue that if the researcher states in a clear and detailed manner how he/she actually collected his data and reached to the conclusions this increases the reliability and transparency of qualitative research.
Secondly, replicability criterion is concerned with the extent to which findings of other researchers can be replicated- this may be the case if the researcher feels that these results do not resemble other important empirical evidence related to the same topic in question. In order to, increase the replicability of the research, the procedures used to conduct it should be clearly explained and stated (Bryman and Bell, 2003).

The final criterion is the validity of research, which refers to "whether a specific measure of a concept really measures that concept" (Bryman and Bell, 2003:77). There are different types of validity which are set out in Table 4.3.

<table>
<thead>
<tr>
<th>Validity Type</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Measurement/Construct Validity</td>
<td>The extent to which the measurements used are measuring what is supposed to be measured</td>
</tr>
<tr>
<td>2. Internal validity</td>
<td>The extent to which alternative explanations of causal relationships are explored and taken into account.</td>
</tr>
<tr>
<td>3. External validity</td>
<td>The extent to which the results of a study could be generalized to the whole population beyond the research context.</td>
</tr>
<tr>
<td>4. Ecological validity</td>
<td>The extent to which the findings are applicable to the people every day natural settings. In other words these findings are not artifacts made by the researcher himself rather than true reality of what happens in everyday life of people.</td>
</tr>
</tbody>
</table>

*Source: Bryman and Bell, 2003; Kirk and Miller, 1986.*
These criteria are mainly used to evaluate quantitative research. Some writers argue that they cannot be applied in qualitative research (Bryman and Bell, 2003). However, writers have used alternative criteria for evaluating qualitative research as described in Table 4.4.
Table 4.4: Alternative criteria for evaluating qualitative research

<table>
<thead>
<tr>
<th>Evaluation criterion</th>
<th>Definition</th>
<th>How it was applied in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative validity</td>
<td>Refers to the importance of achieving consistency between the researcher’s understanding and interpretations of data and the actual data being analysed (Kvale, 1989; Sandberg, 2005; Lamb et al., 2011)</td>
<td>This was achieved partially through focusing on melting the ice and establishing rapport between researcher and the interviewees before the interview through exchanging emails and follow-up calls to ensure that the respondents had a clear understanding about the research. Moreover, during the interview the researcher allowed some time for establishing rapport through asking few general questions about the interviewee’s personal aspiration and motivation to start this line of business. This was followed by use of several open ended questions that allowed the interviewee to express and articulate his or her actual experience (Sandberg, 2005; Lamb et al., 2011).</td>
</tr>
<tr>
<td>Pragmatic validity</td>
<td>Refers to the tendency to avoid face-value and straightforward statements and assertions (as is the tendency in positivist research) and to look for the underlying meanings (Sandberg, 2005; Lamb et al., 2005; Kvale, 1989)</td>
<td>This was achieved through probing the interviewees with further questions and asking them to elaborate more. I started by asking generic questions about for example key important relationships that helped the company to start business, internationalise and so forth. With each one of these ties I prompted the interviewee to tell me more about the history of the relationship, how they knew each other, what sort of benefits they offered the SME and how the relationship evolved.</td>
</tr>
<tr>
<td>Transgressive validity</td>
<td>Refers to the ability of the researcher to identify key differences and variation in phenomena under investigation rather than looking for abstract general consensus (Sandberg, 2005; Lamb et al., 2011)</td>
<td>This study has two aims mainly to identify general patterns of evolution and co-evolutionary among UK and Egyptian SMEs (Chapter 5) and also to identify key variations and idiosyncrasies in individual SMEs behaviour (Chapter 6).</td>
</tr>
<tr>
<td>Procedural reliability</td>
<td>This involves the use of the appropriate research procedures, design and methods to obtain reliable findings and data (Ryan et al., 2002; Yin, 2009).</td>
<td>One way of ensuring this is that all the field notes and case study material are well documented through creation of what Yin (2009) referred to as “case study database and protocol” which involves details about interview schedule, case study reports, how data was analysed and reported and which could be made available for review upon request by other researchers (Ryan et al., 2002). A copy of the interview schedule, case summaries, detailed codification of data and an example of details of samples and analysis using spreadsheets are described in appendices 1.1-1.3.</td>
</tr>
<tr>
<td>Transferability</td>
<td>Refers to the possibility of replicating and applying the findings in another context (Lincoln and Guba, 1985; Ryan et al., 2002)</td>
<td>The aim here according to Yin (2009:44) is to find &quot;replication logic&quot;, which in the context of this study means that if the analysis of the data showed similar patterns of network and internationalisation for similar types of firms this would provide strong evidence for theoretical generalisations to the SMEs internationalisation and network theories.</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Contextual validity</strong></td>
<td><strong>Triangulation of data methods; respondents (Feeding back findings to them); theory triangulation.</strong></td>
<td>This involves triangulation of data though the use of multiple informants; multiple data collection techniques, multiple sources of evidence and even alternative theories (Johanson and Vahlne, 2003; Ryan et al., 2002). This research used two types of data triangulation-mainly multiple sources of evidence and multiple informants. Although the main data gathered from personal interviews with the founders or managers of SMEs, the researcher gathered a significant amount of secondary data such as brochures, company’s websites and newsletters, periodic reports, project databases, annual reports and ongoing list of action plans. These were used before and during the interview to probe and verify some aspects and also were used alongside the interview transcripts to verify and confirm the key events and timings of projects and markets discussed during the interview.</td>
</tr>
</tbody>
</table>
So far, I have discussed the different research strategies that a researcher can choose from. However, it is equally important to construct a research design that enables the researcher to meet the research objectives and questions. Research designs are the procedures that the researcher follows to collect and analyse research data (Creswell and Plano Clark, 2007). There are different classifications of research design, for example Bryman and Bell (2003) identified four main research designs; namely cross-sectional, longitudinal, experimental, case-study and social surveys. They treat research design to fit either qualitative or quantitative strategies. However, others such as Creswell and Plano Clark (2007) offered a different classification for those researchers using mixed methods. These are triangulation, embedded, explanatory and exploratory designs23. It is important to select the appropriate research design for addressing the four research questions which are:

(1) What are the different internationalisation patterns/paths of Egyptian and UK SMEs over time?

(2) What are the network development patterns of Egyptian and UK SMEs over time?

(3) Is there co-evolution between the internationalisation and network development patterns of Egyptian and UK SMEs over time? If so, what are the underlying reasons for the co-evolution between the internationalisation and network development patterns based on the understanding and interpretations provided by the UK and Egyptian SME decision makers?

(4) What are the key antecedents/contingencies of SMEs internationalisation and networking behaviours

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23 Triangulation refers to use of combination of qualitative and quantitative empirical evidence to understand a particular phenomenon. Using both is argued by Creswell and Plano Clark to overcome the weaknesses inherent in quantitative and qualitative research methods. Embedded design involves using different research methods to answer different objectives (Creswell and Plano Clark, 2007). Moreover, explanatory research design or sequential strategy involves firstly the quantitative methods as main strategy and then use in-depth interviews (qualitative methods) to further investigate key issues and vice versa (Creswell, 2003; Creswell and Plano Clark, 2007). Finally the exploratory or two-step design which means using one type of design (qualitative or quantitative) as the basis for the other. For example, the researcher might conduct several case studies to understand a particular phenomenon and then use the insights generated from the qualitative data to develop a measure to be tested on a larger number of cases (Creswell, 2003; Creswell and Plano Clark, 2007).
To address these research questions, a research strategy and design is required to give the researcher the flexibility to (1) identify key patterns of internationalisation and networking behaviours of SMEs over time; (2) test if there exist patterns of association between the two behaviours over time; (3) understand the underlying mechanisms and the processes through which SMEs internationalise and use their networks over time. The first two aspects will involve a high level of abstraction and quantification of data (in terms of focusing on network structural variables and on internationalisation performance measures) to provide an overview of networking and internationalisation patterns of the Egyptian and UK SMEs over time and test for the patterns of associations between the two behaviours over time. The third aspect involves reliance on rich qualitative data that provides explanations for these development patterns and more importantly explaining the process by which SMEs internationalise and network over time.

Qualitative research is considered to offer the researcher the flexibly needed to gain in-depth and rich data and at the same time allows for abstraction and quantification of some of the variables needed to identify key patterns of development. In addition, there is a need to identify key patterns of development and to test for possible correlations between the two processes, a sufficient number of SMEs is essential, the use of multiple case studies from UK and Egypt is considered the most appropriate research design.

In the next section I shall briefly discuss case study design and then move onto the research methods used in collecting and analysing data.

**Case study design**

There is a debate on whether to consider case-studies as a research design or as a method of data collection. According to (Yin, 2009:18) it can be considered as an "all -encompassing
method; covering the logic of design", data collection, analysis techniques and approaches. Traditionally, the case study has been defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context" usually using multiple sources of evidence (Saunders et al. 2006, Yin, 1989:13). However, Yin (2009:18) has extended this traditional definition as shown in Figure 4.2.

*Adapted from Yin (2009:18)

**Figure 4.2: Technical definition of case-study as an all-encompassing method**

Case study research is best used when the research aims to answer "how" and "why" questions; when there is no need to have control over behaviours or events as in case of experiments; and when it focuses on extant or current phenomena (Yin, 2009). Also, Welch, Piekkari, Plakoyiannaki and Paavilainen-Mantymaki (2011) argue that case studies are not
only used for inductive theory building but they can be used to serve different purposes such as natural experiment, interpretative sense-making and contextualisation of theory. An example is the use of a case study as a natural experiment to refute or confirm an existing theory as Lipset, Trow and Coleman’s classic study (1956) of Union Democracy did in respect of Michels so-called “Iron Law of Democracy”. In addition, case studies could be used to identify complex causal explanations between variables through isolating them from the broader context of the case and using other case studies to verify the causal relationships identified from the initial cases. Hence, this similar to experimentation design and emphasises a greater explanatory power to case studies. On the other hand, when using case studies as an interpretive sense-making approach, the researcher focuses on building theory through interpreting the experiences of actors to gain a deeper understanding of the phenomenon under investigation. Researchers often choose either to focus on theory-testing theory or theory-building.

Welch et al. (2011) added a new application for case studies -what they refer to as contextualised explanation. Contextualised explanation involves understanding "how" and "why" a certain event occurred, through adopting a historical view to understand how a certain event or outcome took place through going backwards in time to understand the causes of such event.

Furthermore, an investigation can be confined to a single case-study or extend to multiple-case studies. The latter is often referred to as a comparative research design (Yin, 2009; Bryman and Bell, 2003). Using a single case study may place the researcher at risk if the chosen case turns out to be different than what it was expected to be. Therefore, it is crucial to carefully investigate and make sure that the chosen cases match the objective of research to
minimize this risk (Yin, 2009). There are five rationales for using a single case-study approach as shown in Table 4.5.

**Table 4.5: Rationales for Using Case Studies**

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical case</td>
<td>The researcher has a set of clearly defined hypothesis prepositions and choosing a critical case that meets all the conditions for testing the theory under investigation which would either refute or confirm theory.</td>
</tr>
<tr>
<td>Extreme/unique case</td>
<td>That has a unique characteristics that is worth documenting and analysing.</td>
</tr>
<tr>
<td>Representative/typical</td>
<td>Where the researcher may choose a case, be it a project, individual or an organization, that is typical of the several other projects, individuals or organizations.</td>
</tr>
<tr>
<td>Revelatory case</td>
<td>When the investigator has an opportunity to observe and analyse a phenomenon previously inaccessible.</td>
</tr>
<tr>
<td>Longitudinal case</td>
<td>Studying the same case at two or more different points in time; to trace the changes in factors over time.</td>
</tr>
</tbody>
</table>

* Source: Yin, 1989:44; 2009:48

Multiple case studies involve the use of the same methodology as in the single case-study research on two or more cases. This is done through employing "replication design" - similar to using several experiments ensure that vigorous findings are achieved when replicating the findings of first experiment to a second and third one under the same conditions used in the first experiment - with the aim of having more vigorous and strong research findings (Yin, 2009:54). Yin (2009:54) asserts that replication can be either "literal or theoretical replication". The former is achieved through careful choice of each case so that it is expected to yield similar results. The latter is achieved through choosing cases that are expected to have contrasting results but based on predicted justifiable reasons.
Multiple cases are often used to construct a comparison between cases in order to better understand particular phenomena and to identify whether or not a theory will prevail under different circumstances and conditions (in other words this design enhances the generation of theories). This also helps the researcher to identify which concepts are relevant to existing theories (Yin, 1984; Bryman and Bell, 2003; Eisenhardt, 1989). However, it tends to distract the researcher from the specific context and tends to focus more on how to make comparisons between cases.

As discussed in Chapter 2, this research contrasts SMEs from two different contexts and institutional environments, namely UK and Egypt. The latter is an example of a collectivist culture and a weak institutional context and the former is an example of an advanced and well developed institutional context and an individualist culture. These national differences in terms of culture and level of institutional development are expected to shape and influence the SMEs internationalisation and networking behaviours. Hence, use of a comparative multiple case study design would enable the researcher to capture and understand differences in the UK and Egyptian SMEs behaviours. This involves the use of multiple case studies from each context and comparing and contrasting their internationalisation and networking behaviours and the impact of national institutional context of the SMEs behaviour.

However, case studies have some key advantages and limitations which are presented in Table 4.6.

Table 4.6: Advantages and limitations of case studies

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow for in-depth investigation of phenomena under investigation</td>
<td>Allow for addressing a large amount of variables as opposed to surveys where the researcher has only a limited set of variables to focus on. Also, they allow for the use of several sources of evidence such as interviews, documents, and surveys, which enhance the triangulation of data (Yin, 1989).</td>
</tr>
<tr>
<td>Allow the use of both quantitative and qualitative methods.</td>
<td>Case studies could involve both of quantitative and qualitative methods. Moreover, it could be used to serve different purposes as a part of mixed methods research design (Yin, 2009; Bryman and Bell, 2003; Creswell, 2003).</td>
</tr>
</tbody>
</table>
For example, a study may start with few case studies in order to identify key variables and relationships to be tested later with a large-scale survey. Or a study may be primarily qualitative study in one or two organizations and a survey may be conducted among different employees in different departments. In addition case studies can employ several levels of analysis (Eisenhardt, 1989; Yin, 1984).

**Can be used to address different research objectives**

It could be used in descriptive research aiming only to provide a detailed description of one or more focal units. Also, it could be used to test a theory using a deductive approach and to building a theory using an inductive approach (Eisenhardt, 1989; Yin, 2009; Bryman and Bell, 2003).

<table>
<thead>
<tr>
<th>Limitations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited external validity</td>
<td>This means that the findings of a single case or multiple case studies cannot be generalized to a wider population. Advocates of case study research argue that they aim to achieve &quot;theoretical or analytical generalization&quot;; where the empirical results are generalized to wider theory (Bryman and Bell, 2003:55; Yin, 2009:15).</td>
</tr>
<tr>
<td>Potential for researcher bias</td>
<td>Due to unsystematic and unstructured procedures inherent in case-study research the researcher is more likely to incorporate his own judgements or views into the findings and conclusions (Yin, 1989; 2009; Bryman and Bell, 2003).</td>
</tr>
<tr>
<td>Low internal validity</td>
<td>Where controlling other explanatory reasons for why a certain variable causes another is difficult to achieve (Bryman and Bell, 2003; Kirk and Miller, 1986). However, Yin (1989; 2009) argues that case study can offer insightful evidence that complements results obtained from experiments; this is due to the fact that how and why X caused change on Y is better addressed by case studies rather than experiments, especially if the latter are conducted outside a natural setting.</td>
</tr>
<tr>
<td>Threats to the reliability of the case(s)</td>
<td>The reliability of a case study is generally low due to its qualitative nature. In other words the ability of the researcher to reach to the same results if he/she carried out the same research with the same case to reach the same conclusions is difficult (Yin, 2009:45). However, there are some techniques that might enhance the reliability of case studies suggested by Yin (2009) which are the use of case study protocol and case study database -where both include details about every stage of research that is documented in great details.</td>
</tr>
</tbody>
</table>

As mentioned before, the case study enables the researcher to rely on multiple sources of evidence using different research methods. Research methods refer to techniques used for collecting data such as interviews, questionnaires (Bryman & Bell, 2003). There are several methods for collecting and analysing data ranging from documents (secondary data); different types of interviews; surveys; observations and focus group interviews.

So far this chapter has discussed the most common research approaches/strategies and methods. However, there are some specific research approaches/strategies that are unique to the study of relational data and networks. This research approach is referred to as Social
Network Analysis (SNA), which is an approach used to study relational data and structure of networks using either quantitative or qualitative methods or both.

SNA is an approach that has been used by sociologists to study social relationships between different actors as opposed to studying attributes of the actors themselves (Burt, 1978; Hanneman, Robert and Riddle, 2005). The unit of analysis is usually the social network which is a network of actors and relationships between them (Wasserman and Faust, 1994; Edwards, 2010). These actors could be individuals, organizations or groups of people which constitute a set of nodes. The relationships between them are represented by lines between those nodes. There are two traditions in the collection of data about social relationships. The first involves the use of quantitative methods to collect data for SNA such as surveys, measures and maps of relationships in order to grasp the structural dimensions of networks using complex statistical techniques (Carrington, Scott and Wasserman, 2005; Edwards, 2010). The second, less dominant approach, involves using of qualitative methods to obtain information about social relations. These methods use ethnographies, in-depth interviews, observations and mapping techniques that involve participants (Trotter, 1999; Pahl and Spencer, 2004; Emmel, 2008; Edwards, 2010).

Social network analysis has attracted increasing attention from by scholars across different disciplines ranging from sociology, business, mathematics and economics (Freeman, 2004). This is because it is an analytical tool that can be used to understand the structural patterns of network of relationships and because networks have to receive increasing attention from international entrepreneurship scholars.
Most social sciences scholars tend to promote the use of both quantitative and qualitative approaches or methods rather than using one of them in isolation. This helps the researcher to confirm and validate the data and at the same time reap the benefits of using each approach (Creswell, 2003). This tendency is beginning to be focused on combining both types of methods of SNA, especially in the business and management literature which has been dominated by quantitative methods for decades (Monsted, 1995; Coviello, 2005; Edwards, 2010). Social network analysts argue that using SNA not only offers the benefit of making the best use of both methods but it also represents a unique platform to do so (Coviello, 2005; Edwards, 2010). In other words, because of the unique nature of social networks that encompass both structural and process dimensions, using quantitative methods can help to understand the different structural properties of the networks ("outsider view"). In addition, using qualitative techniques help us to understand the underlying processes or content of the networks through gaining "an insider view" of network (Edwards, 2010:5).

There have been calls to integrate qualitative methods to SNA, not to undermine the value of quantitative techniques but to serve as a complementary method to enhance the understanding of underlining the network processes (Crossley 2009; Emmel and Clark, 2009; Heath, Fuller and Johnston, 2009; Edwards, 2010). On the one hand, quantitative methods of SNA can help in mapping networks of different kinds and calculating structural measures such as the size of network, centrality measures and density of relationships -that helps in gaining an external view of network (Edwards, 2010; Coviello, 2005). On the other hand, qualitative methods of SNA help in understanding and addressing the content of relationships and context in which

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24 Social network analysis has its ancestry in mathematics of socio-metry, graph theory and ethnographic research. In addition, anthropologists used SNA to study the structure of affinity and interpersonal relationships. SNA therefore has its roots in both quantitative and qualitative approaches (Barnes 1954; Edwards, 2010). However, SNA started to increase in popularity in the last four decades when the development of user friendly statistical packages such as Pajek and UCINET software (De Nooy et al. 2005; Borgatti, Everett and Freeman 2002). This software helps in handling network data and facilitates its analysis.
networks are embedded. Furthermore, they focus on the understanding the nature of interaction between actors, strength and value of relationships.

Moreover, traditional quantitative methods map the network at a specific point of time (snapshot) and fail to capture the dynamic and evolutionary nature of networks. An illustration of limitation approach is given in Figure 4.3.

| Mapping of network ties involve converting them into binary data (i.e. the presence or absence of tie). This is a common feature of mapping and dealing with network data (Hanneman and Riddle, 2005). Also, to fully understand the strength/value of a relationship it is not enough to record the frequency of interaction (Edwards, 2010).

Some actors may interact frequently more than others because of the nature of work they do. That does not necessarily mean that a strong tie exists between them based on trust. For example, a client and a supplier - located in different places- contact each other on a regular basis in order to create a prototype of an integral component to the client company. The presence of regular interaction does not mean that breach of trust cannot occur. It is only through positive interaction and experiences that trust is established, especially in the absence of a formal contract. Thus, in order to better understand the nature of interactions between individual actors, and the differences, replicability, and dynamics of networks, it is essential to use both qualitative and quantitative methods to map and measure structural aspects of networks (Edwards, 2010). |

**Figure 4.3: A traditional quantitative method and its limitations**

It is equally important to distinguish between data gathered from the whole network and from parts of a network, as each approach could serve a different research objective.

**Defining network boundaries and sampling**

It is a challenge to set the boundaries of a network as they may be composed of a large number of actors depending on the population of interest. Therefore, it is useful to think of different strategies to collect data about relationships among different actors in the form of a
spectrum. At one end of the spectrum, lies the "whole network /full network approach" which has to do with gathering data from all actors of a particular network. This tends to be costly and time consuming and in some cases it is impossible to gather the required data (Hanneman and Riddle, 2005).

At the other end of the spectrum, a sample of the whole network is taken, which focuses only on a subset of relations. This approach is less costly and conclusions could be generalized to some population (Hanneman and Riddle, 2005).

The decision of which route to follow depends on the research questions and objectives. These two alternatives and the possibilities they offer are summarised in Table 4.7.

Table 4.7: Comparison between different sampling approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Definition</th>
<th>Advantages and Disadvantages</th>
<th>Best used in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole /Full network</td>
<td>Data is collected from each actor's ties with all other actors. In essence, this approach is taking a census of ties in a population of actors. In other words, data are collected about all ties that are present between all dyads in a population.</td>
<td>It helps the researcher gather a full picture of the structure and properties of network. However, it is costly to collect data and difficult to implement.</td>
<td>It is very useful especially if the analysis involves a small group of actors.</td>
</tr>
<tr>
<td>Snow ball approach</td>
<td>The researcher often starts off with a focal actor(s) and then they are asked to name other actors they relate to. Those other actors then nominate others. This continues until some type of closure could be achieved, such as no new names are mentioned.</td>
<td>This approach is very effective to capture the elite network data. Members who are not connected to this network (often referred to as isolates) are not included. It tends to overstate the &quot;connectedness&quot; and &quot;solidarity&quot; of populations of actors. In addition, it is not always possible to find all of the connected individuals in the population.</td>
<td>Very useful for particular types of populations. For example, members of an elite club or kinship networks.</td>
</tr>
</tbody>
</table>
This is due to the fact that the point of start could be with a really marginal/wrong place leading to loss of whole sub-sets of actors who are connected - but not attached to starting points.

| Ego-centric networks (with alter connections) | The researcher starts with a set of focal nodes (egos) and identifies the actors (alters with whom they are connected). After that those alters ego is connected to are asked to identify how they are connected to each other. Alternatively the ego may be asked how his alters are connected to one another. | It is quite effective for collecting a form of relational data from very large populations; it can give a good and reliable picture of the kinds of networks (or at least the local neighbourhoods) in which individuals are embedded. Also, it enables the researcher to understand the opportunities and constraints that ego has as a result of the way they are embedded in their networks. Allows only the gathering of micro-data and measures about network rather than overall network measures. | Useful if whole network data cannot be gathered or gathering data about an ego’s local neighbourhoods is important for the research. |
| Ego-centric networks (ego only) | This involves gathering data about the ego’s connections to alter(s) without their connection with one another. | It is helpful if the objective is to identify which actors have many friends and which have only a few. This enables the researcher to understand the variation in actors’ places in social structure, and make some predictions about how these locations constrain their behaviour. It is a good approach to understand the actors in terms of their social roles rather than as individual occupants of social roles. Accordingly, information about local social | It is useful if the objective is to gather data about social roles played by an ego and local social structure in which ego is embedded. |
structures could still be identified.

The nature of the whole network cannot be identified using this approach.

*Adapted from Hanneman and Riddle, 2005

In practice, SNA scholars have combined quantitative and qualitative research strategies together through using different research methods to collect and/or analyse the data. The main purpose is to enhance the triangulation of data through using different research methods and/or to provide complementary evidence and explanation of phenomena under investigation (Edwards, 2010; Creswell, 2003). Figure 4.4 illustrates two studies that combined qualitative and quantitative research methods to enhance triangulation and to offer two different interpretations or perspectives on a particular topic.
This is in line with Monsted’s (1995) argument that to understand the processes of merging networks we need to use both research strategies. He highlights the fact that some types of ties such as "very weak ties or latent ties" are usually not recorded in matrices used in quantitative analysis and can only be captured qualitatively (Monsted 1995: 194, Edwards, 2010). Another concern highlighted by Crossley (2009) is that focusing on the quantitative approach to SNA "oversimplifies" the social world of networks and neither the structural configuration of network nor its measurement can be divorced from its content (p.8).

To sum up, combining methods helps the researcher not only to understand the structural properties and mapping of networks but also to understand their context and dynamics.
It also helps the researcher to have an internal (perception of individual actors) and external view of the network (structural properties and mapping).

After providing the background of key research design and methods informing this study, the following section now illustrates how these designs and methods were applied.

**Research design and methods used in this study**

This study used multiple case studies to understand the dynamics of Egyptian and UK SMEs networking and internationalisation processes over time (Eisenhardt, 1989; Yin, 2009). In order to understand these evolutionary processes, a retrospective approach was used based on the key respondents’ memory and recall of each company’s life story since it was founded (Bryman and Bell, 2003). Twenty SMEs were studied from each country—Egypt and the UK—allowing for a sufficient number of cases to identify key patterns and themes (Lamb et al., 2009). These cases were collected from a variety of sources as explained in Table 4.8.

**Table 4.8: Sources of UK and Egyptian SMEs**

<table>
<thead>
<tr>
<th>Cases</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK SMEs</td>
<td>Thirteen of the companies were either selected from a compiled list from Thomson One Banker database and the Oxford Science Park website or from the researcher’s personal contacts.</td>
</tr>
<tr>
<td></td>
<td>Seven SMEs were identified through the help of the Birmingham and the Black Country Chamber of Commerce.</td>
</tr>
<tr>
<td>Egyptian SMEs</td>
<td>Four SMEs were identified through the researcher’s personal contacts.</td>
</tr>
<tr>
<td></td>
<td>Sixteen SMEs were identified through the help of the Entrepreneurs forum in Alexandria and the Social Fund for Development (SFD) in Egypt.</td>
</tr>
</tbody>
</table>

These cases were purposefully selected and the bases of theoretical sampling were firms that had less than 250 employees, have been operating for at least 10 years and have been

---

25 Ideally a longitudinal approach would have been better for collecting data from multiple case studies. However, O’Donnell and Cummins (1999) argue that it is not always feasible to do so, especially in this context where the focus is on well established firms with 10+ years of history.
engaged in international markets for at least 6 years. This is to allow the researcher to capture the SMEs’ internationalisation behaviour from conception to stability and maturity. The choice of a cut-off figure of 6 years is assumed to be sufficient for the SME to demonstrate its capacity to survive in foreign markets. Further information on the two national samples is given in Appendix 1.1.

The interviewees were the founder(s) of the company or middle level professionals who were responsible for the international development of the company (such as sales, export and business development managers). The unit of analysis in this study is the network from the perspective of the SME’s decision-maker (entrepreneur) the so-called ego network perspective (Hanneman and Riddle, 2005). Ego the entrepreneur defines the boundary of the network from his own perspective, and the interviewees were asked to identify key connections between different actors to provide a relatively comprehensive picture of the configuration of the network. Although SMEs connections in foreign markets could be independent, possible connection(s) between actors were probed for. For example, if the entrepreneur mentioned a key relationship in foreign market who is an old school friend and previously he mentioned another friend who helped him to internationalise in domestic market, I asked about the possible connection between these two friends. This is similar to the ego-centric network analysis with alter connections. Moreover, the possible connections between ego’s alters is important as it could offer an understanding of the degree of cohesiveness (density) of ego’s network. This is a measure of proportion of ego’s alters that are connected to one another (Coviello, 2006, Hanneman and Riddle, 1998). The different network structural measures will be discussed in Chapter 5.
A total of 60 SMEs were contacted in the two countries out of which 42 SMEs agreed to participate in the research (twenty from the UK and twenty-two from Egypt). Two were excluded from the Egyptian sample because these were SMEs that had either just started exporting and/or focused only on one market and a few one-off transactions.

The UK SMEs were contacted initially by email describing the purpose of the study and a request for participation, followed by a follow-up call to remind the respondents about the email and to negotiate access. In the Egyptian context -where use of email is not a norm, telephone conversations were the initial point of contact and several follow-up calls were carried out to confirm the dates and access. This resulted in a total of 52 semi-structured interviews in the two countries that were conducted by the researcher through site visits during the period 2009-early 201126.

Each interview lasted on average between one and half to two hours and produced 14-20 pages of single spaced transcripts. Fifty interviews were tape recorded and transcribed and only two cases refused to permit tape recording. In addition, extensive field notes were taken by the researcher to document the interview.

Multiple informants were interviewed –whenever possible –to confirm/refute data reported by other informants (Johanson and Vahlne, 2003). In seven of the UK SMEs, multiple informants were interviewed (either co-founder(s) and/or export manager) and in Egypt only four cases, multiple informants were interviewed27.

Questions within the interviews depended mainly on open-ended questions, as this is believed to provide deeper insights and explanation by each respondent in his /her own terms. The use

26 All the Egyptian interviews were conducted before the start of the 25th of January 2011 revolution.
27 Egyptian SMEs are usually managed and owned by one person. Export/business development managers were hardly found in SMEs.
of open-ended questions suffers from some difficulties as it requires more effort and time to collect and code different responses. However, this type of questioning in a qualitative study is deemed appropriate as it does not "require specific answers as compared to quantitative study" (Bryman and Bell, 2003:37). In order to increase the validity of measures, interview questions were piloted among two practitioners and one academic to avoid any leading and ambiguous questions.

The interview covered key themes namely (1) background information about the company (2) concept generation and establishment history (3) internationalisation pattern, history and outcomes (4) key contacts and relationships that were significant for the firm’s growth (internationalisation) and survival over time (Coviello, 2005: 2006; Coviello and Munro, 1997; Yli-Renko et al., 2002; Pratshantham and Dhanraj, 2010).

Regarding each network attachment the respondents highlighted, I used probing questions to identify the tie’s history and initiation, the pattern of tie development, reasons behind such development and key benefits for internationalisation the SME derived from this tie. Finally, the strength of tie was measured within the course of the interview through the use of concentric circles approach commonly used by sociologists (Borgotti et al., 2000). The aim is to identify varying degrees of strength for each group or type of actors. This meant that after asking about the full history of SME from inception until the time of data collection, I grouped key ties mentioned by the interviewee into categories and asked him/her to locate the strongest tie to the SME on the closest circle to the centre (SME) and weakest tie on the farthest circle and any medium strength relationships to be located in middle circle. However, in some cases the interviewee identified the strength of a particular tie(s), within the course of our conversation. This was taken into account as a key representation of the strength of that particular tie.
In addition, four interviews were carried out with trade advisors and managers of governmental supporting agencies in the UK and Egypt in order to understand the type of support these supporting agencies offers to SMEs and criteria through which SMEs become eligible for different types of support. Additional secondary sources were also gathered including brochures, reports and drafts of export promotion laws that were enacted in recent years. Copies of the interview schedules used to interview both the SMEs and supporting agencies presented in Appendix 1.2 and 1.3.

Interview transcripts collected from the Egyptian SMEs were translated from Arabic to English by the researcher. To check the quality of my translation, three transcripts were back-translated from English to Arabic by a professional bilingual translator/editor.

**Data arrangement and preparation**

After transcribing the interviews, I did not immediately code the interviews as is the norm with qualitative research but rather I wrote the full story of each case and the chronology of events (including the timing of each market entry and tie creation) and key triggering events/junctures were identified. This was done on an iterative basis, where the case report was revisited several times to ensure the accuracy of chronology of events and identification of key network actors. Each case was treated as an independent test that either confirmed or refuted the emerging themes (Brown and Eisenhardt, 1997).

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28 I was given a copy of the Egyptian export promotion law from the CEO of Social Fund for Development which is the main governmental supporting agency in Egypt.

29 These historical chronologies are useful milestones for identification of patterns of development over time (Pettigrew, Woodman, and Cameron, 2001).
I then prepared a large spreadsheet where I identified key events and presented them in the corresponding chronological order, where each event was represented by a row. An event could be an internal affair of the company, entry to a new market, further penetration of existing market, identification and creation of a tie or termination of a relationship. For each row I classified the ties involved into several categories as shown in the following example (see Table 4.9).
Table 4.9: Individual tie coding based on different tie characteristics— the Manu5 case.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Description</th>
<th>Illustrative Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>An event could be for example, an internal affair of the company, entry to</td>
<td>Manu5’s founder approached Mr H. - who is an old school friend - to refer him to</td>
</tr>
<tr>
<td></td>
<td>a new market, further penetration of existing market, identification and</td>
<td>his relative in USA.</td>
</tr>
<tr>
<td></td>
<td>creation of a ties or termination of a relationship.</td>
<td></td>
</tr>
<tr>
<td>Tie</td>
<td>Identification of key ties involved in particular event</td>
<td>Mr. H and Mr H’s relative</td>
</tr>
<tr>
<td>Basis of tie</td>
<td>This could be a tie that is intentionally created or reactivated by the</td>
<td>Relationship with Mr H was intentionally managed. However, relationship with Mr H’s</td>
</tr>
<tr>
<td>initiation</td>
<td>entrepreneur (intentionally managed tie). It could be a result of chance</td>
<td>relative is semi-coincidental.</td>
</tr>
<tr>
<td></td>
<td>or unplanned incident (coincidental tie) and finally it could be a tie that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>was a result of a third party referral (semi-coincidental tie)</td>
<td></td>
</tr>
<tr>
<td>Strength of tie</td>
<td>Could be strong, medium, weak strength based on concentric circles and the</td>
<td>Relationship with Mr H (as interviewee mentioned) is strong; and his relative is a</td>
</tr>
<tr>
<td></td>
<td>way the interviewee described a certain tie.</td>
<td>weak tie.</td>
</tr>
<tr>
<td>Nature of tie</td>
<td>Could be a business, social or a mixed relationship. Whereas a business</td>
<td>Relationship with Mr H is a social relationship and with the relative is a business</td>
</tr>
<tr>
<td></td>
<td>relationship is mainly contractual or work related relationship. A social</td>
<td>relationship^30^.</td>
</tr>
<tr>
<td></td>
<td>relationship is mainly personal relationships with family and friends.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finally a mixed relationship is a multiplex relationship that has both</td>
<td></td>
</tr>
<tr>
<td></td>
<td>business and social (personal) dimensions.</td>
<td></td>
</tr>
</tbody>
</table>

^30 The interviewee was asked how the relationship with Mr H’s relative evolved. He mentioned that was a medium term relationship that last only until the project was finished and he said it was not a friendship relationship.
<table>
<thead>
<tr>
<th>Tie perpetuation</th>
<th>Could be a one-off relationship (i.e., one transaction) or a medium term relationship (for example, a tie that lasted only for a certain period of time and ceased to exist). For example, SME might have a relationship with a particular project manager and this relationship ceases to exist after the project finishes. Finally, a continues relationship, is a relationship that is on-going.</th>
<th>Medium, lasted only until the overseas project was over.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key benefits driven from tie</td>
<td>Could be a strategic referral, market knowledge and entry to market.</td>
<td>Mr H served as a bridging relationship and his relative was the medium through which the company entered the US market.</td>
</tr>
<tr>
<td>Relationship-related costs</td>
<td>For example, lack of commitment, breach of trust.</td>
<td>Company had to find another agent (other than Mr H’s relative) to operate in US market.</td>
</tr>
</tbody>
</table>
As described in Chapter 3, in order to capture the dynamics of social capital and SME’s internationalisation process, three stages of firm life cycle were proposed as shown in Figure 4.5:

**Pre-Internationalisation stage**
Involves concept generation, legal establishment of the company and the first commercial activity.

**Early internationalisation stage**
Involves the first/concurrent international activities and is characterized by limited focus on overseas markets.

**Subsequent internationalisation stage**
Involves further internationalisation of the firm and is usually characterised by extensive international involvement and perhaps the use of more advanced modes of entry (such as: joint ventures). This is usually an intentional decision taken by the SME decision maker to aggressively internationalise. This could be a proactive decision or as a result of an external stimulus (i.e. reactive decision).

**Figure 4.5: SME’s internationalisation stages**

The boundaries of these stages are not rigid but rather they are evolutionary and process based. The movement from one stage to another is identified by trigger events or juncture points in the firm’s lifecycle.

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31 As will become evident in Chapter 5 and 6, the data obtained indicated the validity of applying this stage categorisation to all the SMEs studied although it was originally proposed in the new venture model (Figure 3.1).
Data analysis

Based on a chronology of events, three adjacency matrices were prepared for each case in a separate spread sheet and UCINET 6 and Netdraw were used to map and measure different structural dimensions of the SMEs network. Each case had three different matrices reflecting the SMEs network in each stage, and the tie pattern of development was taken into account.

After preparing the data and calculating the network structural measures for each of the three stages of SMEs life cycle, I followed a mixed approach for analysing data, which Coviello (2005) referred to as a "bi-focal approach" (p.40).

This mixed approach involved two steps. The first step involved preparation of a summary spread sheet which included key internationalisation performance measures over time and the structural measures of SMEs network for both UK and Egypt. I then was able to conduct some non-parametric statistical tests (such as Spearman correlations and Mann Whitney U test and Chi-square tests) to identify internationalisation and networking evolutionary and co-evolutionary patterns.

The next step involved a quantitative analysis of the data through using the exploratory hierarchical clustering technique to obtain three main taxonomies of UK and Egyptian SMEs respectively.

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32 These matrices are binary and directed, which shows whether a tie exist or not and its direction. Following that an attribute file for each stage per case was prepared in order to visualise the different types or categories of networks present within each stage of the SMEs life cycle. Drawing a clear distinction between individual and inter-organisational networks is multifaceted (Mitchell 1969; Coviello, 2005; Larson and Starr, 1993). The focus of this study is on the relationships between individuals and between these individuals and different organisations.

33 UCINET 6 is a social network analysis software that allows researchers to calculate different structural measures for overall network of SME and individual egonets (networks of each actor within a given network) (Borgatti et al, 2002). NETdraw is a software that converts these matrices to a network map so that different actors within each stage of firm development is mapped and drawn.
I then began to identify key themes and differences between internationalisation and networking processes of SMEs within each cluster within each case and across cases. This was done on an iterative basis until I reached a level of theoretical saturation where no more themes of differences could be identified (Lamb et al., 2009; Yin, 2009).

To ensure the accuracy and reliability of data, I draw on different sources of evidence through using of multiple informants and secondary sources such as minutes of board of directors, periodic reports, annual reports, ongoing list of action plans, websites and promotional material. The use of documents is argued to serve as a significant complementary source of evidence which might either confirm or contradict interview data; this enhances the triangulation of data (Yin, 1989; 2009). The details on how data were triangulated are provided in Table 4.10.

Table 4.10: Triangulation of research data

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee(s)</td>
<td>Mainly were founder(s); export and business development managers</td>
<td>Mainly were founder(s) and on three occasions (production/sales managers; head of publication department).</td>
</tr>
<tr>
<td>Secondary sources</td>
<td>There were mainly project databases; company’s website; newsletters; promotional materials (brochures) and general company profiles and annual reports.</td>
<td>Internal emails, management meeting records and company detailed profiles and financial statements. Project databases and descriptions and promotional material.</td>
</tr>
<tr>
<td>How triangulation was applied</td>
<td>As a general practice I consulted the company’s websites before contacting the company and kept a record of their nature of business and latest news they published on their website which helped me to have a general overview of the company’s activities and to probe. For example,</td>
<td>Similar to the UK whenever possible I compared the documented material about projects and action plans to the interview transcripts but in four cases I had an access to internal emails, management meeting records and company</td>
</tr>
</tbody>
</table>

34 In the two of the Egyptian cases, documentary evidence on dates of new market entry were at variance with the information supplied in the interviews which led me to re-contact the interviewees to check further.
I would start by saying "I have seen on your website that you operate in so and so markets and can you please take each market individually and talk about the story behind entering this market?" I then asked at the end of the interview if they had a documented record of projects/clients (in mentioned markets) with names and dates and details. I was given this list whenever it was available. Hence when conducting data analysis I compared the interview transcripts with the projects/clients details and annual reports to confirm the dates and details.

Also, from these documents I double checked and identified some of the ties or relationships (especially with agents and overseas clients) that were mentioned in the interview.

detailed profiles and financial statements.

Moreover, I provided feedback covering some of the key findings to two of the UK SMEs and three of the Egyptian SMEs to ensure that I have collected data that matched their experiences. I also cross checked with another researcher the illustrative quotes reported in Chapter 7 and there was over 90% agreement regarding the way I interpreted these quotes

Summary of the research process

The research process followed in this research is reflexive and iterative. I started with reviewing the general literature on internationalisation, networking, institutional theory and co-evolution. Based on which two co-evolutionary models were developed for two types of SMEs, namely traditional SMEs and new ventures (see Chapter 3). Moreover, the review of literature guided the data collection and preliminary analysis.

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35 This inter-rater reliability was only used for the antecedents section mainly because this is the only part where different interpretations could emerge. As for the identification of chronology and history of the SME, it is a straightforward process that requires less interpretation.
After completing data collection and the first stage of data analysis, it became apparent that there was a mismatch between the proposed theoretical frameworks and the empirical findings. SMEs tended to choose different internationalisation and network development patterns at different points in time. SMEs hardly followed a uniform or linear internationalisation pattern and they were likely to be shaped by critical incidences emerging from the external environment. This called for a refinement of the proposed stages of internationalisation discussed in Chapter 3.

In order to answer the first three research questions, I carried out three rounds of data analysis. Firstly, I prepared a chronology of events for each case and identified the structured patterns of internationalisation and network development. This was done through codification of the structural aspects of network and the internationalisation performance outcomes over the three internationalisation stages of the SME. Moreover, I wanted to check if there are co-evolutionary trajectories between the two processes. I relied on social network analysis software (UCINET6) to compute the structural dimension of network and Spearman correlations to find out if there are patterns of association (co-evolution) between structural dimension of networks and internationalisation performance measures over time. This analysis illustrated the general tendencies of the Egyptian and UK SMEs.

Secondly, to understand the co-evolutionary trajectories within each sample, I carried out an exploratory clustering of SMEs. This clustering resulted in six taxonomies of UK and Egyptian SMEs. It served as a way to find out key similarities and differences between the different clusters. I then began analysing the accounts provided by the SME decision makers, to understand how and why these co-evolutionary trajectories took place over time. The qualitative findings offered in-depth explanations as to why and how internationalisation and network processes co-evolved and how the SME responded - and sometimes influenced - changes in the external environment. These findings are presented in Chapter 6.
Thirdly, the qualitative findings provided important explanations regarding how certain contingencies (such as the national institutional context) shape the SME’s behaviour, as shown in Chapter 7. Guided by on the empirical findings discussed in Chapters 5-7, I shall propose a revised co-evolutionary framework and compare it to the two a priori frameworks discussed in Chapter 3, (please refer to Figures 8.1-8.3 on pages 399-401).

Based on the previous discussion, it is difficult to associate myself with a particular theoretical orientation. In other words, I am neither a pure positivist nor a pure interpretivist. Also, I do not hold the view that reality is socially constructed by the social actor or that reality is completely independent of the researcher. I fit somewhere between the two extremes. I am not a subjectivist or an objectivist. I am a critical realist [CR].

Critical realism does not render itself to a particular ontological or epistemological consideration, but rather calls for the use of abductive reasoning to understand the social phenomenon (Welch et al, 2011). Furthermore, Welch et al. (2011) suggest that understanding why a certain outcome/effect took place can only be interpreted through identifying the causes and origins of this outcome. They argue that social scientists need to dig beyond the observable facts to understand why actors behave in a certain way or why a certain process took place. This calls for the abolition of the trade-off between inductive theory building and deductive theory testing dichotomy.

In addition, qualitative research methods allow for an understanding of how processes and causal mechanisms develop over time and provide explanations to why certain causalities and processes took place through the interpretations of experiences provided by the social actors. For their part, quantitative research methods are crucial for "calibrating the understanding of a certain phenomena and in uncovering the prevalence or predominance of actors’ experience” (Lee, 1999; Bluhm, Harman, Lee and Mitchell, 2010:5).
This calls for a mixed methods approach to complement different aspects of the phenomenon under investigation (Blum et al., 2010). In other words, quantitative methods help to test and identify causal relationships usually deduced from established theories. While qualitative research can offer contextualised and novel explanations of causal mechanisms identified through a detailed investigation of individual(s) experiences (Welch et al., 2013).

To meet my research objectives I used comparative multiple case studies. I collected data from twenty UK and twenty Egyptian cases. I relied on semi-structured interviews with key SME decision makers and gatekeepers in the governmental supporting agencies in both the UK and Egypt. I relied on mixed methods to analyse data or in Coviello’s (2005) terms a bifocal approach. Quantitative methods were used to pinpoint internationalisation and network development patterns and to test for presence of co-evolutionary trajectories. On the other hand, qualitative methods were used to provide a contextualised explanation of the internationalisation and network co-evolution.

**Conclusion**

This chapter has explained the philosophical orientation guiding this research. It also has provided a detailed explanation of multiple case study design used in this research and how the qualitative data was collected and analysed. I also explained the unique approach through which the findings of this study were analysed. The next chapter provides details on how the key measures used in this study are operationalised and then the analyses of the co-evolution of SME internationalisation and network development.
Chapter 5
OVERALL CO-EVOLUTIONARY PATTERNS: NETWORKS AND INTERNATIONALISATION DEVELOPMENT PATTERNS

Introduction

This chapter presents findings on the co-evolutionary patterns of SMEs’ social capital development and internationalisation processes. The choice of SMEs operating in foreign markets for at least 6 years allows their development from conception to maturity to be examined.

As mentioned in chapter 4, these cases were purposefully selected, to provide differences in firm age, geographical coverage, international sales revenues and mode of foreign market entry. Following Prashantham and Dhanraj (2010), variations in the firm’s initial stock of social capital was allowed and subsequent variations in the dynamic social capital were also permissible (Saxienian, 1994; 2002).

This chapter is to provide an overview of networking development patterns and the internationalisation development over time; and the co-evolution of the two processes, network development and internationalisation, for both UK and Egyptian based SMEs. The following section describes how these findings were prepared and presented.
Generic framework and data preparation

Given the complexity of the data and number of variables involved, a generic framework was prepared to help the reader to understand the logic and discussion of different network and internationalisation outcomes of the SMEs. Figure 5.1 presents the guiding framework used in this chapter.
Legend:

- X1: Pre-internationalisation stage (PIS) – which involves concept generation, legal establishment of the company and the first commercial activity.
- X2: Early internationalisation phase (EIS) - which involves the first/concurrent international activities and is characterized by limited focus on overseas markets
- X3: Subsequent internationalisation phase (SIS) - which involves further internationalisation of the firm and is usually characterised by extensive international involvement (which is usually a response to a trigger event or sometimes just the proactiveness of the entrepreneur)
- T0: Timing of pre-internationalisation phase
- T1: Timing of early internationalisation phase
- T2: Timing of subsequent internationalisation phase
- Tn: Present time
- Te-t1: Trigger event at time T1
- Te-t2: Trigger event at time T2
- Net size: Network size at T1; T2; T3
- Net Density: Network density at T1; T2; T3
- Net constraint: Network Constraint at T1; T2; T3
- Av. net size: Average network size across time
- Av. net density: Average network density across time
- Av.net constraint: Average network constraint across time
- PFS: Percentage of foreign sales at T2; T3; Tn
- No. of markets: Number of markets at T2; T3; Tn
- No. of regions: Number of regions at T2; T3; Tn
- Rt : Rate of growth at Tn

Internationalisation outcomes variables:

- PFST: Percentage of foreign sales
- No. of Markets: Number of markets
- No. of regions: Number of regions
- Rt: Rate of growth

Network Variables:

- Net size T1
- Net Density T1
- Net Constraint T1

Internationalisation outcomes variables:

- PFST T2
- No. of Markets T2
- No. of regions T2

Internationalisation outcomes variables:

- PFST T3
- No. of Markets T3
- No. of regions T3

Figure 5.1: Generic Framework
As shown in Figure 5.1, SMEs pass by three main phases through which there is assumed to be interplay between network variables (structural variables) and the internationalisation outcomes/performance. On the assumption that these two processes co-evolve together and influence one another, it is imperative to highlight the evolutionary patterns within each of the three stages and also across the three stages (i.e. over time).

This was done by going through the qualitative interview(s) of each individual case and formulating a chronology of events for each case. This involved identifying key relationships that were at each of the three stages of SMEs lifecycle, identification of history and development of these ties and the internationalisation history within each stage. In addition, key trigger events or conjunctions that had a significant impact on the way the firm operates were taken into account and accordingly cut-off dates through which the company moved from one stage to another were determined.

This enabled me to draw a time line for each case and to identify key network relationships and internationalisation outcomes that took place within each stage and helped to depict the networking and internationalisation behaviour of the SMEs over time.

Having this time line to hand allowed me to take a longitudinal view on the evolution of networking and internationalisation behaviour of SMEs and also to have a retrospective view (at the present time—t₀) regarding the present status quo of SMEs network and internationalisation performance.

The logic behind this guiding framework is similar to the "net present value" concept in finance and life insurance fields, whereby the company’s (life cycle) starts at time t₀ or time zero and then as the time moves on, the company passes through different time periods.

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(t₁ and t₂) and then the lifecycle stops at time t₀ which is the present time³⁷. This allows the researcher to examine what happens within each time period and also to have an assessment of the company’s current status quo at present time.

Accordingly, three network variables; namely network size, network density and constraint were calculated for the pre-internationalisation stage [PIS], the early internationalisation stage [EIS] and the subsequent internationalisation stage [SIS]. Also, three internationalisation outcomes were calculated for the two stages of actual internationalisation namely EIS and SIS. These network and internationalisation variables/outcomes are referred to as "within stage" measures.

Furthermore, to gain a dynamic view of the network variables the averages of the network size, density and constraint in each stage were calculated. Also, internationalisation outcomes over time were computed. Table 5.1 describes in detail the meanings and operationalization of the key variables used in this chapter.

³⁷ Present time refers to year 2012.
Table 5.1: Definitions and operationalisation of key variables

<table>
<thead>
<tr>
<th>Key Measures</th>
<th>Variables</th>
<th>Description</th>
<th>Comments</th>
<th>Code/ abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within stages Network structural measures</td>
<td>Network size</td>
<td>Refers to the number of ties or contacts in ego's network, in other words how many contacts or ties ego is connected to, this is a proxy to the degree to which ego is involved in networking (Arenius, 2002; Coviello, 2006; Borgatti, Evert, Johnson, 2013). In this research network size refers to the number of ties in an SME's network at a given period of time.</td>
<td>As the SMEs network size increases this strictly speaking means that ego has more access to resources and opportunities. This increases the SMEs social capital and creates a degree of self-sufficiency, whereby the company becomes less dependent on a limited number of contacts. (Narooz and Child, 2012; Arenius, 2002).</td>
<td>Net Size</td>
</tr>
<tr>
<td></td>
<td>Network density</td>
<td>It is a measure of network cohesion and it is the ratio of number of ties in a given network to the possible number of ties. It is also the probability that a certain tie might exist between any two actors in a given network (Borgatti et al., 1998; 2013; Coviello, 2006). In this research network density refers to the degree of connectedness of SME’s contacts at a given period of time and a density score of 1.00 or 100% means a completely dense network where everyone knows everyone (star network).</td>
<td>Coleman (1988) and Burt (1992) have two divergent views regarding the impact of dense networks on ego’s performance. On one hand, Coleman (1988) argues that highly dense networks have a closure effect whereby most of the actors in ego’s network are connected and these ties are characterized by a high degree of trust and commitment, actors have reciprocal interests. These strong closely connected ties serve as key sources of rich information. On the other hand Burt (1992), argues that the higher the density of a given ego’s network the more likely it will have redundant ties and repetitive sources of information and ideas. Hence the higher the density of ego’s network the less social capital s/he has. However, if ego has access to structural hole (Burt, 2005) - becomes connected through a bridging relationship to a network s/he has no access to - s/he is more likely to have access to new sources of information and opportunities and becomes more innovative (i.e. he has more social capital, than another ego who does not have access to structural hole or to the broker(s)). Closely linked is the fact that ego himself could be a broker and connect otherwise unconnected networks and hence becomes more powerful (Burt, 2000; 1998; Coviello, 2006; Narooz and Child, 2012). Density measures should be interpreted carefully as small network is more likely to be dense (in a particular context) than a large network (in a different context).</td>
<td>Net density</td>
</tr>
</tbody>
</table>
Borgatti et al. (2013) gave an example of a small department in business school; a density score of 0.5 might be small as most of the staff members are likely to know one another. However, in another context like an entrepreneur’s network with a density score of 0.5 might be high because his network might be composed of people inside and outside his own home country. Therefore it is better to use density when comparing between two networks and its interpretation is highly dependent on the study context (Borgatti et al., 2013).
### Within stages Network structural measures (Cont’d)

| Network constraint | This is a measure of structural hole whereby if ego connects two unconnected alters he or she is a broker (where s/he can manipulate the network for his own benefit) and if he is connected to a bridging relationship that connects two unconnected alters ego then he has access to structural hole through his connection with bridging relationship (Burt, 1995; 1998; 2000; 2005; Borgatti et al., 2013). Hence, network constraint is a measure of the “extent to which ego’s alters have ties to each other and it is an indication to the extent to which ego invests time and energy on alters who invest in each other” within a given period of time (Borgatti et al., 2013:275). Ego’s investment in an alter is measured by the amount of ties this alter has (Borgatti et al., 2013). |
|--------------------| A network with a large number of structural holes signifies higher level of social capital where SME has more diverse access to resources and diverse sources of information. As there are fewer redundant ties (which provides redundant information). So if the SME has a high level of network constraint this means that the network has a limited access to structural holes (Burt, 2005;1998) and the SME is said to be obscured by alters in his or her network(Burt,1992; Borgatti et al., 1998; 2013). |
| Number of markets | Refers to the number of overseas markets (countries) SME operates in at a given period of time. The higher the number of markets an SME operates in, the greater the scope of SMEs internationalisation. |
| Number of regions | Refers to number of regions in which SMEs operate in namely (Asia; Europe; North America; South America; Africa; Australia; Middle East) at a given period of time. The greater the number of regions, the higher the breadth (i.e. international diversity) of SMEs internationalisation. |
| Within stages Internationalisation outcome measures- these are internationalisation performance outcomes | Percentage of foreign sales to total sales (FS) Refers to percentage of foreign sales to total sales at a given period of time, given that some SMEs have both inward and outward internationalisation. The respondents were asked to combine both sales revenue coming from outward and inward and estimate the proportion of these two out of the total sales. If an SME’s foreign sales are more than the local or domestic sales, this is an indication of high international involvement and higher the scale (depth) of internationalisation. |
| PFS | No. of markets |
| No. of regions | 188 |
| Within stages | Network constraint | This is a measure of structural hole whereby if ego connects two unconnected alters he or she is a broker (where s/he can manipulate the network for his own benefit) and if he is connected to a bridging relationship that connects two unconnected alters ego then he has access to structural hole through his connection with bridging relationship (Burt, 1995; 1998; 2000; 2005; Borgatti et al., 2013). Hence, network constraint is a measure of the "extent to which ego's alters have ties to each other and it is an indication to the extent to which ego invests time and energy on alters who invest in each other" within a given period of time (Borgatti et al., 2013:275). Ego's investment in an alter is measured by the amount of ties the alter has (Borgatti et al, 2013). | A network with a large number of structural holes signifies higher level of social capital where SME has more diverse access to resources and diverse sources of information. As there are fewer redundant ties (which provides redundant information). So if the SME has a high level of network constraint this means that the network has a limited access to structural holes (Burt, 2005;1998) and the SME is said to be obscured by alters in his or her network(Burt,1992; Borgatti et al., 1998; 2013). | Net constraint |
| --- | --- | --- | --- |

| Within stages | Percentage of foreign sales to total sales (PFS) | Refers to percentage of foreign sales to total sales at a given period of time. given that some SMEs have both inward and outward internationalisation. The respondents were asked to combine both sales revenue coming from outward and inward and estimate the proportion of these two out of the total sales. | If SMEs foreign sales are more than the local or domestic sales, this is an indication of high international involvement and the higher scale (depth) of internationalisation. | PFS |
| --- | --- | --- | --- |

<table>
<thead>
<tr>
<th>Number of markets</th>
<th>Refers to the number of overseas markets (countries) SME operates in at a given period of time.</th>
<th>The higher the number of markets an SME operates in, the greater the scope of SMEs internationalisation.</th>
<th>No. of markets</th>
</tr>
</thead>
</table>

| Number of regions | Refers to number of regions in which SMEs operate in namely (Asia; Europe; North America; South America; Africa; Australia; Middle East) at a given period of time. | The greater the number of regions, the higher the breadth (international diversity) of SMEs internationalisation. | No. of regions |
Table 5.1: Definitions and operationalisation of key variables (Cont’d)

<table>
<thead>
<tr>
<th>Key Measures</th>
<th>Variables</th>
<th>Description</th>
<th>Comments</th>
<th>Code/ Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Across stages network measures</td>
<td>Average network size across stages</td>
<td>It refers to the sum of the network sizes divided by the number of time stages/phases.</td>
<td>The higher the average network size of SME, the more it has access to resources and information that are crucial for its survival and growth within domestic markets and overseas.</td>
<td>Av. Net size across stages</td>
</tr>
<tr>
<td></td>
<td>Average network density across stages</td>
<td>Refers to the summation of network density divided by the number of stages/phases.</td>
<td>The higher the average network density of SME the more likely that network is highly cohesive and is composed of close strong trustworthy relationships where rich and tacit knowledge is exchanged. However, there is a closure risk whereby SME is restricted and has limited exposure to new sources of information and ideas (Burt, 1992; 1998).</td>
<td>Av. Net Density across stages</td>
</tr>
<tr>
<td></td>
<td>Average network constraint across stages</td>
<td>Refers to the summation of network constraint divided by the number of phases/stages.</td>
<td>The higher the average constraint of SMEs network, the more likely that the company has limited access to new sources of information and knowledge (i.e. Limited access to structural hole) and is more likely to be constraint by other actors in its network (Burt, 1998; Borgatti et al., 2013).</td>
<td>Av. Net constraint across stages</td>
</tr>
<tr>
<td>Across stages internationalisation outcome measures</td>
<td>Number of markets at ( t_n )</td>
<td>This refers to an over time view where at time ( t_n ) what is the number of overseas markets the SME operates in?</td>
<td>The greater the number of markets an SME operates in, the greater is the scope of internationalisation.</td>
<td>No. of market ( t_n )</td>
</tr>
<tr>
<td></td>
<td>Number of regions at ( t_n )</td>
<td>This refers to a over time view where at time ( t_n ) what is the number of regions the SME operates in?</td>
<td>The greater the number of regions an SME operates in, the greater is its breadth (international diversity) of internationalisation.</td>
<td>No. of regions ( t_n )</td>
</tr>
<tr>
<td></td>
<td>Percentage of foreign sales at ( t_n )</td>
<td>This refers to a over time view where at time ( t_n ) what is the percentage foreign sales to total sales (at 2012).</td>
<td>The higher the percentage of foreign sales of SME, the greater is the scale (depth) of internationalisation.</td>
<td>PFS( t_n )</td>
</tr>
<tr>
<td></td>
<td>Rate of growth at ( t_n )</td>
<td>This is the percentage of foreign sales at time ( t_n ) divided by number of years being international</td>
<td>The higher the rate of growth over time, the better the international growth of the SME.</td>
<td>R( t_n )</td>
</tr>
<tr>
<td></td>
<td>Years being international</td>
<td>Refers to the number of years SME has been operating overseas until ( t_n ).</td>
<td>The greater the number of years being international, the higher the SME internationalisation learning and experience.</td>
<td>Years being international</td>
</tr>
</tbody>
</table>
As discussed in the Chapter 2, co-evolution implies that key processes within an organisation co-evolve with one another and with the external environment. The SME might respond to a certain stimulus (conjunction or trigger event) emerging from the external environment by adapting to changes in the environment or changing the conditions inherent in the external environment in a way that helps it to grow and survive. The details regarding co-evolution and how companies adapt to change of external environment and how the network development process and internationalisation co-evolve together over time are discussed in more detail in Chapter 6. The objective of this chapter is to provide a holistic view of how SMEs’ networking and internationalisation behaviour evolve and co-evolve over time. Internationalisation and networking behaviours of SMEs evolve individually and co-evolve over time. It is imperative to distinguish between causation and co-evolution.

Internationalisation and networking processes of SMEs co-influence one another, in one occasion SMEs’ networks have an impact or influence on internationalisation of the SME (for example, a SME might decide to enter a particular overseas market through piggybacking on an MNC and /or the SME might be part of a global supply chain and follow the global buyer all over the world). On the other hand, internationalisation might influence the networking behaviour of an SME, for instance, the SME might decide to enter a certain overseas market to increase its profitability and it will then try to find a suitable agent in that particular market to serve the customers). Thus, it is not possible to position network or internationalisation variables as being dependent or independent in this case.

38 The key premise of co-evolutionary perspective used in this research is that; there is no clear cause and effect relationship between the internationalisation and networking processes, but rather the these two processes co-evolve and co-influence one another at different points in time. For example, internationalisation could be triggered by a certain relationship (such as: unsolicited order from an overseas client) at a given point in time and the SME decision maker could decide to enter into a new overseas market at another point in time. Or the SME decision maker might decide to further penetrate a certain overseas market through searching for a new agent and at the same time s/he might also respond to an solicited order in the same market at the same point in time. This means that these two processes influence and cause one another at different points in time (or simultaneously) and co-influence one another in a cyclical manner.
Hence, both processes are not mutually exclusive they co-influence and depend on one another. In order to test this and to gain some insight on the different patterns of association between networks and internationalisation, a set of non-parametric correlations was conducted to test the correlation between; different network variables within each stage, different internationalisation outcomes within each stage and network variables and internationalisation outcomes within each stage. Finally, a set of correlations was also carried out between different network variables and internationalisation outcomes over time which is referred to as across stages correlations.

Since this research investigates the differences between SMEs behaviour in Egypt and the UK, I did not standardise which network variables and internationalisation outcomes to assess for each of the two samples. Instead, a correlation analysis was carried out for all of the above mentioned variables with the aim of identifying the significant correlations between the variables for each sample separately. This might shed some light on the differences in networking and internationalisation behaviours of UK and Egyptian SMEs. Within stage and across stage correlations for both UK and Egyptian SMEs are now discussed. For the breakdown of the measures for each case in the two samples please refer to Appendix 2.1
A. UK SMEs evolutionary and co-evolutionary patterns

To understand the evolutionary patterns of both networking and internationalisation behaviours of UK SMEs, the mean values of each variable and outcomes were calculated across the 20 cases and a simple graphical presentation is provided to highlight the development patterns of networking and internationalisation behaviours. Furthermore, a set of non-parametric (spearman) correlations were conducted within stages and across stages.

A.1 Within stage correlations and overall development patterns

I shall start by presenting network development patterns over time based on the mean value of the three network variables, followed by within stage non-parametric network correlations.

A.1.1 Network development patterns and within stage network correlations

Table 5.2 presents the means of the British SMEs network density, size and constraint level within each stage of the SME’s lifecycle.
Table 5.2: Average network measures within stages (UK SMEs, N=20).

<table>
<thead>
<tr>
<th>Time</th>
<th>Network size</th>
<th>Network density</th>
<th>Network constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>t₁</td>
<td>5</td>
<td>23.82</td>
<td>63.8</td>
</tr>
<tr>
<td>t₂</td>
<td>19</td>
<td>6.7</td>
<td>21.1</td>
</tr>
<tr>
<td>t₃</td>
<td>29</td>
<td>2.72</td>
<td>11</td>
</tr>
</tbody>
</table>

It is clear that mean network size increased over time as the company moved from pre-internationalisation stage to subsequent internationalisation stage. However, network density and constraint decreased over time, which indicates an inverse relationship between the network size and network density and constraint. This is depicted in Figure 5.2.
This means that over time UK-based SMEs tend to focus more on networking (building new contacts) and rely on sparse networks (less dense networks characterised by a relatively high level access of structural holes). The tendency to build new contacts and rely on relationships to have access to resources and information was highlighted by several respondents. Manu-12’s export manager mentioned that relations can be viewed as long-term investment:

"Something I found very important personally in dealing with relationships is that today’s tea boy might become tomorrow’s manager...[...] ...our guys are always attentive to every one of our clients...[...].. Because you never know even the tea boy may not become a manager but he may pass a message to somebody...[...].. This (word of mouth referral) costs you nothing it’s a very cheap commodity and very under used but not by ourselves...we know the significance of word of mouth".
Also, Manu-3’s founder argued that he would do anything to find the easiest and cheapest way to find a suitable relationship in overseas markets and the possibility that this new relationship might serve as a bridging relationship or a platform to access new sources of information and resources.

"I stand to lose everything and also stand to gain everything. We give the best personal service to our clients and suppliers, if someone needs me in Germany next week, I will find the easiest, cheapest and quickest way to go there... I recently gave a presentation in front of companies which wanted to export to Germany ....and my presentation was on how to do business in Germany and I said the first thing I did I went to three websites Easy Jet, Ryanair and BMI websites and I said where can I fly to, what is the cheapest option and once I have realised that, I went to Hamburg and tried to find a customer there in my level; it doesn’t matter if you lose some pennies and hasn’t come off that’s ok but at least you have...[...]. it is just simple things ....[...]. Moreover, relationships are crucial for our business and getting to find out that people can put you in touch is something amazing.... [...] ...making yourself available for that and that’s the only thing that works".

This company in particular relied extensively on the bridging relationships it created in individual overseas markets to get access to other key relationships in those markets and even in other countries to gain access to resources, network of distributors, suppliers and referrals to original manufacturers (OEMs).

Moreover, some entrepreneurs valued and utilised bridging relationships differently. Some relied on them mainly to have access to information, support or to enter new markets. Others created links with key brokers to reach otherwise unreachable relationships. The following two examples illustrate how SMEs might rely on structural holes differently over time. The first one is OG2
company which is an oil and gas company and the second one is a traditional manufacturer of multi-lock products.

The founder of OG-2 focused on a niche in the market and decided to establish his own company and focus on this niche. He was a former student of a well-known UK-based university and thought of capitalising on his strong relationship with the university to grow and expand his company. He utilised his geographical proximity to large oil and gas companies to access their overseas networks and enter new markets. Also, through referrals from these big MNCs other marine companies began approaching the company (these MNCs served as a platform or a bridging relationship). The links with marine companies enabled the company was able to sell its products through the overseas networks of these marine companies. However, as the company reached the SIS it began to aggressively pursue other markets (in which it has limited or no operations) and build relationships with agents and distributors in these new markets.

Another example, Manu-12 (which is a multi-lock manufacturer) followed a different networking approach in the pre-internationalisation stage. The company directly approached local clients who bought anything that could be made out of crude aluminium especially letter plates. They didn’t have any intention of exporting until some Scandinavian clients (who were using same type of letter plates like the UK) approached the company and began buying some of its products to be used in their respective markets. Over time the letter plates business died and the managing director decided that it was time to expand and specialise in multi-lock business. The sales manager/export manager then decided that in order to succeed the company had to compete with German manufacturers who were the key players in this industry and he began approaching the distributors and suppliers of OEMs in the UK and overseas in order to get access to OEMs and he managed to convince them that they offered the same good quality of German lock manufacturers but at a lower price. This was a huge success and it even forced the German manufacturers (through their subsidiaries in the UK) to approach Manu-12 and buy from it.
As the company entered the SIS, it began to think of exporting as the primary means of survival since the profits from home market were diminishing. They decided to de-internationalise for a while from Middle East and Far East countries and focus only on nearby markets such as Eastern Europe. It then approached its local chamber of commerce to help them get access to eastern European markets. Over time the company began to re-internationalise into diverse markets through direct search or reliance on key clients to get access to distributors or suppliers. In one instance the company relied on one of its clients that buys raw materials from China and asked him if he could refer them to someone who could help in finding reliable suppliers. The client then referred Manu-12 to VC company which is a private company that specialises in helping overseas companies to find good, reliable Chinese suppliers.

Also, Figure 5.2 infers that the higher the network density, the higher the network constraint (Burt, 1998; 2010; Hanneman and Riddle, 1998; Borgatti et al., 1998). However, if the network becomes too large it becomes difficult to manage and maintain (Coviello, 2006). Also, the larger the number of strong/close relationships (dense network) an ego has the more constraint s/he is because of most of his time and effort are devoted to maintaining a large number of strong relationships, giving him no access to structural holes (Burt, 1992; 2010).

Manu-9 is an example of a company that started off with a highly dense network and evolved into a large sparse network which became difficult to manage and also they relied on bridging relationships in subsequent internationalisation stages.

Manu-9 is a concrete and construction materials manufacturer. It started as a department in XY Company and in 1982 the current founder joined XY Company as an engineer in this department. Later it became a business unit and began to introduce a new range of metal coatings’ and
concrete products. The founder then became the export manager of the SBU. During the pre-internationalisation stage, the network density was 100% whereby the network size was only 3 (founder, XY co. and colleagues) with a network density score of 100% - because everyone in ego’s network is connected to the other and a network constraint level of 1.125 which is more than 1.00 (this is considered very high).

Within less than one year after the company’s establishment the founder was asked by his supervisor to start and target overseas markets to sell the new range of products through forming networks of distributors in each new market. He started by choosing two distributors one in Belgium, whose responsibility was to form a network of distributors and sell to the western European markets, the other distributor in the UAE, who found other distributors in Qatar and Saudi Arabia. Shortly after the success of these exporting attempts, the founder was then asked to establish a network of distributors to target new markets in the world. The founder then approached the local chamber of commerce and UKTI and sought their help. The UKTI team referred the founder to the overseas high commissioners and UKTI teams whereby they offered the founder with a list of potential clients. The founder also did desk research complying names of likely clients or distributors in a particular market and obtained their contact details from telephone directories and began contacting them.

The UK embassy in the Czech Republic provided the founder with a list of potential distributors out of which the founder chose one. This relationship evolved into a strong business relationship whereby the Czech distributor referred the company to his twin brother who lives in Sweden and he became the company’s distributor. Things followed a similar pattern whereby the founder approached different overseas consulates and acquired a list of potential distributors and approached them or he did his own research selected the ones that proved to be suitable. There were few
incidences of referrals from clients of distributors. On one or two occasions a few overseas agents approached the company as it began to have a well-known name a key characteristic of the relationship with UKTI is that Manu-9 became a preferential tie whereby it were always given a unique support in overseas markets and advice because of its success and strong relationship it developed with the UKTI and local chamber of commerce.

The network size during EIS was 43 and it had a density score of 44%. Moreover, the network constraint level decreased to 0.038, which means that the company relied on bridging relationships to a relatively high extent.

Over time the domestic market became more price-driven which made it nearly impossible for the company to stay competitive. Also, the original owner of the XY company started hiring more employees hoping to enhance the sales and marketing efforts. This attempt further increased the cost for the company and the original owner decided to sell the company. Manu-9’s founder and his colleague (a technical director) made an offer to the original owner of XY Company to buy out the division and they registered the company under the name of Manu-9. Both had a strong determination and vision to aggressively internationalise into overseas markets. During the subsequent internationalisation stage the company began to reactivate most of its old ties and relationships with clients and distributors and capitalize on them to enter new markets or obtain referrals to prospective agents. Moreover, several overseas clients approached the company through the website making the website one of the key means of further internationalisation of Manu-9. Furthermore, as Manu-9’s network began to expand it became really difficult to keep track of every single tie and to keep up to date with current development in overseas markets. He relied on existing strong relationships he had with overseas clients and distributors to help company to expand further.
The founder summarised his network behaviour by saying "when I look at all of these markets we want to enter, relationships are absolutely fundamental from all of these businesses overseas…. We bought, we opened a new business … […] … I do not have the time available to meet all of our export customers and distributors I am actually relying in many cases on very strong relationships which I built up and worked hard over more than twenty years … I am relying on these relationships now to carry us forward".

As Manu-9’s founder noted, network relationships are fundamental and crucial for his business however, if the network became very large over time it would became very difficult to manage and the only way out might be to rely on strong direct and/or bridging relationships he established over time.

The same networking logic was mentioned by founder of Con-2. He noted that:

"Finding the right people to deal with and seek advice from is essential to our business.. I view relationships as our key business model…[..]. However, it is only me who manages the company and I can’t keep in touch frequently with all of our key contacts… so I tend to evaluate regularly those relationships that yield best benefits and discard the ones that are not useful or beneficial".

Con-2 follows a different rationale when it comes to dealing with large networks; the company tends to follow a calculative approach whereby they maintain those ties that generate benefits and discard those that are not beneficial anymore.

These examples raises the question of whether there is a significant correlation between network size and network constraint and density as the SME moves from pre-internationalisation to
subsequent internationalisation stage. To answer this question a set of non-parametric correlations was carried out to highlight significant correlations (if any) between these three variables over time. These correlations are presented in Table 5.3.

All of the variables were tested using Shapiro and Wilk normality test, Skewness and Kurtosis z-scores to identify which ones approached normal distribution. Most of the variables were not normally distrusted apart from network constraint at time t1 and average density over time and rate of growth at time t’n. This is an expected conclusion since both samples were only 20 cases and this is a very small sample. Moreover, the basic assumption of this research is that network and internationalisation variables correlated and each influence one another. So it is not possible in this case to identify which ones are the dependant and/or the independent variable. Hence, non-parametric correlations were used (Shapiro and Wilk, 1965; Razali and Wah, 2011; Cramer, 1998; Cramer and Howitt, 2004; Doane and Seward, 2011).
Table 5.3: Within stage network correlations (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Network density t1</th>
<th>Network density t2</th>
<th>Network density t3</th>
<th>Net size t1</th>
<th>Net size t2</th>
<th>Net size t3</th>
<th>Net constraint t1</th>
<th>Net constraint t2</th>
<th>Net constraint t3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network density t1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network density t2</td>
<td>0.293</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network density t3</td>
<td>-0.235</td>
<td>0.355</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net size t1</td>
<td>0.351</td>
<td>0.137</td>
<td>-0.119</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net size t2</td>
<td>0.259</td>
<td>-0.196</td>
<td>-0.095</td>
<td>0.234</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Net size t3</td>
<td>0.061</td>
<td>0.017</td>
<td>-0.164</td>
<td>-0.011</td>
<td>-0.222</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Net constraint t1</td>
<td>0.178</td>
<td>0.090</td>
<td>0.136</td>
<td>-0.740**</td>
<td>-0.076</td>
<td>-0.012</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net constraint t2</td>
<td>0.209</td>
<td>0.573**</td>
<td>0.230</td>
<td>0.167</td>
<td>-0.575**</td>
<td>0.436</td>
<td>0.015</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Net constraint t3</td>
<td>-0.202</td>
<td>0.208</td>
<td>0.946**</td>
<td>-0.186</td>
<td>0.008</td>
<td>-0.252</td>
<td>0.226</td>
<td>0.097</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.
As shown in the Table 5.3, there is a significant correlation between different network variables during the course of the SME internationalisation. During pre-internationalisation stage, none of the network variables showed significant correlation with one another. However, as the SMEs began to internationalise network constraint and network density showed significant positive correlations during the early and subsequent internationalisation stages. This means that as the SMEs network density decreases—less cohesive, sparser networks—the SMEs level of network constraint decreases; which means that there are more structural holes in the SME’s network.

Furthermore, there is a negative correlation between network size and network constraint in the pre-internationalisation and early internationalisation stages, whereby, as SME’s network size increases the SME, tends to depend more on bridging relationships (access to structural holes) as it moves from pre-internationalisation stage [PIS] to early internationalisation stage [EIS]. This means that the SME builds new relationships as it moves from the pre-internationalisation to early internationalisation stage and relies more on access to structural holes to gain access to new sources of information and resources. Surprisingly, there is no significant correlation between network size and network constraint as the SME moves into the subsequent internationalisation stage [SIS].

Referring to Table 5.2, it is clear that the percentage change in network size is very high as the SME moves from pre-internationalisation stage to early internationalisation stage (53%) which is greater than it is between the early internationalisation and subsequent internationalisation stage (28%). The percentage of change in level of network constraint is relatively high (decreased from 67% to 48%). This may explain why there is a significant negative correlation between network size and network constraint during PIS and EIS. Another plausible explanation could be as the SME moves into subsequent internationalisation stage [SIS] it has enhanced its networking capability and improved their internationalisation experience. This means that SMEs become more active in building new relationships (intentionally managing ties) by themselves rather than relying on referrals or intermediaries (brokers) to do so. Moreover, some of the UK SMEs establish a strong legitimacy and become well recognised in local and overseas markets which encourage clients and suppliers to approach them directly. Also, recently the internet has played a crucial role in the further
internationalisation of UK-based SMEs. This suggests that access to structural holes is not as important in the SIS as it is at the PIS and EIS. Moreover, at the SIS, SMEs would have advanced their networking capability and gained more power or status (Burt and Merluzzi, 2013) and they then themselves become brokers and start to dictate their own terms on new ties they create.

Manu-5 for example, is knowledge-intensive company whereby during the SIS stage the founder managed to create relationship with a large MNC called U co. This MNC has a large global network of distributors/agents in most of the countries around the world. The founder managed to persuade the MNC to let the SME become its UK-based agent. In the international sales meeting the founder met up with Mr P who is the international sales director of U co. and they got along pretty well. Mr P then Left U co. and opened his own business called P company in Mexico. The founder then approached Mr P and asked him to be his agent in Mexico and that Manu-5 would be the company’s agent in the UK. Both Mr P and Manu-5 founder formed a mutual agency agreement capitalising on each other network of distributors. Moreover, they also utilised the connection they had with U company’s network of distributors worldwide and through this network they would sell their products around the world.

Also during the SIS through the profound and established profile the company has, a large distribution company in India approached the company through their website and suggested becoming their agent and supplying their products to Asia. The founder wanted this distributor to form and find agents in Australia and New Zealand and supply the company’s products through them. This shows how the company’s enhanced network capabilities and status helped it to negotiate favourable terms with MNCs and a large distribution companies around the world.
A.1.2 Internationalisation development patterns and within stage internationalisation correlations

The SME is likely to pass through two internationalisation stages mainly EIS (t2) and SIS (t3). The means of the two internationalisation outcomes are summarised in Table 5.4 and Figure 5.3.

Table 5.4: Internationalisation outcomes within stages (UK sample, N=20)

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage of foreign sales</th>
<th>No. of foreign markets</th>
<th>No. of regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>t2</td>
<td>32%</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>t3</td>
<td>53%</td>
<td>19</td>
<td>5</td>
</tr>
</tbody>
</table>
The percentage of foreign sales to total sales during the EIS and the SIS has increased from 32% to 53% which is an indication of increased the scale of British SMEs internationalisation over time. Furthermore, breadth and scope of internationalisation is measured by number of regions and overseas markets in which SME operate has increased from the EIS to the SIS. The number of foreign markets served increased from 7 to 19 and the number of regions increased from 4 to 5. This demonstrates that UK-based SMEs increased the depth and the breadth of their internationalisation as they became more engaged into overseas markets and moved to the SIS.

The internationalisation rationale and behaviour differ as the company becomes more accustomed to internationalisation and gains more confidence in its ability to excel in overseas markets. The founder of Manu-3 stated that: 

Figure 5.3: within stages internationalisation development patterns
"When we get the first inquiry and the prices are low we don’t want to lose any money, but we are not greedy so once we get the order we fulfil it and so forth for two times and then we started to increase the price. Because it’s important to get into new markets and in many different markets and seven-eight years ago we really had nothing”.

Also Manu-9’s founder argued that:

"Probably in about mid 1990’s (start of subsequent internationalisation stage)….we were looking at a map of the world and we had a map on the wall and started asking ourselves where in the world we are not operating or not doing any business. What are we targeting? .... I’m sorry to say but it’s really hard work and I carry on talking about kissing frogs... if you know the old story of kissing frogs... occasionally, bingo you get the conversion you want....you have to be very enthusiastic and keep going....".

In order, to check if there is a significant correlation between the three internationalisation outcomes within stages, a set of non-parametric correlations was conducted and the results are presented in Table 5.5.
Table 5.5: Within stage internationalisation correlations
(Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Percentage of foreign sales $t_2$</th>
<th>Percentage of foreign sales $t_3$</th>
<th>Number of regions $t_2$</th>
<th>Number of regions $t_3$</th>
<th>Number of markets $t_2$</th>
<th>Number of markets $t_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of foreign sales $t_2$</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of foreign sales $t_3$</td>
<td>0.376</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions $t_2$</td>
<td>0.053</td>
<td>0.115</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions $t_3$</td>
<td>-0.098</td>
<td>0.335</td>
<td>0.607**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets $t_2$</td>
<td>0.021</td>
<td>0.014</td>
<td>0.802*</td>
<td>0.321</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Number of markets $t_3$</td>
<td>-0.148</td>
<td>0.117</td>
<td>0.079</td>
<td>0.651**</td>
<td>-0.147</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.

As shown in Table 5.5, there is a significant positive correlation between number of markets and number of regions in the early and subsequent internationalisation stages respectively. Moreover, there is a significant correlation between the number of regions in the early internationalisation stage [EIS] and number of regions at the subsequent internationalisation stage [SIS]. This suggests that internationalisation breadth increases over time in terms of number of markets and number of regions in which SMEs operates and that British SMEs tend to internationalise and expand to a largely geographically dispersed markets during EIS and SIS respectively. Furthermore, it could be argued that there is a likelihood that if the SME starts to pursue diverse and largely geographical dispersed markets in the EIS, they are more likely to continue to do so in the SIS.
A.1.3 Within stages co-evolutionary correlations

As shown in the previous examples, SMEs rely on network ties to have access to needed resources and information and to cease new opportunities as they emerge. It is crucial to see which of the network variables have a significant correlation with internationalisation and which ones do not. Table 5.6 illustrate the correlation between network variables and internationalisation outcomes within each stage. Also, the possibility that one variable might be correlated with another one in a subsequent stage is also investigated. For instance, it is worthwhile investigating if network constraint in EIS has an influence on the number of markets in which a company operates in SIS, because if there is a negative correlation between these two variables one could argue that the more the company relies on referrals or bridging relationships in the EIS stage, it is more likely to be more geographically diverse in subsequent internationalisation stage because of the opportunities that were made readily available for the company through those bridging relationships.
Table 5.6: Within stage co-evolutionary correlations (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Net. density $t_1$</th>
<th>Net. density $t_2$</th>
<th>Net. density $t_3$</th>
<th>Net size $t_1$</th>
<th>Net size $t_2$</th>
<th>Net size $t_3$</th>
<th>Net const. $t_1$</th>
<th>Net const. $t_2$</th>
<th>Net const. $t_3$</th>
<th>Percentage of foreign sales $t_2$</th>
<th>Percentage of foreign sales $t_3$</th>
<th>Number of regions $t_2$</th>
<th>Number of regions $t_3$</th>
<th>Number of markets $t_2$</th>
<th>Number of markets $t_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network density $t_1$</td>
<td>1.000</td>
<td>0.293</td>
<td>-0.235</td>
<td>0.351</td>
<td>0.137</td>
<td>-0.119</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network density $t_2$</td>
<td>0.293</td>
<td>1.000</td>
<td></td>
<td>-0.196</td>
<td>-0.095</td>
<td>0.234</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network density $t_3$</td>
<td>-0.235</td>
<td>0.355</td>
<td>1.000</td>
<td>0.261</td>
<td>0.17</td>
<td>-0.164</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Net size $t_1$</td>
<td>0.351</td>
<td>0.137</td>
<td>-0.119</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Net size $t_2$</td>
<td>0.259</td>
<td>-0.196</td>
<td>-0.095</td>
<td>0.234</td>
<td>1.000</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Net size $t_3$</td>
<td>0.061</td>
<td>0.17</td>
<td>-0.164</td>
<td>-0.011</td>
<td>-0.222</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net constraint $t_1$</td>
<td>0.178</td>
<td>0.090</td>
<td>0.136</td>
<td>-0.740**</td>
<td>-0.76**</td>
<td>0.012</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Net constraint $t_2$</td>
<td>0.209</td>
<td>0.573**</td>
<td>0.230</td>
<td>-0.575**</td>
<td>0.436</td>
<td>0.015</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net constraint $t_3$</td>
<td>-0.202</td>
<td>0.208</td>
<td>0.946**</td>
<td>-0.186</td>
<td>0.008</td>
<td>-0.252</td>
<td>0.226</td>
<td>0.097</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of foreign sales $t_2$</td>
<td>0.379</td>
<td>-0.080</td>
<td>-0.225</td>
<td>0.051</td>
<td>0.142</td>
<td>-0.113</td>
<td>0.199</td>
<td>0.098</td>
<td>-0.053</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of foreign sales $t_3$</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.6: Within stage co-evolutionary correlations (Spearman's rho correlation coefficient)"Cont'd"

<table>
<thead>
<tr>
<th></th>
<th>Net. density t₁</th>
<th>Net. density t₂</th>
<th>Net. density t₃</th>
<th>Net size t₁</th>
<th>Net size t₂</th>
<th>Net size t₃</th>
<th>Net constrait t₁</th>
<th>Net constrait t₂</th>
<th>Net constrait t₃</th>
<th>Percentage of foreign sales t₂</th>
<th>Percentage of foreign sales t₃</th>
<th>Number of regions t₂</th>
<th>Number of regions t₃</th>
<th>Number of markets t₂</th>
<th>Number of markets t₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of foreign sales t₃</td>
<td>0.154</td>
<td>0.227</td>
<td>0.264</td>
<td>-0.048</td>
<td>-0.380</td>
<td>0.189</td>
<td>0.022</td>
<td>0.384</td>
<td>0.336</td>
<td>0.376</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions t₂</td>
<td>0.069</td>
<td>-0.402</td>
<td>0.102</td>
<td>0.102</td>
<td>0.575**</td>
<td>-0.087</td>
<td>-0.134</td>
<td>-0.435</td>
<td>0.230</td>
<td>0.053</td>
<td>0.115</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions t₃</td>
<td>0.197</td>
<td>0.136</td>
<td>0.275</td>
<td>0.002</td>
<td>0.166</td>
<td>0.396</td>
<td>-0.012</td>
<td>0.173</td>
<td>0.261</td>
<td>-0.098</td>
<td>0.335</td>
<td>0.607**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets t₂</td>
<td>0.088</td>
<td>-0.337</td>
<td>0.139</td>
<td>0.275</td>
<td>0.628**</td>
<td>-0.353</td>
<td>-0.280</td>
<td>0.048</td>
<td>0.261</td>
<td>0.021</td>
<td>0.014</td>
<td>0.802**</td>
<td>0.321</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Number of markets t₃</td>
<td>0.136</td>
<td>0.075</td>
<td>0.009</td>
<td>0.030</td>
<td>-0.168</td>
<td>0.833'</td>
<td>-0.511*</td>
<td>0.433</td>
<td>-0.108</td>
<td>-0.148</td>
<td>0.117</td>
<td>0.079</td>
<td>0.651**</td>
<td>-0.147</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.
As shown in the above correlation matrix, there is a positive correlation between network size and number of regions and number of markets at EIS; and a positive correlation between network size and number of markets in SIS. This strongly suggests that the SME’s network size increases, the SME’s internationalisation breadth increases (in terms of increased number of markets and regions)\textsuperscript{6}. Surprisingly, there is no significant correlation between the network size and percentage of foreign sales. This suggests that British SMEs rely on their existing network contacts to diversify and increase the number of their overseas markets across different regions.

There is a significant negative correlation between network constraint at the PIS stage and number of markets in SIS. This implies that British SMEs rely more on intermediaries and/or third party referrals during their early internationalisation stage in order to gain access to information and resources that they would later utilise to enter new markets during subsequent internationalisation stage.

A.2 Across stages co-evolutionary correlations

We have seen that network variables correlate with internationalisation outcomes within the early and subsequent internationalisation stages and they might even influence the evolution from one stage to another. For example, the level of network constraint in PIS was highly negatively correlated with the number of markets in SIS. This suggests an accumulation of knowledge and experience from third party referrals that would later facilitate the SMEs entry to new markets in the subsequent internationalisation stage\textsuperscript{40}.

\textsuperscript{40} It is important to note that the opposite process also applies, whereby as the SME enters new markets it is more likely to form new relationships in those markets.
It is worthwhile investigating if these arguments hold true over time; taking into account the current status quo of UK-based SMEs. Therefore a set of measures were calculated to assess if any of the network variables influence and are influenced by internationalisation outcomes over time. These are measures that take time into account and draw our attention to the status of SMEs at the present time. Table 5.7 demonstrates the co-evolutionary correlations over time.

For example, the percentage of foreign sales at time $t_n$ is the percentage of foreign sales that was reported by the SMEs for the period between 2010 and 2012. The number of markets and regions is the total number of markets and regions the SME operates in without taking into account the chronology of events.

As for the network variables, the average network size, average network density and average network constraint were calculated for each of the three stages $^{41}$.  

$^{41}$ The average network size is equal to total network size of the three stages divided by the number of stages. The same logic applies to network density and constraint. The researcher computed the accumulated figures of network density, size and constraint to test if different correlations with internationalisation outcomes would appear. There was no significant differences between accumulated and average figure of the three network variables would yield a different significant correlation with internationalisation. The reason behind this is that network measures computed for each stage takes into account the ties that were established during this stage.
As shown in Table 5.7, there is no significant correlation between any of the network variables across stages of internationalisation. In other words, average network size, average network density and average network constraint are not correlated as is the case within stages.

There is a significant positive correlation between the average network size and number of markets at Tn. This suggests that over a period of time, British SMEs rely extensively on relationships to enter new overseas markets. This is illustrated by the founder and managing director of Lek Company:

---

**Table 5.7: Co-evolutionary correlations across stages (Spearman's rho correlation coefficient)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average net density over time</th>
<th>Average network size over time</th>
<th>Average net constraint over time</th>
<th>No. of years being inter.</th>
<th>Percentage foreign sales at Tn</th>
<th>Number of regions at Tn</th>
<th>Number of markets at Tn</th>
<th>Rate of growth at Tn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average net density over time</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average network size over time</td>
<td>0.068</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average net constraint over time</td>
<td>0.415</td>
<td>-0.205</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of years being inter.</td>
<td>0.078</td>
<td>0.247</td>
<td>0.171</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage foreign sales at Tn</td>
<td>0.179</td>
<td>-0.359</td>
<td>0.060</td>
<td>-0.097</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions at Tn</td>
<td>0.158</td>
<td>0.337</td>
<td>0.044</td>
<td><strong>0.508</strong>*</td>
<td>0.095</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets at Tn</td>
<td>0.023</td>
<td><strong>0.490</strong>*</td>
<td>0.140</td>
<td><strong>0.603</strong>*</td>
<td>-0.131</td>
<td>0.706**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Rate of growth at Tn</td>
<td>0.202</td>
<td>-0.336</td>
<td>0.017</td>
<td><strong>-0.640</strong>*</td>
<td>0.746**</td>
<td>-0.234</td>
<td>-0.457**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
***N=20
"Our networking strategy is that of a sales and engineering oriented company. So the position is that sales have to come and services have to be provided and engineers fix them and then we get paid. So we do anything in our capacity through being sales aggressive finding relationships needed to do that whether inside or outside the company. We have for each sales person and managers a target. Also, each one of the manager sums every night saying how good or bad he/she is doing and we make a competition between our different branches. Each branch manager gets an email saying to him what other branches say in Poland or Portugal has done (in terms of maintaining crucial relationships and finding new markets), and only the managers can see it."

Moreover, the co-founder of OG1 company argued that without referrals and word of mouth the company would have not been able to become a global company (this company operates in 6 continents and in 14 markets). He said:

"Our internationalisation was a slow build up process over a period of time. As people got to know us, friends and J (co-founder) has a very good personality and gets along with nearly everyone. What helped us to internationalise globally is the word of mouth. We have tried to advertise using brochures. We have also tried exhibitions and we found that we are spending thousands and thousands and we could not really find the return from it... So relationships with large MNCs (oil and gas companies) has helped us in our internationalisation spread and kept us moving forward until this date".

Furthermore, there are some interesting correlations between different internationalisation outcomes over time. The number of years being international is positively correlated with number of regions and number of overseas markets. However, it is negatively correlated with
the rate of growth at time $t_n$. This implies that as the SMEs learning and international experience increases, they gain more confidence to internationalise into a larger number of diverse markets.

There is a negative correlation between the number of years being international and rate of growth\(^{42}\), the overall average rate of growth of the British SMEs is 4% and the average number of years the UK-based SMEs spend operating in international markets is 24 years. One plausible explanation is that the longer a SME spend in operating in overseas markets the lower the yearly growth rate. Although there are some companies in the sample which have been operating in international markets for over 30 years, the objective here is just to give an overview of the internationalisation behaviour of the SMEs. Individual cases will be discussed more closely in the next chapter. Moreover, the percentage of foreign sales is positively correlated with the rate of growth. This suggests that the higher the percentage of foreign sales the higher is the growth rate of the SME.

Furthermore, the number of overseas markets is positively correlated with the number of regions and is negatively correlated with the rate of growth\(^{43}\). This suggests that UK-based SMEs focus more on market diversification and becoming global companies more than they focus on increasing the level of their international sales revenue. This might be attributed to the SMEs piggybacking a multinational that operates on a worldwide scale. SMEs are often part of a global supply chain and this is reflected in a large number of diverse markets that the SME has access to.

For example, Manu-1 is a conveyor manufacturer and they tend to be part of a global supply chain of conveyor handling and manufacturing. In its early days the company was the main

\(^{43}\) It is important to note that it is easier for a smaller firm to achieve a high rate of growth (%) than a larger firm (i.e. relative growth) as opposed to growth in absolute terms.
provider of conveyors used by the British royal mail. Since the UK has the oldest Royal Mail system in the world, they were responsible in helping other countries in installing and operating mailing systems. This involved having British expatriates working with people in overseas markets and most of these expatriates know about Manu-1 through the former interaction (as Manu-1 was the main conveyor supplier of Royal Mail) and they asked the company to supply the overseas mail and post offices. During the subsequent internationalisation stage the company was one of the key airport conveyor manufacturers and suppliers in the world and they tended to supply most of the airports around the world.

Another example, OG1 is an oil and gas company and it sells safety signs for marine and oil and gas companies overseas. They started their early internationalisation through Shell (large MNC) and through its links with other overseas oil and gas companies; OG1 was the main supplier of these overseas oil and gas companies in different oil and gas capitals around the world.

B. Egyptian SMEs evolutionary and co-evolutionary patterns

To understand the evolutionary patterns of both networking and internationalisation behaviours of Egyptian SMEs, the mean values of each variable and performances/outcomes were calculated across the 20 cases and a simple graphical presentation is provided to highlight their patterns of development at the three points in time. Furthermore, a set of non-parametric (Spearman) correlations were computed both within stages and across stages. In other words, the same analysis was followed as for the UK SMEs.
B.1. within stage correlations and overall development patterns

I shall start with presenting network development patterns over time based on the mean value of the three network variables, followed by within stage non-parametric network correlations.

B.1.1 Network development patterns and within stage network correlations

Table 5.8 gives the means of the Egyptian SMEs network density, size and constraint level within each stage of the SME’s lifecycle.

Table 5.8: Average/mean values of network variables within stages (Egyptian SMEs, N=20).

<table>
<thead>
<tr>
<th>Time</th>
<th>Network size</th>
<th>Network density</th>
<th>Network constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>t₁</td>
<td>10</td>
<td>30.03</td>
<td>47</td>
</tr>
<tr>
<td>t₂</td>
<td>17</td>
<td>4.14</td>
<td>16.5</td>
</tr>
<tr>
<td>t₃</td>
<td>17</td>
<td>2.33</td>
<td>8.12</td>
</tr>
</tbody>
</table>

In general, network size increased from the pre-internationalisation stage [PIS] to the early internationalisation stage [EIS]. However, it remained the same as SMEs moved from early internationalisation stage to subsequent internationalisation stage [SIS]. Network density and network constraint decreased over time as the SME moved from the PIS to the SIS. The evolution of the three network variables is presented in Figure 5.4.
There is an inverse relationship between network size, network density and network constraint. Also, there is a positive relationship between network density and network constraint within each of the three stages of SMEs life cycle. To evaluate the significance of these correlation and whether this hold true within each stage of SME’s life cycle, a set of Spearman non-parametric correlations was conducted to test the relationship between variables. These are presented in Table 5.9.

---

44 Out of the 20 Egyptian SMEs, 6 companies did not reach the subsequent internationalisation stage. This leaves 14 companies which reached the subsequent internationalisation stage. For the sake of simplicity those companies that haven’t reached the third stage were given a score of zero. This might deflate or decrease the average figures used Table 5.8 and figure 5.4 Therefore, it is important to be aware of this aspect when interpreting the results. By contrast, only two of the UK cases reached the subsequent internationalisation stage.
Table 5.9: Within stage network correlations (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Network density t1</th>
<th>Network density t2</th>
<th>Network density t3</th>
<th>Net size t1</th>
<th>Net size t2</th>
<th>Net size t3</th>
<th>Net constraint t1</th>
<th>Net constraint t2</th>
<th>Net constraint t3</th>
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<tr>
<td>Network density t1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network density t2</td>
<td>0.248</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Network density t3</td>
<td>0.251</td>
<td>0.484</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net size t1</td>
<td>-0.910**</td>
<td>-0.127</td>
<td>-0.271</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net size t2</td>
<td>0.235</td>
<td>-0.459*</td>
<td>-0.401</td>
<td>-0.236</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net size t3</td>
<td>0.410</td>
<td>0.515*</td>
<td>0.452*</td>
<td>-0.202</td>
<td>-0.296</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net constraint t1</td>
<td>0.957**</td>
<td>0.139</td>
<td>0.173</td>
<td>-0.958**</td>
<td>0.348</td>
<td>0.287</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net constraint t2</td>
<td>-0.131</td>
<td>0.605**</td>
<td>0.476*</td>
<td>0.170</td>
<td>-0.924**</td>
<td>0.394</td>
<td>-0.248</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Net constraint t3</td>
<td>0.214</td>
<td>0.301</td>
<td>0.946**</td>
<td>-0.301</td>
<td>-0.441</td>
<td>0.341</td>
<td>0.157</td>
<td>0.443</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.
The correlation matrix presented in Table 5.9, shows that network size is negatively correlated with network density and network constraint during the PIS. This implies that the smaller the size of a SME’s network during the PIS stage, the more dense the network (cohesive) and it is likely to have limited access to new sources of information and opportunities (embedded in networks with several bridging relationships that offer access to structural holes). As shown in Table 5.8, the mean of network size during PIS is 10, which indicates that Egyptian SMEs have a relatively small network during the pre-internationalisation stage and a relatively dense network with a mean score of 30%.

Network density in the pre-internationalisation stage is positively correlated with network constraint. This implies that the denser an SME’s network during the PIS, the less likely it will depend on weak bridging relationships to gain access to new sources of information and opportunities. Egyptian entrepreneurs tend to rely on their close friends and colleagues to seek support and help. If close friends in entrepreneur’s network cannot help, they would then ask them for personal recommendations to help solve a particular problem or to obtain the information they need. In other words, it is the immediate close ties that help entrepreneurs have access to certain brokers. For instance, FR-1 is an example of a company that relied heavily on the founder’s network of close strong relationships. Over time, it created other strong and close relationships and devoted every possible effort was devoted to keep the dense network intact.

FR-1’s founder- Mr M -graduated from one of well-known public universities in Egypt and during his university years he established a portfolio of close friends. After graduation each of those friends went on his own way and when the founder decided to open a company, the
founder approached two of his friends as he thought they would surely help him. They provided him with the capital he needed to start the business and left its management fully in his hands. Then one of his friends Mr S who became a leather manufacturer referred the company to one of the large public department stores in Egypt (R stores). Through them the company began to expand and grow locally. In addition, this leather manufacturer referred the founder to other suppliers of wood that were reliable and cheap.

The sales and production managers of the same company established strong relationships with top and lower level managers of the Omar Affandi department store (the largest public store in Egypt) and they directly approached the store.

They said that establishing relationships with lower level managers not just top managers, was crucial because these lower level managers serve as key sources of insider information and are a very good source of referral. For example, they tend to let the company know if there is a project coming up (say an order coming from a resort in Sharm El Shiekh) and ask the company to prepare a proposed design of furniture which they will then show to their top level managers, as a result, the company gets a preferential chance to be selected.

These managers also referred clients to FR-1 if they requested something that the stores did not offer. This helped the company to expand into 42 different governorates and cities around Egypt through the network of branches this store had. This shows that dense networks whether those of the founder or established during PIS are key to the company’s survival and growth, especially within the local market. Because of these friends’ help and the dense network, the company was able to gain access to sources of support from the most successful export
promotion agency, called IMC or expo-link (these agencies offer the most reliable source of support if you manage to get into them through being connected through a key player in the field or they pick successful companies). Fr-I managed to export for the first time through an American friend of the founder and then the founder was approached by IMC and through the IMC the company participated in several fairs whereby local and international clients bought and made orders from the company. Since then this has been one of the key ways through which the company got into overseas markets. However, building strong relationships with overseas clients took time and because of the poor reputation of Egyptian products they have to see the product first and this might be one of the main reasons that companies focus more on the density of networks than on their size.

In a similar fashion, during the early internationalisation stage [EIS] network density and network constraint are positively correlated and both were negatively correlated with network size.

By contrast, network density and size are positively correlated in the subsequent internationalisation stage [SIS]. This suggests that if SME’s network size increases, that network becomes more cohesive and the SME relies on a limited number of bridging relationships (since there is a positive correlation between network density and network constraint in SIS).

Interestingly, a network variable in one stage could be correlated with another network variable in a subsequent stage. For instance, network constraint in EIS is positively correlated with network density in SIS. This means that the less the SME relies on bridging relationships (i.e. access to structural holes) in the early internationalisation stage, the more likely it will have a denser (more cohesive) network in the subsequent internationalisation stage. One explanation could be that the company during the EIS relied on bridging relationships to reach out for contacts with which they have no direct relationship, but over time the bridging relationships
decayed and those ties, that were disconnected from ego during EIS, become stronger and closer relationships over time due to frequent interaction (Burt, 2001). The tendency of Egyptian entrepreneurs to value strong close relationships and do everything they can to maintain their closeness, is consistent with the collectivist culture of Egyptian entrepreneurs.

In addition, network density in the EIS is positively correlated with network size in the SIS. This suggests that the more dense (cohesive) the SME’s network in the early internationalisation stage the larger the network size will be in the subsequent internationalisation stage and vice versa. As highlighted by some of the cases, costs of internationalisation increased over time as SMEs became more internationally involved. This may have forced some entrepreneurs’ to rely heavily on the dense strong networks and they had in the PIS and the EIS to gain access and referrals to key gatekeepers in domestic and overseas markets to mitigate against the costs of increased internationalisation. For instance, FR-2 (a manufacturer of hand-made furniture) depended heavily on family and friends who immigrated in US and Canada to help him expand in the USA during the EIS, and over time with increased competition and key internal conflicts that arose from different US agents. The founder capitalised heavily on close friends and family members in the US to sort out the problems with US clients and to help him find other prospective agents with their own network of distributors. This suggests that as the Egyptian SMEs become more involved in overseas markets the more likely they will rely on Egyptian immigrants in overseas markets to offer support and also to refer them to new contacts that might help the companies to further penetrate overseas markets.

Another example is EB’s founder, who is a doctor (Dr AS). He graduated from medical school and had a colleague (Dr O) from university whom he approached and told him about his idea, and they agreed to work together (both became the co-founders). Dr AS capitalised on his
relationship with a former school friend with whom he had lived in Kuwait and studied in the same high school. This friend is of a Syrian origin and he helped the founder to find critical ingredients he needed to manufacture the product. Also the friend came and taught the company the required know-how at a relatively cheap price. The other co-founder used to be a medical representative of a Saudi company in Egypt with a large number of distributors and distribution companies. The co-founder depended on his strong relationship with these distributors across the three stages of the firms’ lifecycle. In the beginning they helped the company to distribute the product in the domestic market and to establish a strong presence in the home market. The first co-founder also capitalised on personal relationship to know about what support is offered for SMEs and he managed to acquire a very useful piece of advice about the Social Fund for Development and that they offer loans for SMEs and tax exemptions for beneficiaries up to ten years.

During the EIS stage they relied on the relationship the second co-founder had with his former employer and the Saudi distribution companies he dealt with to promote the product and sell it to Saudi Arabia. The first co-founder referred him to a friend who knows someone in one of the biggest distribution companies in Yemen, and through this link he managed to enter Yemeni markets.

After some time this company stopped exporting and placed the business on hold, and both co-founders went to university and managed to get an MBA. This was to help them learn how to manage the company. Through their links with university professors they were given important advice on management and finance. Through a mutual friend, an export manager was found and appointed for a year to help the company learn how to export. This helped the company to move into the SIS where it reactivated the overseas and local relationships it had placed on hold and asked these ties (especially ones in overseas markets) to refer them to other distributors or
get referral to enter other markets. They mentioned that relying on friends (informally) helps
the company to know information about - for example - where to get something, what support is
available to it or who to contact in company X and that these referrals played a significant role
in a company’s survival and growth and led to an increase in foreign sales revenue and
diversity of markets.

B.1.2 Internationalisation development patterns and within stage internationalisation
correlations

Table 5.10 and Figure 5.5 depict the internationalisation patterns of the Egyptian SMEs over
time. These SMEs continued to internationalise into the same number of markets and regions
as in the early internationalisation and subsequent internationalisation stages. One plausible
explanation for this is that Egyptian SMEs continued to focus on further penetration of
existing markets and enriching and reinforcing relationships that were developed during the
PIS and EIS stages. This is closely linked with the unlimited change in SME network size
from EIS and SIS and the limited increase in percentage of foreign sales to total sales.

This raises an important question, whether there is a connection between the network size,
density and constraint levels and the limited advancement in the Egyptian SMEs
internationalisation. One way to answer this is to test if there is a correlation within stages
between network and internationalisation variables.

Table 5.10: Average/mean values of internationalisation outcomes within stages

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage of foreign sales</th>
<th>No. of markets</th>
<th>No. of regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>( t_2 )</td>
<td>37%</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>( t_3 )</td>
<td>42%</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
Figure 5.5: within stage internationalisation development patterns

To further understand the internationalisation patterns of Egyptian SMEs across the EIS and SIS stages, a set of non-parametric correlations are presented in Table 5.11.
Table 5.11: Within stage internationalisation correlations:

<table>
<thead>
<tr>
<th></th>
<th>Percentage of foreign sales $t_2$</th>
<th>Percentage of foreign sales $t_3$</th>
<th>Number of regions $t_2$</th>
<th>Number of regions $t_3$</th>
<th>Number of markets $t_2$</th>
<th>Number of markets $t_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of foreign sales $t_2$</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of foreign sales $t_3$</td>
<td>0.202</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions $t_2$</td>
<td>0.127</td>
<td>-0.180</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions $t_3$</td>
<td>0.196</td>
<td>0.811**</td>
<td>-0.398</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets $t_2$</td>
<td>0.252</td>
<td>-0.459*</td>
<td>0.600**</td>
<td>-0.489*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Number of markets $t_3$</td>
<td>0.150</td>
<td>0.806**</td>
<td>-0.363</td>
<td>0.912**</td>
<td>-0.401</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.

As shown in Table 5.11, the number of regions and number of markets during the early internationalisation stage are positively correlated. However, the percentage of foreign sales during EIS is not significantly correlated with any of other internationalisation outcomes. This suggests that the higher the number of overseas markets in which the SME operates the more geographically diverse is the SME’s international operations.

However, in SIS the three internationalisation outcomes are positively correlated. This suggests that the lower the percentage of SME’s foreign sales, the more likely that the SME will operate in a limited number of geographically diverse markets and vice versa. This could be attributed to the fact that Egyptians view exporting to Europe and the western world as a key
challenge and only few exceptions manage to export to western countries. These were mainly software application providers. For instance, the founder of Fr-3 -which is a furniture manufacturer-, stated that:

“*It is embedded in our culture that if you export to Europe that is exceptional ...[...].... meaning that it’s very difficult and only few ones (companies) do that.[...]....so it is easier to sell to Arab countries and the Middle East rather than Europe and USA as they have more stringent requirements and different consumer tastes*”.

On the other hand, other entrepreneurs mentioned that they can do exceptionally well in overseas markets and that they could even excel over foreign competition as the founder of SF-2 argued:

"*No we can export to any country we want. If they can manufacture useful and important software ,we can excel over them and that is what happened with one of our products ;we excelled over the only German manufacturer who manufactures these statistical software and we even won his clients over ...[...]. They were mainly European clients. However, I have put off the aggressive penetration into the European market until I have enough cash flow*”.

There are some important correlations between the three internationalisation outcomes across the two stages. The number of markets in EIS is negatively correlated with percentage of foreign sales and number of regions in SIS. This has some implications on the internationalisation development patterns pursed by Egyptian SMEs. It suggests that if the SME operates in a limited number of markets in the early internationalisation stage, it is more likely to have more foreign sales from a diverse number of overseas markets in SIS and vice versa.
Given the overall stability in the number of markets or regions, different dynamics may be going on—which will be discussed in chapter 6.

So far, we have seen that the network and internationalisation evolutionary patterns within stage. However, it is worthwhile investigating whether there is a correlation between the network variables and internationalisation outcomes. And there are significant correlations between network variables and internationalisation outcomes are they similar to the UK-based SMEs?

**B.1.3 Within stage co-evolutionary correlations**

Table 5.12 shows within stage co-evolutionary correlations. These are correlations between internationalisation and network variables within stages.
Table 5.12: Within stage co-evolutionary correlations (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>network density t1</th>
<th>network density t2</th>
<th>Network density t3</th>
<th>net size t1</th>
<th>net size t2</th>
<th>net constraint t1</th>
<th>net constraint t2</th>
<th>net constraint t3</th>
<th>percentage of foreign sales t2</th>
<th>Percentage of foreign sales t3</th>
<th>number of regions t2</th>
<th>number of regions t3</th>
<th>number of markets t2</th>
<th>number of markets t3</th>
</tr>
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<tbody>
<tr>
<td>network density t1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>network density t2</td>
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<td>1.000</td>
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</tr>
<tr>
<td>Network density t3</td>
<td>.251</td>
<td>.484</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>net size t1</td>
<td>-.910**</td>
<td>-.127</td>
<td>-.271</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>.235</td>
<td>-.459*</td>
<td>-.401</td>
<td>-.236</td>
<td>1.000</td>
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</tr>
<tr>
<td>Net size t3</td>
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<td>.515*</td>
<td>.452*</td>
<td>-.202</td>
<td>-.296</td>
<td>1.000</td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>net constraint t1</td>
<td>.957**</td>
<td>.139</td>
<td>.173</td>
<td>-.958**</td>
<td>.348</td>
<td>.287</td>
<td>1.000</td>
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<td></td>
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<tr>
<td>net constraint t2</td>
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<td>.605**</td>
<td>.476*</td>
<td>.170</td>
<td>-.924**</td>
<td>.394</td>
<td>-.248</td>
<td>1.000</td>
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<td></td>
</tr>
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<td>.946**</td>
<td>-.301</td>
<td>-.441</td>
<td>.341</td>
<td>.157</td>
<td>.443</td>
<td>.418</td>
<td>.136</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>percentage of foreign sales t2</td>
<td>.282</td>
<td>-.107</td>
<td>.154</td>
<td>-.295</td>
<td>.320</td>
<td>.194</td>
<td>.352</td>
<td>-.418</td>
<td>.136</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the 0.05 level.
**Significant at the 0.01 level.
<table>
<thead>
<tr>
<th>Percentage of foreign sales t3</th>
<th>.670**</th>
<th>.398</th>
<th>.588**</th>
<th>-.610**</th>
<th>-.019</th>
<th>.707**</th>
<th>.631**</th>
<th>.120</th>
<th>.547</th>
<th>.202</th>
<th>1.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of regions t2</td>
<td>-.039</td>
<td>-.241</td>
<td>-.179</td>
<td>.099</td>
<td>-.223</td>
<td>-.035</td>
<td>-.443</td>
<td>-.242</td>
<td>.127</td>
<td>-.180</td>
<td>1.000</td>
</tr>
<tr>
<td>number of regions t3</td>
<td>.445†</td>
<td>.353</td>
<td>.531‡</td>
<td>-.417</td>
<td>-.219</td>
<td>.748**</td>
<td>.371</td>
<td>.234</td>
<td>.547</td>
<td>.196</td>
<td>.811**</td>
</tr>
<tr>
<td>Number of markets t2</td>
<td>.065</td>
<td>-.421</td>
<td>-.537†</td>
<td>-.012</td>
<td>.595**</td>
<td>-.325</td>
<td>-.650**</td>
<td>-.586**</td>
<td>.252</td>
<td>-.459</td>
<td>.600**</td>
</tr>
<tr>
<td>Number of markets t3</td>
<td>.537†</td>
<td>.218</td>
<td>.450†</td>
<td>-.493†</td>
<td>-.169</td>
<td>.772**</td>
<td>.473†</td>
<td>.234</td>
<td>.457</td>
<td>.150</td>
<td>.806**</td>
</tr>
</tbody>
</table>

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

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

*** N=20
As shown in Table 5.12, the within stages correlations revealed some interesting findings. Network density during the pre-internationalisation stage [PIS] is positively correlated with the percentage of foreign sales, number of markets and number of regions in the subsequent internationalisation stage [SIS]. On the other hand, network size in PIS is negatively correlated with percentage of foreign sales and number of markets in SIS. This implies that a highly cohesive (dense) network composed of strong ties is more crucial for the internationalisation performance of SMEs during the SIS than is the number of contacts that the SME has in the PIS. In addition, the denser the SMEs’ networks during the PIS the better the internationalisation performance of the SME during later internationalisation stages.

This could be attributed to the richness of information provided by the social capital of the founder(s) and the favours that could be sought from close and strong relationships that existed during the PIS. Several Egyptian entrepreneurs said that they do not like to lose relationships but instead focus on nourishing them even if they are no longer immediately useful. They also have the mind-set that some relationships which are not useful today might be beneficial tomorrow. This networking logic was highlighted by some respondents. For instance, EB’s co-founder stated that:

"Definitely, some of our distribution companies with whom I used to deal with ...[...]... we used to even meet on daily basis and then I stopped dealing with them because simply the business between us finished ...[...]... We stayed in touch and we call each other on special occasions (such as special holidays or Eid) and then I find myself at some point that I need something from these companies ...[...]... a certain service at a certain point in time or something unrelated to their services but someone within that company who knows someone in another company who can help me. So I reactivate this relationship ...[...].. However, it’s
very important to note that I never leave a relationship in a disrespectful way so when I need to reactivate this relationship it is not difficult to do so. I never leave a relationship with hard feelings or in a disrespectful way but rather it is our nature. For sure, today we may have mutual benefit but tomorrow we may not, or a contradiction may take place where today we do not need each other but tomorrow we will. So, it is very important to keep the minimum personal aspect of the relationship going”.

Similarly, the founder of Manu2-eg noted that relationships are crucial and that one could never know who might be useful in the future and who might not be:

"Sure, it’s a nature of business according to the Egyptian proverb, today’s friends are tomorrow enemies and today’s enemies could be tomorrow’s friends".

On the other hand, during the early internationalisation stage network size is positively correlated with the number of markets. Moreover, the level of network constraint is negatively correlated with the number of markets. This suggests that during the early internationalisation stage, Egyptian SMEs focus more on establishing new relationships and rely on access to structural holes to enter new overseas markets (for example, through fairs organised by governmental and non-governmental supporting agencies). This access to structural holes could be referrals from pre-existing relationships or third party introductions. This could be linked to the type of relationships that the SME rely on to enter new markets in the early internationalisation stage.
Manu3-eg\(^\text{45}\) founder argued that:

"Those ones (new ties created in early internationalisation stage) were actually mainly personal...[...]. Let me say it’s about 60% personal efforts whereby I visited those clients I met in the international trade fair and sometimes even approached some local ones alone and showed them several offers and met them at least 3 times and then they could see that you really are interested and then you might be able to offer good quality products .....[....]......

As for the international trade fair it helped us with three or four overseas clients because through the three days of the fair, three or four businessmen who came and saw our product(s) thought it is good -because we usually have samples with us and offer good prices- normally these businessmen rely on big companies such as flora and fine which are very expensive and when they saw our products and good price and quality they decided to buy from...[...]. So the fair helped us a bit and we also depend on our own personal efforts whereby I visited the client and I usually give them a good offer and good prices ... we usually introduce the product to them and offer them best prices and offers and this is how we grew".

As for the subsequent internationalisation stage, surprisingly, all three network variables (network constraint, network density and network size) are positively correlated with number of markets, number of regions and percentage of foreign sales. This shows that Egyptian SMEs’ networks are likely to be highly cohesive and composed of some bridging relationships. In other words, they try to achieve a balance between dense (cohesive)
networks and some access to structural holes. This is what Burt (2009:2) referred to as "network duality". This balance enables the firm to enhance its internationalisation performance. An example of network duality is illustrated by the sales director of FR1:

"In old days, when there was a common proverb between traders that keeping your word is worth more than million pounds there were no problems ..... Now we have more problems although we have contracts but you can always get a clever lawyer to get you out of them or out of the obligations specified in the contract very easily. I usually ask my friends to refer me to a good lawyer....But also having strong personal relationships and trust is of utmost importance for our international growth ".

As FR1 sales director emphasised, the company can establish a new relationship for example with a lawyer to sort out problems as they arise, but still they need to depend on their dense and close relationships to internationalise further.

In addition, an interesting finding came out of the correlation matrix presented in Table 5.12. Network density and constraint in the SIS are negatively correlated with the number of overseas markets the SME operates in during the early internationalisation stage. In other words, Egyptian SMEs with limited international coverage in EIS are more likely to rely more on intermediaries and relatively dense networks to further internationalise in SIS. A good example of this implication is Con2-eg, which designs and supervises composting and recycling facilities and manufacture composting products-it operates in Asia and Arab/middle eastern countries.
The company relies on the dense network of its founders and the linkages they have with other sister companies or affiliated companies to the founder(s) of sister to get access to projects in municipal and agricultural waste composting; and recycling facility design and construction supervision. According to Con2-eg’s co-founder:

"In the last 15 years (namely during the PIS and EIS) I have moved from being a dancer - excuse me for using this example- you accept what comes in your way, now after years of operations (during SIS) ….we are well established we pick what only suits us”.

From the above quote it is apparent that the Con-2-eg relied on the dense network relationships of its three co-founders such as the relationships the first co-founder managed to establish with key ministries in Egypt. Over time the company grew and began to choose which relationships to work with from the pool of clients that approached the company. Nonetheless, they relied to some extent on access to structural holes which the co-founder referred to as a catalyst.

"Of course, if you never worked in a particular market, you are like a stranger who is blind although he can see. I gained market knowledge from governments and municipalities not individual companies (company’s main overseas clients). So we see who in government of a particular country can help us gain needed information and form an agreement with him or her....[...]. You often search for what I call a catalyst –someone who enhances the process but has nothing to do with management of operations- which is usually between Con-2-eg and the client which is usually a country; who can help us enter and learn about systems, markets and laws in respective markets".
B.2 Across stages co-evolutionary correlations

A key question remains - do these significant co-evolutionary correlations hold true over time? Hence, another set of non-parametric correlations is carried out between the network variables and internationalisation outcomes over time (see Table 5.13).
Table 5.13: Across stages Co-evolutionary measures (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Average net density over time</th>
<th>Average network size over time</th>
<th>Average net constraint over time</th>
<th>No. of years being inter.</th>
<th>Percentage foreign sales $t_n$</th>
<th>Number of regions $t_n$</th>
<th>Number of markets $t_n$</th>
<th>Rate of growth $t_n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average net density over time</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average network size over time</td>
<td>-0.011</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average net constraint over time</td>
<td>0.925**</td>
<td>-0.152</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of years being inter.</td>
<td>0.181</td>
<td>0.229</td>
<td>0.131</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage foreign sales $t_n$</td>
<td>0.770**</td>
<td>0.425</td>
<td>0.644**</td>
<td>0.088</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of regions $t_n$</td>
<td>0.420</td>
<td>0.444</td>
<td>0.357</td>
<td>0.393</td>
<td>0.537*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets $t_n$</td>
<td>0.510*</td>
<td>0.220</td>
<td>0.545*</td>
<td>0.406</td>
<td>0.413</td>
<td>0.644**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Rate of growth $t_n$</td>
<td>0.491*</td>
<td>0.374</td>
<td>0.414</td>
<td>-0.398</td>
<td>0.840**</td>
<td>0.243</td>
<td>0.166</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** N=20.
As shown in Table 5.13, the average network density over time is positively correlated with average network constraint over time. This means that as the SMEs network density increases the network constraint increases (i.e. access to structural holes decreases).\textsuperscript{46}\textsuperscript{11} In other words, the denser an SME network the less likely it will rely on access to structural holes. The number of markets and percentage of foreign sales over time are positively correlated with average network density and constraint over time, and the average network density is positively correlated with rate of growth over time. This implies that network density and limited reliance on bridging relationships played a more important role in the Egyptian SMEs internationalisation over time than did the number of contacts inherent in the SMEs network.

This seems to be a recurring theme across the 20 Egyptian cases. For example, the founder and sales manager of FR1 stated that when it comes to overseas clients close and strong trustworthy relationships are of utmost importance because of the poor reputation of Egyptian product in overseas market. He said:

"Sure, product is everything; in Milano’s fair ... it’s a proof of what I’m saying people there will never deal with an Egyptian just based on a talk or a chat. They have to come and see the product themselves and inspect the quality. ...[...]...After displaying our product at the Milano furniture fair....[...].... They (overseas clients) dealt with us but for us to go around Europe and tell people I have these products and even show them catalogues they will not deal with me ... so our overseas business wasn’t through just

\textsuperscript{46} It is important to highlight that usually very small networks show a higher degree of density if most of ego’s contacts know one another.
talking to people but rather good and quality products that helped us gain their trust ..... as I said if I go by myself to these people overseas and tell them I have this company in Egypt that does this and this they will not know me. Over time this trust and close relationship is impartial. For instance, now I have a very good relationship with Denis the guy from USA ...the issue of trust is not a problem ... we trust each other completely ..... So I mean if he comes after two years from now to ask for something I will deal with him without thinking twice... I will deal with him as if I’m blind’’.

Also, the founder of EB company views overseas relationships as partners rather than mere clients of distributors and he can draw on their support or advice at any time.

“Sometimes my own strategy towards a certain relationship changes for example , at some point I focused more on wholesalers but later I became more consumer driven ....so I focused more on retailers or end consumers so automatically I ended the relationship with wholesaler-only the business side of it not the personal side. ...... so even the business relationship ended... our relationship is very simple ... I can easily call any of them and ask about something or get certain advice...[...] ... all of our relationships with agents and distributors is like business partners , look to it not from a supplier - buyer horizontal relationship but rather a 360 degree angle where on any place around the circle all are business partners -whether clients , suppliers , distributors - all are like business partners (no capital is involved) and it has to be a win-win situation all the time for this to work”.

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Although the win-win situation makes these relationships with overseas ties more like business relationships, a high degree of trust and closeness is crucial (characteristics of dense networks). As will be explained in the following chapter Egyptian SMEs tend to have fewer overseas contacts and a denser network than UK SMEs who rely more on weak ties and larger networks over time.

The percentage of foreign sales is positively correlated with number of regions in which the firm operates. In addition, the number of regions is highly correlated with the number of markets. A closer look at the nature of markets and regions in which Egyptian SMEs internationalise sheds some light on the reason behind this correlation. Some Egyptian SMEs choose to export to nearby counties especially in the Arab -Middle East region. This is due to the fact that there are similarities in culture, language and consumer tastes and preferences which makes it easier to enter into these markets and less reluctant to export to more distant markets. By contrast, those SMEs that export to a large number of diverse markets are more likely to higher percentage of foreign sales.

Surprisingly, the number of years being international has no significant correlation with any of internationalisation outcomes or the network variables over time. This might imply that internationalisation experience of Egyptian SMEs is either of limited importance since they tend to internationalise to low psychic distance markets. Or it could be the main reason why they have limited internationalisation breadth compared to UK-based SMEs. Moreover, the yearly growth rate is positively correlated with average network density supporting the fact that network density plays a more crucial role in Egyptian SMEs internationalisation than does the network size.
As for the yearly international rate of growth the Egyptian SMEs has an average of 4% rate of growth and the average number of years being international is 14 years. Although it is the same yearly growth rate as the British SMEs, the number of years being international is much less than the UK sample with an average of 24 years. This lowers the rate of growth of British SMEs.

So far, I have discussed the general evolutionary and co-evolutionary patterns of Egyptian and UK SMEs, without differentiating between the new venture and traditional SMEs. As discussed in Chapter 3, I proposed two a priori co-evolutionary frameworks for new ventures and traditional SMEs. The difference between these two types of firms is the speed of internationalisation the significance of which is explored in the following section.

**Speed of internationalisation as an alternative perspective of internationalisation process**

Firstly, in Chapter 2, I noted that 3 broad categories of SMEs were distinguished in the literature namely, traditional SMEs, born globals and born again globals (Bell, McNaughton, Young and Crick, 2003; Bell, McNaughton and Young, 2001; Kuivalainen, Saarenketo and Puumalainen, 2012). These categories have often been taken to designate different types of SMEs. However, they could be equally applied to indicate the difference between SMEs with respect to timing and speed of internationalisation because the main focus of internationalisation has been on the initiation or early stages of internationalisation. Few studies discuss what happens in subsequent stages. This means that question of the different patterns, in particular speed and timing of internationalisation, after its initiation has been scarcely addressed.
In two special issues of International Marketing Review this question has been addressed and different internationalisation patterns or pathways were identified in an attempt to better understand how SMEs internationalise and the different patterns companies pursue over time. However, the main focus of these special issues was again only on the first few years of SME internationalisation. An interesting exception was Kuivalainen et al., (2012) studied the internationalisation patterns of 78 Finnish SMEs and have collected data in 1999 from these SMEs and made a follow up round of data collection depending on secondary sources to identify what happened to these SMEs in 2004. The time period they covered was six years and they have identified several patterns of internationalisation for three types of SMEs, namely, BGs, BAGs and traditional SMEs. They focused on three main internationalisation process dimensions, mainly the scale, scope and timing of internationalisation.

Following a similar logic, this present research attempts to investigate briefly how the different patterns of internationalisation Egyptian and UK SMEs follows with respect to the speed of internationalisation. In essence, the objective is to investigate if the integrating speed of internationalisation will offer an alternative explanation to the general patterns of internationalisation discussed in the above sections.

I have added the time dimension in the previous discussion, through investigating over time the different internationalisation patterns that SMEs followed in terms of internationalisation scale, scope and geographical focus (breadth) (Yeoh, 2004; Jones, 2009) over their life cycle. However, investigating different internationalisation patterns of SMEs based on the speed of 

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47 The criteria for internationalisation scale they focused on was, BGs achieving at least 25% as foreign sales within the first three years of foundation). The scope of internationalisation they used to differentiate between Born Global companies and traditional SMEs is that BGs operate in at least five countries and finally they used the period of three years from SMEs inception as a cut-off period to differentiate between BGs and traditional SMEs (Knight and Cavusgil, 2004; Kuivalainen et al., 2012).
internationalisation and the subsequent internationalisation speed are suggested to offer additional insights.

For the sake of simplicity, I have grouped the SMEs studied based on the timing of early internationalisation using the three years from company’s inception -as a cut-off point-proposed by Knight and Cavusgil (2004) and Kuivalainen et al. (2012). For calculating the speed of subsequent internationalisation, I used an arbitrary cut-off point of six years. This is suggested to offer an indication of the likelihood of SME’s survival (Oviatt and McDougall, 1994).

However, I did not pre-determine a certain cut-off score for internationalisation scale and/or scope (For example, the 25% foreign sales criteria proposed by Knight and Cavusgil, 2004). I wanted to identify the different internationalisation patterns based only on the speed of early and subsequent internationalisation. SMEs can vary in terms of their internationalisation scale and scope significantly across different points in time. Therefore, I sought to investigate whether those SMEs that undertake their first internationalisation activity soon after their inception, continued to internationalise rapidly in the subsequent internationalisation stage.

Also, the question arises if SMEs start their initial internationalisation within the three years cut off point will they obtain more foreign sales revenues compared to traditional SMEs –will they generate at least 25% of their sales revenues from overseas markets? How many markets and regions do they operate in? What happens in subsequent internationalisation stage will rapidly internationalising SMEs achieve higher percentage of foreign sales and operate in a large diverse number of markets compared to the traditional SMEs. Table 5.14 explains the classification of SMEs at different stages of internationalisation used in this section.
Table 5.14: Details of classification of SMEs at different stages of internationalisation

<table>
<thead>
<tr>
<th>SME type</th>
<th>Early Start-up</th>
<th>Traditional start-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early internationalisation stage</td>
<td>These are SMEs that started their first international activities within the first three years of the company's inception</td>
<td>These are SMEs that started their first international activities after three years of the company's inception</td>
</tr>
<tr>
<td>Subsequent internationalisation stage</td>
<td>Early subsequent internationaliser</td>
<td>Traditional subsequent internationaliser</td>
</tr>
<tr>
<td></td>
<td>These are SMEs that started their subsequent internationalisation stage within six years from company's inception</td>
<td>These are SMEs that started their subsequent internationalisation stage after six years from company's inception</td>
</tr>
</tbody>
</table>

This classification is based only on timing or speed of early and subsequent internationalisation. I used the term "start up" to refer to first internationalisation attempts(s) and subsequent internationaliser to refer to the subsequent internationalisation attempts. Table 5.15 provides key descriptive of the UK and Egyptian SMEs based on the speed on internationalisation\(^\text{48}\).

Table 5.15: SMEs descriptives

<table>
<thead>
<tr>
<th>Type</th>
<th>UK</th>
<th>Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early start-up</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Traditional start-up</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Early subsequent internationaliser</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Traditional subsequent internationaliser</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

\(^{48}\) It important to note that some of the SMEs in both samples have not reached the SIS; this is why a third group (referred to as none) was created.
From the above Table 5.15, it clear that there are approximately the same number of early and traditional start up SMEs in both the UK and Egyptian samples. However, the number of SMEs that did not reach SIS is larger among Egyptian SMEs compared to those of the UK. The number of early subsequent internationalisers is higher among the Egyptian SMEs and the number of traditional subsequent internationalisers in higher among the UK SMEs. This raises an important question as to whether this means that the Egyptian SMEs are more likely to internationalise rapidly during SIS? In order to answer this question, it is important to look at other internationalisation outcomes or variables such as depth and breadth of internationalisation. Table 5.16 presents mean value of internationalisation outcomes of the early and traditional SMEs per stage.

**Table 5.16: Internationalisation outcomes for different types of SMEs**

<table>
<thead>
<tr>
<th>Type of SME</th>
<th>Internationalisation outcome</th>
<th>UK</th>
<th>Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early start-up</td>
<td>Percentage of foreign sales</td>
<td>41.58</td>
<td>38.00</td>
</tr>
<tr>
<td></td>
<td>No. of markets</td>
<td>7.17</td>
<td>5.85</td>
</tr>
<tr>
<td></td>
<td>No. of regions</td>
<td>3.33</td>
<td>2.69</td>
</tr>
<tr>
<td>Traditional start-up</td>
<td>Percentage of foreign sales</td>
<td>51.75</td>
<td>34.71</td>
</tr>
<tr>
<td></td>
<td>No. of markets</td>
<td>5.38</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>No. of regions</td>
<td>3.25</td>
<td>2.29</td>
</tr>
<tr>
<td>Early subsequent</td>
<td>Percentage of foreign sales</td>
<td>69.71</td>
<td>68.50</td>
</tr>
<tr>
<td>internationaliser</td>
<td>No. of markets</td>
<td>13.57</td>
<td>8.10</td>
</tr>
<tr>
<td></td>
<td>No. of regions</td>
<td>4.14</td>
<td>4.10</td>
</tr>
<tr>
<td>Traditional subsequent</td>
<td>Percentage of foreign sales</td>
<td>51.64</td>
<td>46.00</td>
</tr>
<tr>
<td>internationaliser</td>
<td>No. of markets</td>
<td>24.55</td>
<td>7.67</td>
</tr>
<tr>
<td></td>
<td>No. of regions</td>
<td>5</td>
<td>3.67</td>
</tr>
</tbody>
</table>
The findings presented in Table 5.16 shows that UK SMEs in general are more international across the three internationalisation dimensions compared to the Egyptian SMEs. Surprisingly, there was a small variation between early subsequent internationalisers in the UK compared to Egypt in terms of PFS and the number of regions.\textsuperscript{49}

Those early start up SMEs in both EIS and SIS achieve a high percentage of foreign sales (above the 25% criteria set by Knight and Cavusgil, 2004) and operate in a relatively large number of markets and in at least three regions. This confirms the literature that early start up firms tend to seek from inception to internationalise into a large number of diverse overseas markets.

However, as seen in Table 5.16 these early start-up SMEs do not necessarily obtain a higher percentage of foreign sales compared to traditional start-ups (for example, in the UK the average PFS is higher for the traditional start-ups) nor operate in more diverse markets (for example, early and traditional start-ups in the UK operate nearly on average into the same number of regions). Moving to the SIS, UK early subsequent internationalisers have a higher percentage of foreign sales [PFS] than traditional subsequent internationalisers. However the latter operate in higher number of markets and regions. In contrast, Egyptian early subsequent internationalisers obtain a higher PFS and operate in a larger number of diverse markets compared to the traditional subsequent internationalisers.

\textsuperscript{49} I have taken the average of the highest percentage of foreign sales reported by SMEs for the first 6 years and after the first six years of firm’s inception. This is to control for the age of the SME.
This raises an important question, do all early start-ups continue to internationalise rapidly in the SIS or do they slow down and tend to follow more of a traditional approach? In order to address this question a similar reasoning used by Kuivalainen et al, (2012) will be used to address the number of SMEs that continued to follow the same pattern-in terms of speed of internationalisation- they started with in EIS and/or if they changed their pattern in SIS. This is presented in Figures 5.6 and 5.7.

*(n) represents the number of companies

- Source: Logic adopted from Kuivalainen et al.,(2012), but created by the author

**Figure 5.6: UK SMEs internationalisation patterns based on speed of early and subsequent internationalisation**
Figure 5.7: Egyptian SMEs internationalisation patterns based on speed of early and subsequent internationalisation

- Source: Logic adopted from Kuivalainen et al.,(2012), but created by the author
Figures 5.6 and 5.7, show the different patterns emerging from the data. The early

Start-up SMEs could follow any of the three following patterns into the SIS:

1) To continue to internationalise rapidly into further overseas markets.

2) To follow a rather slow internationalisation path (meaning that there is a long time lapse or gap between the timing of EIS and SIS).

3) Not entering the SIS, in other words, the SME is content with its current status quo.

On the other hand, the Traditional start-up might follow any of the three following patterns:

1) It might accelerate its internationalisation after entering its first overseas markets.

2) It might continue to follow a slow internationalisation pattern (denoting a long time period between EIS and SIS)

3) It might not enter into the SIS. In other words, where the SME maintains its status quo.

This shows that a company could start off its international operation within three years of its inception and later slow down its internationalisation. This could be the case in which an SME would follow a large client into several worldwide locations and only expand further after it has gained confidence and acquired experiential knowledge. The company might also maintain its status quo and not expand further into new markets because it generates a high percentage of foreign sales revenue from its existing overseas markets. Finally, SMEs might rapidly internationalise due to the help of its founder’s dense and close relationships and has no further opportunities to expand further due to lack of new relationships to help them internationalise, or they might not be subjected to new sources of information the so-called closure effect (suggested by Burt, 1992, Colman 1988) and/or these companies especially
Egyptian companies might lack sufficient support from supporting agencies that would aid the company in its subsequent internationalisation.

Furthermore, traditional start-ups or slow internationalisers might suddenly increase their level of internationalisation soon after they acquire needed experiential knowledge from both domestic and overseas operations. Moreover, some companies might continue to internationalise slowly suggesting incremental pattern of growth and finally these companies might not even enter SIS and maintain their status quo either because of lack of support, focus on few large clients and/or closure effect and limited access to structural holes. This is more evident in the case of Egyptian SMEs because the total number of SMES that did not enter into SIS is seven compared to only two cases in the UK).

Studies on early start up or new ventures argued that Born Global companies operate in a large number of markets and achieve a higher percentage of foreign sales compared to traditional SMEs. To briefly assess the link between the speed of internationalisation (early and subsequent) Spearman correlations was carried out between timing of EIS and SIS and the three internationalisation outcomes in the EIS and the SIS. These are presented in Tables 5.17 and 5.18.

**Table 5.17: Correlation between speed of internationalisation and internationalisation outcomes of UK SMEs (Spearman's rho correlation coefficient)**

<table>
<thead>
<tr>
<th></th>
<th>Time EIS</th>
<th>Time SIS</th>
<th>Percentage of foreign sales t₂</th>
<th>Percentage of foreign sales t₃</th>
<th>Number of markets t₂</th>
<th>Number of markets t₃</th>
<th>Number of regions t₂</th>
<th>Number of regions t₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time EIS</td>
<td>1.000</td>
<td></td>
<td><strong>0.475</strong> *</td>
<td>-0.427</td>
<td>-0.048</td>
<td>0.167</td>
<td>-0.031</td>
<td>-0.104</td>
</tr>
<tr>
<td>Time SIS</td>
<td></td>
<td>1.000</td>
<td>-0.381</td>
<td>0.207</td>
<td>0.298</td>
<td><strong>0.530</strong></td>
<td>0.359</td>
<td><strong>0.452</strong></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.02 level (2-tailed).
***N=20
Table 5.18: Correlation between speed of internationalisation and internationalisation outcomes of Egyptian SMEs (Spearman's rho correlation coefficient)

<table>
<thead>
<tr>
<th></th>
<th>Time EIS</th>
<th>Time SIS</th>
<th>Percentage of foreign sales $t_2$</th>
<th>Percentage of foreign sales $t_3$</th>
<th>Number of markets $t_2$</th>
<th>Number of markets $t_3$</th>
<th>Number of regions $t_2$</th>
<th>Number of regions $t_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time EIS</td>
<td>1.000</td>
<td>0.121</td>
<td>-0.119</td>
<td>-0.328</td>
<td>-0.354</td>
<td>-0.354</td>
<td>0.036</td>
<td>-0.236</td>
</tr>
<tr>
<td>Time SIS</td>
<td>0.121</td>
<td>1.000</td>
<td>0.178</td>
<td>0.619***</td>
<td>-0.672**</td>
<td>0.537*</td>
<td>-0.293</td>
<td>0.560***</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.02 level (2-tailed).
*** N=20

From Table 5.17 shows that the timing of EIS of UK SMEs is positively correlated with timing of SIS. This means that if an SME starts to internationalise soon after its inception it is more likely to rapidly internationalise in the subsequent internationalisation stage. Also if the SME internationalises slowly it is more likely to move into SIS after a long period of time. As shown in Figure 5.6, nearly half of the UK early start ups and traditional start-ups continued to follow the same pattern as they did in EIS. However, Table 5.19 shows that among the Egyptian SMEs there is no significant correlation between the timing of internationalisation in the EIS and the SIS.

In addition, the timing of SIS of UK and Egyptian SMEs is positively correlated with at least two of the internationalisation outcomes in SIS, which suggests that the longer it takes SME to enter SIS, the more likely it will operate in a larger number of markets and regions. In the case of Egyptian SMEs it is more likely to achieve higher PFS in SIS and vice versa.
Finally, the number of markets in EIS is negatively correlated with timing of SIS for the Egyptian SMEs. This implies that the larger number of markets the SME operates in EIS, the longer it will take the company to enter into SIS.

The next question is whether there is a correlation between speed of internationalisation and network variables in in the EIS and the SIS. Tables 5.19 and 5.20 present the correlations between speed of internationalisation and network variables.

**Table 5.19: Correlation between speed of internationalisation and network variables of UK SMEs (Spearman's rho correlation coefficient)**

<table>
<thead>
<tr>
<th></th>
<th>Time EIS</th>
<th>Time SIS</th>
<th>Network density t_2</th>
<th>Network density t_3</th>
<th>Network size t_2</th>
<th>Network size t_3</th>
<th>Network constraint t_2</th>
<th>Network constraint t_3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time EIS</td>
<td>1.000</td>
<td>0.475*</td>
<td>-0.056</td>
<td>-0.278</td>
<td>-0.623</td>
<td>0.277</td>
<td>-0.013</td>
<td>-0.366</td>
</tr>
<tr>
<td>Time SIS</td>
<td>0.475*</td>
<td>1.000</td>
<td>-0.189</td>
<td>0.242</td>
<td>-0.032</td>
<td>0.492*</td>
<td>-0.020</td>
<td>0.183</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.02 level (2-tailed).
***N=20

**Table 5.20: Correlation between speed of internationalisation and network variables of Egyptian SMEs (Spearman's rho correlation coefficient)**

<table>
<thead>
<tr>
<th></th>
<th>Time EIS</th>
<th>Time SIS</th>
<th>Network density t_2</th>
<th>Network density t_3</th>
<th>Network size t_2</th>
<th>Network size t_3</th>
<th>Network constraint t_2</th>
<th>Network constraint t_3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time EIS</td>
<td>1.000</td>
<td>0.121</td>
<td>0.141</td>
<td>0.040</td>
<td>-0.592**</td>
<td>-0.063</td>
<td>0.427</td>
<td>0.093</td>
</tr>
<tr>
<td>Time SIS</td>
<td>0.121</td>
<td>1.000</td>
<td>0.099</td>
<td>0.592**</td>
<td>-0.352</td>
<td>0.424</td>
<td>0.307</td>
<td>0.717**</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.02 level (2-tailed).
***N=20
Table 5.19 shows that the timing of SIS is positively correlated with network size in SIS for the UK SMEs. This suggests that the longer it takes the company to reach the SIS the more likely it will have more contacts in its network at that stage. This suggests that companies that are slow to subsequently internationalise are more likely to have larger networks.

On the other hand, Table 5.20 shows the timing of the EIS is negatively correlated with network size at EIS for Egyptian SMEs. This implies that the more rapid the SME’s early internationalisation the more likely it will have smaller networks, perhaps focusing more on dense and pre-existing relationships of its founder. The timing of SIS is positively correlated with network density and network constraint in the SIS. This suggests that more rapidly the SME is entering into SIS, the more likely it will have more sparse networks characterised by a large number of bridging relationships and the slower the company is to enter into SIS the more likely it will have more dense networks in that stage. This means that companies tend to rely more on bridging relationships in order to gain faster access to more markets hence increasing their internationalisation or they rely on a dense network which might create a closure effect and slow down the speed of the SME’s subsequent internationalisation. Alternatively, companies tend to be more satisfied with their status quo generating enough sales revenue for either domestic or few overseas markets (few large clients). Finally it could be the lack of support that makes companies to firstly assess whether their personal social network would offer means and support needed to internationalise and if not they would then tend to create and enter new markets either via creating new relationships or through a bridging relationship.
Discussion and conclusions

In this chapter, I have identified the general patterns of association between network variables and internationalisation outcomes, within and across stages. The purpose was to identify general tendencies of how different network variables correlated one another, how internationalisation outcomes correlated with each another and finally how network and internationalisation variables/outcomes co-influence one another. The co-evolutionary patterns were identified within stages and across stages. This provided a general overview on which variables co-evolve together. These findings have generated the following patterns for UK and Egyptian SMEs as shown in Figures 5.7-5.8.\(^{50}\)

\(^{50}\) It important to note that the opposite of the correlations presented in figures 5.7 and 5.8 is also true. For example, if two variables are positively correlated this indicates that if one increases the other will increase and if one decreases the other will decrease.
Co-evolutionary Model of UK SMEs

Pre-internationalisation stage

Internationalisation Process

Network constraint (L)
i.e. Bridging relationships (H)

Networking Process

Av. Network Size (H)

Over time

Early internationalisation stage

No. of markets (H)
No. of regions (H)

Network Size (H)

Subsequent internationalisation stage

No. of markets (H)
No. of regions (H)

Network Size (H4)

Legend:

Co-evolution Line
(H) High
(L) Low

Figure 5.8: UK SMEs co-evolutionary Model
Co-evolutionary Model of Egyptian SMEs

Pre-internationalisation stage

Early internationalisation stage

Subsequent internationalisation stage

Internationalisation Process

Networking Process

Over time

Legend:

Co-evolution Line

(H) High

(L) Low

Figure 5.9: Egyptian SMEs co-evolution model
As shown in Figure 5.8, there is a positive correlation between average network size and the number of markets and regions in which UK SMEs operate. This is a co-evolutionary pattern across stages which offer an overview of how the average network size over the three stages is associated with total number of markets and regions in which the SME operates at time \( t_n \). This involved the accumulation of number of markets in which the company operates during EIS and SIS. This shows that among the three network variables only network size was associated significantly with internationalisation spread and scope across the stages. Taking each stage individually, network size is positively correlated with number of markets and regions in which SME operates during the EIS and SIS. Moreover, network constraint during PIS is negatively correlated with number of markets and regions in SIS. This means that companies rely on bridging relationships they had during the PIS to increase their internationalisation spread and scope in subsequent internationalisation stage.

The Egyptian SMEs exhibited a different co-evolutionary pattern as shown in figure 5.9. The average network density and constraint were positively correlated with the three internationalisation outcomes at time \( t_n \), showing the importance of dense and close networks in the internationalisation process of Egyptian SMEs. Similar patterns could be identified within stages. For example, network density and constraint are positively correlated with PFS, number of regions and markets in which SMEs operates in SIS. Moreover, the network density and limited number of bridging relationships SMEs had during the PIS played a significant role in SMEs subsequent internationalisation. This is shown by the positive

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51 To avoid duplication, the number of markets through which company de-internationalized is not counted except during the particular stage in which company entered into those markets. For instance, if a given SME entered a particular market in the EIS and further penetrated this market in the SIS this particular market is counted once.
correlation between the network density and constraint level in the PIS and the three internationalisation outcomes in SIS.

Surprisingly, during the EIS, network size was the most important network variable as it was positively correlated with the internationalisation outcomes. Furthermore, network constraint and density were both negatively correlated with number of regions and markets in the SIS. This suggests that if SMEs have less dense networks composed of bridging relationship in EIS, they are more likely to operate in a larger number of diverse markets in the SIS and vice versa. This also implies that if they have dense networks in the EIS they will operate in less number of markets and regions in the SIS.

It is important to consider the opposite scenario of any proposed pattern of association as these are based on correlations result so that for instance, a positive relationship between two variables this simply indicates that they increase or decrease together. It is therefore important to understand the underlying processes behind the correlations using on more in-depth data.

In the following chapter, I explored in more detail the underlying mechanisms and dynamic nature of the SMEs’ networking and internationalisation processes and how they co-influence and complement one another.

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1 The rationale behind sampling and criteria of sampling were presented at the 2012 BAM conference paper. This paper was about the evolutionary patterns of NVs authored by researcher and supervisor (Narooz and Child, 2012). Moreover, some of the methodological aspects mentioned in this chapter have been reported in one of the assignments submitted by the researcher as part of her first year methodology module in June 2009.
CHAPTER 6
SMEs TAXONOMIES AND CLUSTERS

Introduction

In the last chapter, I examined the general evolutionary and co-evolutionary patterns of UK and Egyptian SMEs. This focused on the patterns of association between different network variables and internationalisation performance/outcome variables. The chapter showed some general tendencies and linkages between different variables rather than explaining the underlying mechanisms and processes. It emerged that in the case of Egyptian SMEs, there was a significant positive correlation between the degree of network cohesiveness (measured by the network density) and the percentage of foreign sales to total sales. By contrast, the UK SMEs demonstrated a significant positive correlation between the size of network and the number of overseas markets in which UK SMEs operate. This shows a general tendency of UK entrepreneurs to focus more on operating in a large number of markets and relying on a large number of network ties. By contrast, the Egyptian SMEs tend to focus more on cohesive (dense) networks in order to generate more sales from a limited number of overseas markets. These general tendencies provide us with overview of the internationalisation and networking behaviours of UK and Egyptian SMEs.

The aim of this chapter is to understand the underlying processes and mechanisms of SME internationalisation and networking behaviour over time. To this end, I carried out an exploratory clustering of the UK and Egyptian SMEs in an attempt to pinpoint general
similarities and differences between individual SMEs within each national sample.\textsuperscript{52} This clustering is based on average scores across stages of internationalisation. I subsequently extend the analysis to take account the changes over time.

The clustering of SMEs is based on two main variables; namely the average network size (Av. Net size) and the number of overseas markets in which a given SME operates. The rationale behind choosing these two variables is twofold. Firstly, based on the results of the Mann Whitney U test results, which showed that there is a significant difference between the UK and Egyptian SMEs’ networking and internationalisation behaviour in terms of average network size and the number of overseas markets in which the firm operates. Secondly, I use average network size and number of markets rather than network density and percentage of foreign sales because average network size offers a better understanding of the extent to which ego (an SME) invests in building network relationships that are crucial for its international growth. However, average network density refers to the extent to which ego’s alters are connected to one another, which if taken separately from network size could lead to some confusion. For example, two SMEs might have a similar network density score of 30%; while one of them has a network size of 50 and the other has a network size of just 10. Both have 30\% of their network ties connected to one another (which means three ties of the latter SME are connected to one another and 15 ties of the former are connected to one another). It is clear that the first SME (which has 50 ties) invests more in building relationships and creating new ties than the second SME.

Furthermore, SMEs could derive the bulk of their percentage of foreign sales from one market; which is a major limitation of using percentage of foreign sales as the main indicator

\textsuperscript{52} The sampling possibilities that were available particularly in Egypt did not permit for a systematic comparison of other potential contingences such as sector differences and whether the SMEs are a traditional, knowledge intensive or knowledge based. The limited number of Egyptian SMEs that operate overseas and the scarcity of knowledge based SMEs reduced the scope for systematic comparison between two contexts.
of the SMEs’ degree of internationalisation\(^{53}\). However, using the number of markets in which company operates indicates the extent to which the company is scope and extensively involved in internationalisation.

This chapter will start by discussing the results of Mann Whitney U test regarding the key differences between two samples in terms of across stage co-evolutionary measures; I then perform exploratory clustering of UK and Egyptian SMEs using the hierarchical clustering technique. This generates six different clusters three from each sample. The resulting taxonomies for each national sample will be discussed in detail.

**Generic networking and internationalisation differences between UK and Egypt SMEs**

As a starting point, Mann Whitney U tests were used to assess whether there are significant differences between UK and Egyptian SMEs networking and internationalisation behaviours. A non-parametric equivalent to T-test (Mann Whitney U test) is used to compare two independent samples based on different across stage network and internationalisation variables.

The Mann-Whitney U test was carried out between the two samples to test if there are significant differences between networking and internationalisation variables or not\(^ {54}\). The level of significance used here is "Monte-Carlo exact test" rather than the asymptotic method,

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\(^{53}\) As shown in the last chapter, the number of markets is correlated with the number of regions in which a company operates. Moreover, within each cluster, I have looked at concentration in one region versus diversification to different regions as another indicator of SMEs’ degree of international scope.

\(^{54}\) As expected given the small sample size in both the UK and Egypt cases, the test of homogeneity of variance was carried out for each sample individually and there was no significant variance within each sample for the normality test to be computed. As mentioned in the previous chapter, tests for normality such as the Shapiro-Wilk test were used for both samples. Among the variables used in chapter 5 five variables approximated normal distribution these were mainly average network density and average network size in both UK and Egypt and the number of regions in the UK sample) approximated normal distribution. The remaining seven variables were not normally disturbed. This explains the need to use a non-parametric test to see if there is a significant difference between the two samples. Therefore, I used Mann-Whitney U to test for significant differences between the UK and Egypt (Field, 2011). The results of the Shapiro-Wilk test and the test of homogeneity of variance (Levene’s test) are in Appendix 2.2.
because the exact test is recommended for small sample size (Field, 2011:547). These results are shown in Tables 1 and 2 in Appendix 2.1.

1. The average network density of the UK SMEs (Median=8.05)\(^55\) did not differ significantly from that of the Egyptian SMEs (Median=6.70), \(U=197.5, Z=-0.068, \text{ns}, r=-.0152\(^56\). Moreover, the average network constraint of UK SMEs (Median=0.29) did not differ significantly from Egyptian SMEs (Median=0.23), \(U=137, z=-1.704, \text{ns}, r=-0.38\).

2. However, the average network size of the UK SMEs (Median=17.5) tended to be significantly larger than that of the Egyptian SMEs (Median=13), \(U=111, z=-2.409, p<0.05, r=-0.54\).

3. As for the internationalisation outcomes, the percentage of foreign sales (at time Tn) of the UK SMEs (Median = 55%) did not differ significantly from that of Egyptian SMEs (Median =50%), \(U=183.5, z=-.448, \text{ns}, r=-0.100\). Also, the number of regions (at time Tn) in which UK SMEs operate (Median =5.00) did not differ significantly from that of Egyptian SMEs (Median = 4.00), \(U=152.5, Z=-1.309, \text{ns}, r=-0.29\).

4. However, the number of overseas markets (at time Tn) in which UK SMEs operate (Mdn= 22) differed significantly from Egyptian SMEs (Mdn=10), \(U=79.5, Z=-3.270, p<0.05, r=-0\). The UK SMEs tended to be active in a larger number of overseas markets.

\(^{55}\) In these results, the medians are of the distribution of individual SME scores averaged over the three stages of internationalisation.  
\(^{56}\) The effect size donated by ‘‘r’’ is computed to give a standardized measure of the size of the effect observed in this research so that it could be compared in other studies (Field, 2011). It follows this formula: \(r=Z/\sqrt{N}\), where \(Z\) = z-score and \(N\) is the sample size.
Accordingly, the UK SMEs differed significantly from the Egyptian SEMs in terms of the number of contacts inherent in the SMEs’ networks and the number of overseas markets in which they operate. However, UK SMEs did not differ significantly in terms of the percentage of foreign sales and the average network density and constraint. One plausible explanation is the way in which the network density and constraint are calculated as a proportion of the network size. Hence they depend on the network size and one could argue that it is the network size that makes the difference because the density and constraint are contingent to some extent on the number of alters that are present in ego’s network. Moreover, the majority of foreign revenues (percentage of foreign sales) could be obtained from one overseas market or from several. Again, one could argue that the number of overseas markets in which the SMEs operate gives a clearer indication of the scope of the SMEs internationalisation.

One of the key pitfalls of the quantitative measures is that they do not uncover the underlying mechanisms and dynamics of network and internationalisation behaviours of the UK and Egyptian SMEs (Coveillo, 2005; Bryman and Bell, 2003). In order to gain a clearer and more in depth insights into the networking and internationalisation behaviour of UK and Egyptian SMEs, a more detailed analysis of the two samples is warranted.

As shown in Chapter 5, UK SMEs exhibited different networking behaviours over time compared to the Egyptian SMEs over time. More specifically, they tend to focus more on creating and increasing their network size rather than on nurturing and maintaining existing strong relationships (i.e. they focus to a lesser extent on maintaining strong cohesive networks). Moreover, UK SMEs tend to focus more on enhancing the breadth of internationalisation (in terms of the number of overseas markets and the number of regions) than Egyptian SMEs. This was evident in the across stages co-evolutionary correlation between the network size and number of overseas markets in which UK SMEs operate.
On the other hand, Egyptian SMEs focused more on nurturing and cultivating their dense networks and on enhancing the depth of internationalisation than did the UK SMEs. This was also evident in the across stages co-evolutionary correlations between the percentage of foreign sales and the network density. These tendencies are put forward based on identifying the key significant correlations between different network and internationalisation variables. However, is there a significant difference between the two samples?

A good starting point is to see whether there is a significant difference between the UK and Egyptian SMEs, in terms of their networking behaviour (in terms of network density, constraint and size) and internationalisation focus (percentage of foreign sales, number of markets and number of regions). As just reported, the Mann Whitney U test was carried out based on these variables to pinpoint if there is a significant difference between the two samples or not.

Consequently, I undertook a deeper investigation of the dynamics of the co-evolution of the networking and internationalisation processes over time. For the sake of simplicity and to make the discussion more manageable, a preliminary exploratory clustering was carried out on each sample. Common characteristics of the companies within each sample are highlighted and exemplary cases are identified and discussed.

**A. Proposed SMEs clustering**

In an attempt to explore the data and to come up with empirically derived groups of SMEs, an exploratory clustering technique is used to arrive at taxonomies of Egyptian and UK SMEs respectively. Since this research is based on a small number of SMEs in each sample and an unknown number of clusters, agglomerative hierarchical clustering is used (Hair, Black, Babin, Anderson and Tatham, 2005; Mooi and Sarstedt, 2011).
The agglomerative hierarchical clustering technique is a commonly used technique especially for small sample sizes (Mooi and Sarstedt, 2011; Hair et al., 2005). The clustering algorism—which is a measure of (dis)similarity— is based on the squared Euclidean distance and the clustering method used is complete linkage algorism which is a useful technique if the researcher wants to depict outliers and to have a small compact clusters (Mooi and Sarstedt, 2011; Hair et al., 2005).

Hierarchical clustering generates "n-1" clustering solutions (when n is equal to the number of cases). It involves combining or adding up cases into a "treelike structure" (Hair et al., 2005:584). There are two types of hierarchical clustering, namely agglomerative and divisive clustering. The former involves building up a tree or hierarchy whereby each case in the first stage is grouped into one cluster and the next stage (dis)similar cases are grouped together into one cluster and so on until all clusters are grouped into one main cluster. The latter involves having all cases grouped into one main cluster and then in each subsequent step these cases are divided into clusters, until each case is represented in a cluster on its own (Hair et al., 2005).

The average network size and number of markets of UK SMEs differed significantly from those of Egyptian SMEs across the two internationalisation stages. It is therefore appropriate to investigate whether the clustering SMEs based on these two variables would enhance our understanding of the underlying mechanisms and dynamics of SMEs networking and internationalisation behaviours.

However, it is important to take into account the issue of multi-collinearity or high correlation between the clustering variables (i.e correlation coefficient $R > 0.09$) as this

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57 The choice of Euclidean distance as a measure of the degree of similarity or dissimilarity between objects is one of the most commonly used measures. Moreover, the UK sample has one or two outliers. I decided not to omit or remove the outliers but rather sought to understand the reasons behind their unique behaviour.
might make these variables over represented in the clusters (Mooi and Sarstedt, 2011; Hair et al., 2005).

To check for the multi-collinearity problem, the spearman correlation is used to test if the two variables have a correlation coefficient of more than 0.09. The correlation coefficients of the average network size and the number of markets of both the UK and Egyptian SMEs were below 0.09. The correlation matrix is shown in Appendix 2.3.

As a general guide, the number of clustering variables depends on a sample size of $2^n$, whereby $n=$number of clustering variables (Formann, 1984; Mooi and Sarstedt, 2011). For example, $2^4=16$, which is the minimum number of cases to be present if 4 clustering variables were to be used in clustering cases. In this study the only two clustering variables will be used for the two samples of (20 SMEs each) which is roughly a reasonable sample.

Hierarchical clustering was carried out in two stages. In the first stage, the technique was used without specifying any clustering solution to come up with a dendrogram and an agglomerative matrix. The dendrogram and agglomerative matrix provide a tentative guide showing all the possible clustering solutions for each sample. Moreover, the decision regarding which clustering solution to use depended on theoretical and practical reasons. In this study the objective has been to come up with tentative clusters of SMEs that shows varying degrees of networking and internationalisation behaviours and having a manageable number of clusters that is sufficient to show within group differences and similarities is warranted.

The second stage, involved re-running the analysis while specifying the number of clusters to be used. Accordingly cluster membership is provided and each case is then placed in its corresponding cluster across the two dimensions chosen as clustering variables.
The next section will illustrate the clustering of UK cases and Egyptian cases separately.

A.1 Clustering of UK SMEs

The UK SMEs were clustered based on the average network size and number of overseas markets at time $tn$. The first step of the analysis involved identifying the possible number of clustering solutions and deciding on the best number of clusters to be used.\textsuperscript{58} This is done through examining dendrogram presented in Figure 6.1 which is an SPSS generated dendrogram with possible clustering solutions of UK SMEs\textsuperscript{59}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure_6.1.png}
\caption{UK SMEs dendrogram.}
\end{figure}

\textsuperscript{58} Given the differences in the measures and scales of network size and number of markets, the values for each variable were standardized using z-score.

\textsuperscript{59} Agglomeration matrix for both UK and Egyptian clustering solutions are in appendix 2.4-2.5.
According to Figure 6.1, three or four cluster solutions emerge. Moreover, the number of clusters is also contingent upon logical and theoretical reasoning (Hair et al, 2005). A three cluster solution seems appropriate based on practical and theoretical considerations. Having three clusters showing varying degrees of internationalisation and networking extensity - ranging from high, moderate and low- would serve the purpose of this exploratory technique and would help the researcher to identify key within-group similarities and between group differences.

After re-running the analysis with the three cluster solution the following cluster of UK SMEs were identified based on the two clustering variables (namely average network size and number of overseas markets at tn). These clusters are shown in figure 6.2.
A.2 Clustering of Egyptian SMEs

The Egyptian SMEs were also clustered based on their average network size and the number of overseas markets at time $t_n$. The first step of the analysis involved identifying the possible number of clustering solutions and deciding on the best number of clusters to be used. Examining the dendrogram provides guidelines as to the number of clusters to be used.  

---

60 Given the differences in the measures and scales of network size and number of overseas markets, the values for each variable were standardized using $z$-score.
These are presented in Figure 6.3; an SPSS generated dendrogram with possible clustering solutions of Egyptian SMEs.

![Dendrogram using Complete Linkage](image)

**Figure 6.3: Egyptian SMEs dendrogram.**

In a similar fashion to the UK cases, a closer look at figure 6.3 indicated that three or four cluster solutions were possible. For sake of comparability, the three cluster solution will be used.
After re-running the analysis with the three cluster solution the following clusters of Egyptian SMEs were identified based on the two clustering variables (namely average network size and number of overseas markets at tn). These clusters are shown in Figure 6.4.

**Figure 6.4: Egyptian SMEs taxonomy**
The following section discusses the different UK and Egyptian SMEs taxonomies, through an examination of the specific internationalisation, networking and co-evolutionary processes. What follows is first a description of the operationalisation of the processes indicators. Then each cluster is analysed in terms of this sequence: (1) description of cluster membership; (2) internationalisation profile at the time of the study (Tn); (3) network characteristics at the time of the study (Tn); (4) the processes of internationalisation, networking and co-evolution over time (i.e. stages PIS, EIS and SIS).

B. Taxonomies definitions and operationalisation of measures

Entry mode and entry node

SMEs engage in inward and outward internationalisation in different countries with different levels of institutional development. These markets could be psychically and culturally distant markets to the SMEs home market or they could be similar markets (Ghemawat, 2001; Child and Rodrigues and Frynas, 2009). Operating in highly distant markets creates several risks and uncertainties associated with internationalisation, which might shape and have an impact on the way SMEs enter and operate in overseas markets (Sandberg, 2013). This is closely linked with the mode of entry choice when it comes to entering overseas markets (Chetty and Agndal, 2007). This also has an important implication for the pattern of internationalisation the SMEs will follow over time, namely whether this would be a gradual and slow incremental process or an accelerated process (Oviatt and McDougall, 1997; Jones, 2009; McNaughton, 2002). Some firms rely on low involvement internationalisation modes in the early stages of internationalisation and as the company accumulates more experiential knowledge they tend to choose higher levels of international involvement modes (Johanson
and Vahlne, 1977). Other SMEs, namely born globals tend to follow an accelerated internationalisation pattern where by the pre- and post-entry decisions are non-incremental speedy decisions (Jones and Coviello, 2005).

This also has an important implication for the type of ties and relationships a company creates and depends on in its overseas markets (Sandberg, 2013). Operating in psychically distant markets involves being exposed to more risks and uncertainties than operating in similar and less distant markets. This has a bearing on the type and nature of relationships that SMEs create and rely on in overseas markets (Sandberg, 2013). Recent studies have argued that understanding the SME entry mode choice is better addressed from a network perspective (Johanson and Vahlne, 2003). Since SMEs usually become linked to overseas networks and suppliers, the extent to which they suffer from a "liability of outsidership" may be more important than a "liability of foreignness" (Johanson and Vahlne, 2009:1). This line of reasoning is closely linked to the "entry node" concept that focuses on the ties between the internationalising SME and its overseas network and which assists its entry into a new foreign market (Sandberg; 2012; 2013; Jansson and Sandberg, 2008; Forsgren, Holm, and Johanson, 2005). This contrast with the entry mode concept which builds on the economic perspective of internationalisation and on transaction cost theory, and which concerns the form of new market entry (Sandberg, 2013; Brouthers and Hennart, 2007).

These concepts (entry node and entry mode) are not mutually exclusive but rather interrelated; they co-influence one another, whereby the configuration of overseas entry node is the similar to that of entry mode (Sandberg, 2013; Himmersson and Jansson, 2012). In this study, I shall discuss the entry mode as an important part of the internationalisation process because it reflects the degree of an SMEs international involvement. Also, I shall consider on
the entry node as a representation of the interplay between the internationalisation and network perspectives.

 Operational definitions

Tables 6.1 and 6.2 set out the operational definitions used in this chapter.

**Table 6.1: Operational definitions**

<table>
<thead>
<tr>
<th>Item</th>
<th>Operational definition</th>
<th>Comments</th>
</tr>
</thead>
</table>
markets. Moreover, it involves motivation or process through which SMEs start their first and subsequent internationalisation activities.

<table>
<thead>
<tr>
<th>Networking process</th>
<th>This involves more qualitative aspects of SMEs network, such as logic behind the choice of a certain tie or relationship, what are the benefits obtained from these ties and what are the costs of maintaining relationships, it also involves the type; nature and strength of relationships.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-evolutionary perspective</td>
<td></td>
</tr>
</tbody>
</table>
| Strategic entry node | - Strategic entry node: This is similar to the entry node suggested by Sandberg (2012; 2013), which involves those ties that had a direct or indirect impact on the companies internationalisation.  
- This impact could be an indirect tie, though a domestic relationship (such as a local chamber of commerce that offers advice and sponsors the company to participate in overseas trade fairs that often serve as a platform for finding distributors or agents in overseas markets.  
- It could be a direct relationship such as piggybacking on overseas client (Sandberg, 2013) |
| Strategic domestic node | - Strategic domestic node: this refers to key domestic relationships that were crucial for the company’s domestic expansion and learning which influenced the company’s internationalisation. |
| Type of company |  
| *Knowledge intensive and traditional SMEs | Traditional SMEs tend to use existing knowledge such as traditional production processes in their outputs and do not necessarily use advanced technologies. For example, clothing and window and door and furniture manufacturers (Child and Hsieh, 2014).  
Knowledge intensive SMEs tend "to exploit scientific knowledge to develop product enhancements and modifications or to improve processes". For example, Software developers, engineering and management consultancy and highly specialized component suppliers (Child and Hsieh, 2014:39). |

*This research does not have any knowledge-based SMEs.
# Table 6.2: Networking process- tie characteristics and operational definitions

<table>
<thead>
<tr>
<th>Tie characteristic</th>
<th>Breakdown</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tie initiation mode</td>
<td>Intentionally managed; coincidental; semi-coincidental</td>
<td>This shows that ties could be either intentionally created and managed (Hite and Hesterly, 2001); or they could be a result of mere chance or a referral or third party introduction (Coviello, 2006)</td>
</tr>
<tr>
<td>Tie direction</td>
<td>Incoming or outgoing</td>
<td>Incoming ties are through external actors directly approaching the company and outgoing ties are the ties that the company initiates (Coviello, 2006)</td>
</tr>
<tr>
<td>Tie strength</td>
<td>Weak, medium, strong</td>
<td>This is to differentiate between weak and strong ties (Granovetter, 1973). The medium level was added as some respondents argued that some ties are neither weak or strong</td>
</tr>
<tr>
<td>Tie content/type</td>
<td>Business, social or mixed ties.</td>
<td>Business ties are arms-length ties that are characterised by their commercial and non-social nature. Social ties are those ties with family, friends and/or ties that have a personal dimension attached to them. Mixed ties are those relationships that have both a social and business dimensions attached to them (Larson and Star, 1993).</td>
</tr>
<tr>
<td>Tie continuity/perpetuation</td>
<td>Short term (one off); medium or long-term (Coviello, 2005).</td>
<td>Shorter is usually done on a one-off basis, medium term may be for a certain period of time (such as project) and long term or continuous ties</td>
</tr>
</tbody>
</table>

*This is based on the use of concentric circles whereby the respondent was asked to map or locate different groups of actors within these circles. The closest one to the centre represents the strongest tie and the farthest represents weakest tie.*
refers to ties that were there for a specific purpose such as over the time period of a project or those ties that ceased to exist after sometime.

Long-term ties are those ties are still ongoing and their relationship with the firm is still enacted.


I now investigate the UK and Egyptian clusters in detail and provide illustrative case studies for each cluster in appendices.

**B.1 UK SMEs taxonomy**

The UK SMEs were clustered into three main groups; extensive internationaliser/networker, moderate internationaliser/networker and limited internationaliser/networker. Each of one of these clusters will be discussed to illustrate the within cluster similarities and differences.

I) **Limited internationalisers/networkers**

For UK cases, this cluster is located at bottom left corner of figure 6.2. Limited internationaliser/networker SMEs operate in a small number of overseas markets and have a limited number of contacts in their network. The characteristics of these SMEs, as well as their networking and internationalisation behaviour over time, are set out in Table 6.3.
Table 6.3: Internationalisation and networking processes of limited internationaliser/networker.

<table>
<thead>
<tr>
<th>Overview of cases</th>
<th>Internationalisation performance/outcomes tn</th>
<th>Network characteristics tn</th>
</tr>
</thead>
<tbody>
<tr>
<td>This cluster consists of three knowledge-intensive SMEs (they are management and</td>
<td>Internationalisation performance tn:</td>
<td>Network Characteristics tn:</td>
</tr>
<tr>
<td>engineering consultancy companies), they offer training and support for clients in</td>
<td>-PFS at tn: 50-75% (high)</td>
<td>-Average network size: ranged between 7-9 ties (small network)</td>
</tr>
<tr>
<td>the oil and gas, education, construction and specialist engineering sectors.</td>
<td>-Number of regions at tn: 2-5 (moderate to high)</td>
<td>-Average net density tn: ranged from 0.8%-10% (low-medium)</td>
</tr>
<tr>
<td>Two of these SMEs sell specialist software to aid their clients in their processes.</td>
<td>-Number of markets tn: 7-9 (low)</td>
<td>-Average net constraint: 40-53% (high)</td>
</tr>
<tr>
<td>The third SME has two unrelated business divisions. One recruits and offers support</td>
<td>-Mainly concentrated on few markets in which they have strong relationships and connections. These companies</td>
<td></td>
</tr>
<tr>
<td>to international students studying in the UK and the other division focuses on shipment.</td>
<td>are constrained because of the nature of their product. For example, OG2 offers specialist courses for marine and oil and gas companies, they focused primarily on those countries that serve as major oil and gas hubs where most of global players are- such as Aberdeen, Singapore, Middle East.</td>
<td></td>
</tr>
</tbody>
</table>

(I)Network size is highly extensive if the score is ≥30 contacts; moderate if between 11-29 and low if ≤10
(II)Network density is high if score is ≥30%; moderate if between 11-19%; low if ≤10%
(III)Network constraint is high if score is ≥30; moderate if between 11-29; low if score ≤10%
Table 6.3: Continued

| Internationalisation process | **Modes of entry:** Two out of the three knowledge intensive companies (the engineering consultancy firms) had at least three joint ventures in different markets and loosely defined partnerships in other markets. The third company relied on direct imports/exports; agents and loosely defined collaborative agreements with overseas partners to aid in the shipment side of the business.

**Entry mode choice:** This differed across the two stages of internationalisation and is highly depended on the ties available in each market. In the early internationalisation stage the founder(s) depended on immediate relationships for instance family members who had immigrated to overseas markets. Moreover, some ties were based on referrals from family members, friends and/or former colleagues (usually from previous employment) in overseas markets. Also, links with research institutions in the home country that lead to strategic referrals that helped the company enter other markets.

However, during SIS founders began to actively engage in overseas markets and to actively search for relationships (hence the increase in network size in SIS compared to the first two stages). These new ties are not based on founder’s own network of relationships but they were agents and partner who approached the company because of its reputation and legitimacy.

**Early internationalisation trigger event:** Mostly the founder(s) were proactive whereby they capitalised and reactivated his/her personal contacts such as family members; former colleagues and friends from founder’s home country) and through them several introductions to third parties were made in overseas markets. Only one case started internationalising as a result of piggybacking a large oil and gas MNC.

**Subsequent internationalisation trigger event:** Two SMEs adapted a reactive approach to internationalisation, whereby one company had to find another way to cope with changes in immigration laws concerning international students.

This company decided to offer a total solution package to help students to come and find postgraduate offers in UK universities. Also, the company started offering training and courses for those graduating student if they decided to stay in the UK and wanted to start their own business. However, if they chose not return to their home country the company offered to help with the shipment and packing of their items. To do so the company began creating links with private supporting agencies in the overseas markets to provide them with a list of potential haulage and customs clearance companies. Then company chose one or two haulage companies and formed a loosely coupled partnership with them. The relationship with haulage companies in African markets makes it easier to transport/ ship goods and get through customs. Recently because of the success in the shipment side of the business the founder decided to focus on shipping goods not for students but for heavy manufacturers capitalising on the strong linkages he had managed to develop with customs people in overseas markets and haulage companies. |
The founder of the second company reactivated a relationship he had with a professor in a US University, and because of the professor’s strong links with other universities the company began to expand in North America more aggressively.

The third company was more active in terms of finding overseas opportunities because it became more confident in its ability to succeed overseas, after the several successful exporting attempts. The founder focused on pursuing new markets in the Middle East and Asia.

| Networking process | This depended mainly on strong dense relationships that evolved from social to mixed relationships in all three of the stages of SMEs lifecycle. The only weak ties that were present across the three stages were referrals and introductions made by these strong/dense ties. These ties served as a main conduit of internationalisation they helped companies enter new markets. However, these dense ties were constraining in terms of the internationalisation scope of SMEs. This was mainly because the SMEs did not actively pursue other markets in which they didn’t have strong relationships, or where they did not know anyone. Also this creates -relatively speaking- some closure effect, whereby the founder(s) is subjected all the time to the same sources of information and there is limited space for new sources of information to come in (such as new opportunities to sell the products in new markets). As the founder of LC highlighted: “I decide on which markets to target based on two things; firstly do I know anyone there?.... maybe a friend or a former school friend...[…]...Secondly, Do I know anyone who could help me in this market. Perhaps refer me to a haulage company and/or someone I can trust?” |

| Pre-internationalisation stage | **Key strategic entry nodes:**
These were connections to research institutes and/or universities For example OG2 and LC depended on the founder(s) links with well-known universities in the UK, to expand into local market during PIS. Also, during EIS these links were the main reason those SMEs were able to find overseas clients.

The third company’s (Con1) founder relied on his family and friends of his family to enter and expand into overseas markets, such as Portugal and Spain (he is originally from Portugal).

| Early Internationalisation stage | **Key strategic entry node:**
Founder(s) family connections and /or strong friendship based on relationships with academics and research institutes in overseas markets were key to entering new markets. They offered crucial market knowledge to SMEs. They also referred the founder (s) -of all three companies- to key clients. Finally, they offered support and advice on the best way to do business.

This have resulted in two of these companies resorting to forming more advanced modes of entry informs of partnerships and joint ventures with these dense and strong relationships, where the presence of trust made it easier for the company to rely on advanced modes of entry. However, the third company reverted to piggybacking large MNCs or relying on their clients to become their agents in overseas markets.
<table>
<thead>
<tr>
<th>Subsequent internationalisation stage</th>
<th><strong>Key strategic entry nodes:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All three companies continued to rely on the strong relationships they had to further penetrate existing markets. For example, the company LC depended on the relationship they had established with private supporting agencies in African countries to help connect them with haulage companies and to advertise the shipment facilities they offer.</td>
</tr>
<tr>
<td></td>
<td>The company OG2 started forming JVs through the relationships they had developed with overseas clients as they became more active in initiating relationships in more distant markets. OG2’s founder thought that the best way to mitigate the risks in Middle Eastern and Asian markets would be to form partnerships with overseas customers. This would make partners more committed and more willing to exchange information and support.</td>
</tr>
<tr>
<td></td>
<td><strong>-key domestic node:</strong> only LC company relied on a key domestic node; because of intense competition between shipping companies in the UK. The founder managed to informally talk to his major competitors and formed a consortium. These companies shared the costs /risks inherent in overseas markets and referred clients to each other.</td>
</tr>
</tbody>
</table>
To summarise, the SMEs located in the UK limited internationaliser/networker cluster tended to rely on existing cohesive and strong relationships across the three stages, rather than on forming new relationships.

Although strong relationships and dense networks offer support, rich and tacit knowledge about markets and best ways to do business, they tend to constrain the SMEs’ diversification into distant markets. SMEs have to invest a lot of energy and time cultivating these relationships and they tend to limit themselves to whatever information and opportunities they can get out of these closely tied networks. This creates a form of closure, where the founder becomes enclosed in what and who he knows to access opportunities coming out of the ties and may only partly try to form new weak relationships in subsequent internationalisation stage [SIS]; either directly approaching them as in the case of OG2 (they started to target Middle Eastern countries and Asia through building new weak relationship).

On the other hand, highly cohesive networks tend to serve as the easiest and quickest way to internationalise with a minimal amount of risk, so founders tend to reactivate, or capitalise on existing relationships and even rely on them to access other overseas clients and suppliers.

According to Jones’s (2009) classification of the rapid internationaliser (companies that achieve more than 50% foreign sales over a period of ten years), all three cases were rapid internationalisers. They had become heavily dependent on overseas business as their main source of income. This was done through focusing on a few geographically dispersed markets where most of their contacts are located.

For example, the LC Company focused on helping international students and recruiting them for several years and they incurred problems when immigration laws were tightened and hence the number of international students decreased. This forced the company to
diversify and add the shipment aspect to its operation, but again it was confined to returning students. It was only when one of the company’s competitors tried to steal clients from the company, that founder went and talked to this competitor informally and suggested that they work together and ship furniture from the UK to African countries. Each company would contribute its area of expertise. LC’s founder knows and has good strong links with haulage companies in African countries and the competitor has a large fleet of ships and containers, which opened new avenues for expansion. Only recently the companies began to form consortiums with other shipment and haulage companies in the UK to expand and benefit one another.

A summary of internationalisation profiles and network attachments of the limited internationaliser/networker is presented in Figure 6.5. Moreover, to understand the behaviour of the individual SME within this cluster, the Con1 company will be used as an exemplary case and is described in Appendix 2.6.
Limited internationaliser/networker cluster is composed of knowledge-intensive professional service companies. These SMEs operated in a limited number of markets and had few large clients from at least three regions. These companies had high percentage of foreign sales. They have focused primarily on niche markets and where their clients are. They used advanced modes of entry, such as JVs and branches, in those markets where the entrepreneur had a personal contact there. On several occasions, they directly exported their services to overseas clients. These SMEs followed a proactive internationalisation approach in the early internationalisation stage [EIS], whereby they focused mainly on building strong relationships and reactivating old ones. However, in the subsequent internationalisation stage [SIS], SMEs adopted a reactive internationalisation approach. Changes in external environment were the main trigger events that forced these SMEs to increase their international activity.

These SMEs had small and relatively dense (cohesive) networks with a limited number of bridging relationships. These networks were dominated by strong social and business relationships. They operated in a limited number of markets, whereby they internationalised into countries where they had strong ties during the EIS. Entrepreneur(s) assessed his/her own social network and decided to enter those markets where his contacts could help him. This is a form of closure – according to Coleman (1988) and Burt (2005) – where the entrepreneurs’ social network dictated where to internationalise and how to internationalise. These companies relied on advanced modes of entry that were primarily based on the presence of trust and commitment with overseas ties. These were joint venture, loosely coupled partnerships and/or an overseas branch managed by a close friend of the founder. Although these entrepreneurs invested heavily on their own network ties, they had to internationalise and reach out for clients. Entrepreneurs were not subjected to new sources of ideas and/or opportunities, they tended to think within the box and constrained by the social networks. As these SMEs moved into the SIS, they reactivated their pre-existing relationships in order to further internationalise and on few occasions, to obtain referrals to other clients and overseas networks.

Figure 6.5: A Summary of internationalisation profiles and network attachment of UK limited internationaliser/networker cluster

II) Extensive internationalisers/networkers

This cluster consists of only two cases. These cases are outliers relative to the rest of the sample. The key characteristics of the two cases are set out in Table 6.4.
Table 6.4: Internationalisation and networking processes of extensive internationalisers/networker

<table>
<thead>
<tr>
<th>Overview of cases</th>
<th>Internationalisation performance/outcomes Tn</th>
<th>Network characteristics Tn</th>
</tr>
</thead>
</table>
| These are two knowledge-intensive companies (outliers). One manufactures surgical blades and medical equipment and the other has a diversified portfolio of products. They are producers of conveyors and handling equipment used across a variety of industries in airports and in the marine, oil and gas, construction and aerospace industries. Since 2000 it has become a structural engineering company which can handle a broad range of industries and turnkey projects. | Internationalisation performance Tn:  
- PFS at Tn: manu1 (20%-low); SM (73%-high)  
- Number of regions at Tn: 5-7 (high)  
- Number of markets Tn: Manu1 (26-high) ; SM (100-high)  
- Both companies are geographically dispersed with a large number of markets in at least five continents and/or regions. These companies are global companies and they depend extensively on network relationships to enter foreign markets and generate revenues and profits. However, both companies have a large variation when it comes to percentage of foreign sales to total sales. SM company has about 73% foreign sales from its diverse markets but Manu1 has only 20% foreign sales This is because they generate a large proportion of their turnover from local business. The company reported a large turnover of 18 million pounds in 2010-2011 which makes the percentage of sales relatively low because the majority of turnover came from inside the UK (the airport side of the business which is usually a few large projects, worth millions of pounds). | Network Characteristics Tn:  
- Average network size: ranged between 34-36 ties (extensive network)  
- Average net density Tn: ranged from 14%-43% (high)  
- Average net constraint : 37-55% (High) |

(I) Network size is highly extensive if the score is ≥30 contacts; moderate if between 11-29 and low if ≤10  
(II) Network density is high if score is ≥20%; moderate if between 11-19%; low if ≤10%.  
(III) Network constraint is high if score is ≥30; moderate if between 11-29; low if score≤10
| Internationalisation process | **Modes of entry**: Both companies relied mainly on agents and distributors in the early internationalisation stage [EIS]. However, during subsequent internationalisation stage [SIS] they relied on more advanced modes of entry. SM company had three wholly owned subsidiaries and several distributors. On the other hand, Manu1 had a joint agreement with a Libyan partner to serve the north African region and an extensive network of overseas contacts and relationships with which the company had a loose collaboration. These loosely coupled partnerships took the form of referrals to other clients and the preference was given to the company when new opportunities arise.

These closely coupled collaborative agreements consist of key domestic strategic nodes that refer the company to other large contractors if an opportunity arises in overseas markets in the airport business for example.

**Entry mode choice**: Both companies relied extensively on agents and distributors in respective markets in EIS and used more advanced modes of entry During SIS, the choice was to have only advanced modes of entry when needed. For example, SM’s operation in eastern European markets whereby their key distributor was taken over by an MNC and they decided to establish a branch to serve this market and to lend closer control over their eastern European business and network of distributors.

**Early internationalisation trigger event**: Manu1 focused on a niche market which made clients approach the company as it was one of few providers of the materials handling equipment. The first company to approach the Manu1 was a large UK MNC (sugar manufacturer), through which the company managed to enter several worldwide locations. Moreover, one of large Egyptian holding companies approached the company to buy some equipment. However, the most important move that Manu1 made was approaching UK Royal Mail. Through the relationships it established with key postal office managers- who moved to other overseas markets such as Bahrain, and Denmark to help these governments run their postal office system, as British expatriates – they- introduced Manu1 to the overseas postal office authorities. Finally, Manu1 began to capitalise on steel and cement industries in the UK and succeeded in doing so. This shows that the company followed a mixed approach to internationalisation (i.e a proactive- reactive approach)

As for SM the connection the company had through its two co-founders with a US former employer and former clients the company began exporting to US hospitals and clinics. Also, with the start of the Second World War, the company began selling its products to most of Britain’s allies and former British colony (later the commonwealth) and a few Middle Eastern countries. After two years, the company was not able to cope with the demand. So the company de-internationalised from Middle Eastern countries and decided to focus only on members of the Commonwealth and European markets. This implies again a mixed internationalisation approach/logic (i.e a proactive-reactive approach). |
**Subsequent internationalisation trigger event:** Both companies had to undergo complete restructuring because of changes in the industry and because some of the technology the companies have been using had become obsolete. For example, for SM, the global industry began to change and the company found itself having long lead times – up to 12 months- compared with their competitors. The company had to change its technology and undergo complete restructuring, which again; kept their internationalisation to minimum. After this restructuring the company was able to expand into more diverse markets and build and reactivate relationships in overseas markets.

Similarly, Manu1 had to undergo a complete restructuring and become a structural handling company because the postal industry declined in the early 80’s. Also, the new managing director decided to change the company’s business completely and to start focusing on alternative industries. Given the fact that the steel and Cement industries in the UK shifted to other parts of the world- where there is cheaper labour such as China- the company had to focus on other sectors such as alternative fuel, airports and began actively creating and finding agents and distributors in overseas markets. Furthermore, they began forming collaborative agreements whenever there was a need. For example, in Libya they knew the agent here and decided to go for a JV to serve as regional office for North Africa and the Middle East. This shows that both companies adopted a proactive approach to internationalisation during the SIS stage.

| Networking process | Both companies focused mainly of business relationships in both EIS and SIS. However, manu1 focused primarily on strong semi-coincidental [SCTs] business relationships the company had with British expatriates and even relied on them to enter and expand in overseas markets such as Denmark, Barbados and Bahrain. It also relied on a few coincidental ties [CTs] whereby the big MNCs in the sugar industry approached the company and through their network the company expanded into several worldwide locations. SM, on the other hand, focused mainly on weak intentionally managed ties and a few semi-coincidental ties in EIS, where it sold directly to countries that were part of British colonies and the ties of former US clients that its founders knew through their former US employer. During SIS, SM relied mainly on weak-medium intentionally managed business ties whereby they approached the local chamber of commerce and through them they got through to UKTI teams in overseas consulates and embassies in Middle Eastern markets and they helped the company find agents. Also, a local industry association helped the company to enter several markets.

Manu1 relied mainly on intentionally managed ties [IMTs], which were mainly medium-strong ties to enter new markets and the company had nearly an equal number of SCTs and coincidental ties [CTs]. As it became more well-known several overseas clients approached the company. Furthermore, the strong business relationships that company had with UK airport officials and contractors on the airport side of the business referred and nominated the company to overseas airport authorities; which lead to further expansion into overseas markets. Also, the company reactivated the relationships it had with agents (introduced to them by British expatriates) -semi coincidental ties- to further penetrate into Middle Eastern markets. |
Co-evolutionary processes

| Pre-internationalisation stage | Strategic entry node: For Manu1 there were no significant relationships as the company started its first international activity two months after its inception. However, SM has important strategic nodes through two of its co-founders. They had a good relationship with former US employer and clients. These ties were crucial for internationalisation of the company. |
| Early Internationalisation stage | SM relied extensively on relationships that both the co-founders had established through their former US employer and the type of product also played an important role in EIS. Because surgical blades were in great need during the Second World War and the company sold to most of Britain’s allies and British colonies including several Middle Eastern and Commonwealth countries. However, after the war came to an end the demand for these blades increased to the extent that the company was unable to cope with demand and had to de-internationalise from some markets and focus only on commonwealth countries and some European markets. 

Manu1 on other hand, has been since day one been an innovator. It kept adding new lines of related businesses to increase their domestic and international presence. In the early days of internationalisation, several overseas companies (such as oil and gas companies and an Egyptian sugar manufacturer) approached the company to buy the specialist conveyer and materials handling equipment and over time the company became the main supplier of conveyor systems to the British postal services (Royal Mail). The company maintained a very good and strong relationship with key post office managers across the UK. These managers were appointed by British government to serve as expats in several overseas markets to teach local governments and postal office how to run an effective mailing system. These expats automatically refereed Manu1 to overseas governments and post offices and the company began supplying them. The company also wanted to benefit from the strong steel manufacturing industry that was growing in the UK and they began supplying several steel manufacturers. But by the late 1980’s and 90’s, the industry began to die and the company had to find other lines of business such as airport baggage handling systems. 

Strategic entry node: For SM, trade links and UK allies helped the company expand very quickly with its surgical blades. As for Manu1 links with Royal Mail and local supporting agencies lead to important introductions and referrals into overseas markets |
| Subsequent internationalisation stage | As SM moved into SIS, it had to undergo complete restructuring as it had long lead times and was unable to cope with intense competition and new technologies. It also had to invest more in advanced technologies, which involved then reactivating prior relationships in Middle Eastern countries (distributors there). It was also necessary to create new ties to enter key regions for instance Eastern European, Indian and other Middle Eastern markets. The managing director approached the UKTI and other governmental supporting agencies to seek their help and through the overseas consulates and embassies the company was able to find agents and distributors. Due to changes in the industry and aggressive competition by large MNCs taking over key distributors, the company lost several strategic relationships especially in Poland and Eastern European markets. Thus, it had to create wholly owned subsidiaries in these markets to cope with these obstacles. 

As Manu1 moved to SIS, the company joined a local industry association through which they got to know a leading MNC. It was with this MNC that they formed collaborative agreements and piggybacked in several worldwide locations. The company also began to actively search for agents |
in the Middle East, North Africa and other regions.

**Key strategic entry nodes**: These were former agents that company had in existing markets for instance, agents of SM in the Middle East. Other key strategic entry nodes were domestic and overseas supporting agencies and industry associations. Moreover, coincidental ties [CTs] and semi-coincidental ties [SMTs] played a significant role for Manu1’s subsequent internationalisation such as overseas clients who directly approached the company and referrals from existing relationships.
It is important to note that both companies have been operating in overseas markets for at least 35 years, which is a relatively long period compared to the rest of the UK SMEs (average 24 years). This suggests that they have more experiential knowledge. This might be one of the reasons they operate in a large number of diverse, distant overseas markets and have very large networks. However, SM derives most of its sales revenues from overseas markets, whereas Manu1 derives only 20% of its sales revenues from foreign markets. This is because the latter gets a large portion of its sales revenue from airport projects in the UK relative to the other industries the company operates in (such as alternative fuel, oil and gas, sugar, steel and cement manufacturing and even water treatment).

Overall, from Table 6.8, it can be seen that extensive internationaliser/networker SMEs tend to rely extensively on large and dense business networks in the pre-internationalisation and early internationalisation stages to enter foreign markets and to have access to structural holes (in other words, these dense relationships tend to serve as key bridging relationships to enter overseas markets). As both companies moved into subsequent internationalisation stage, they became more actively engaged in creating relationships and as the company gained legitimacy and reputation it had overseas clients approaching the company; more coincidental ties. To sum up, during early internationalisation stage "network duality" is important, whereby a balance between dense and bridging relationships is suggested to be crucial to SMEs, in order for them to expand into a large diverse number of overseas markets (Burt, 2009:2). Over time, the level of an SME’s legitimacy and reputation increases and the company begins to have “network status" which is evident in the increased number of coincidental ties (Burt, 2013:22).

Finally, these two companies engaged in the continual creation of opportunities. They scan the markets to see where they can locate themselves on the world map and they enter new markets (Ellis, 2010). Also they continuously either add new lines of related businesses (as in
Manu’s case) and/or engage in continuous innovation. For instance, SM started by manufacturing disposable surgical blades and now it manufactures robotic equipments to be used in surgical operations.

A summary of internationalisation profiles and network attachments of the extensive internationaliser/networker is presented in Figure 6.6. Moreover, to understand the behaviour of the individual SME within this cluster, the SM company will be used as an exemplary case and is described in Appendix 2.7.

-Extensive internationalisers/networker SMEs, are mainly-knowledge-intensive companies. They operated in a large number of diverse markets. The amount of foreign sales revenue varied across the members of this cluster. They relied mainly on agents and distributors in the EIS and used advanced modes of entry in the subsequent internationalisation stage (only whenever it was necessary). They adopted a mixed internationalisation approach (proactive-reactive) in the early internationalisation stage and became more proactive in the subsequent internationalisation stage.

-These SMEs had large relatively dense networks. They relied mainly on intentionally managed business relationships with varying degrees of strength. In addition, they had few semi-coincidental (bridging relationships) and coincidental ties. This cluster showed the importance of bridging relationships, this was through the reactivation of the entrepreneurs’ pre-existing relationships (for example, clients he or she got to know through his or her overseas former employer). Other types of bridging relationships were either through piggybacking on domestic or overseas clients or through the links these SMEs had or created with local industry associations. These industry associations served as a bridge through which companies got to meet with MNCs and form collaborative agreements with them. Most of these SMES adopted a proactive networking logic through searching for and appointing overseas agents/distributors. On several occasions, overseas clients approached these companies directly. The main reason behind the increased number of coincidental ties (those ties that came as a result of chance) is the increased legitimacy of these SMEs.

**Figure 6.6: A Summary of internationalisation profiles and network attachment of UK extensive internationaliser/networker cluster**
III) Moderate internationaliser/networker

This is the largest cluster of UK SMEs, being composed of 15 cases. The key internationalisation and network characteristics are set out in Table 6.5.
**Table 6.5: Internationalisation and networking processes of moderate internationaliser/networker**

<table>
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<tr>
<th>Overview of cases</th>
<th>Internationalisation performance/outcomes tn</th>
<th>Network characteristics tn</th>
</tr>
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</table>
| This cluster is composed of 4 professional services companies and the rest are traditional and heavy equipment manufacturers. The four professional service companies are (Con2; LW1; Manu2; SCE)*. | -Internationalisation performance Tn:  
  -PFS at tn: mostly high (more than 70%) with the exception of two companies (of 10% or less)  
  -Number of regions at tn: 2-7 (low-high)  
  -Number of markets tn:11-19 moderate  
  -Most of these (13 out of 15) companies operate in a large number of distant and diverse markets with the exception of two professional services companies (Con2; and SCE), which operate in a relatively small number of markets and in two regions from which they drive a high percentage of foreign sales (70-90%).  
  -The remaining two are traditional manufacturing companies (namely manu7 and manu12), they have a small percentage of foreign sales (less than 10%) and they are moderately diverse (operating in 3-4 regions and operate in a relatively large number of markets, i.e.16-25 markets). The primary reason for small percentage of foreign sales is that they are considered the leading companies in the UK and drive most of their income from all over the UK. | -Network Characteristics tn:  
  -Average network size: 11-29 (moderate)  
  -Average net density tn: ranged from 5%-40% (low-high)  
  -Average net constraint : 7-44%(low-high) |

*Two of these companies (SCE and Manu2) have not reached the SIS as they have had several internal problems (for example, employees’ opportunistic behaviour) so they had to de-internationalise for some time and later they re-internationalised.
Internationalisation process

| Modes of entry: The majority of these cases depended primarily on direct exporting; agents /distributors and piggybacking MNCs and/or original manufacturers. However, some companies have used at least one or two advanced modes of entry, such as JVs and/or branches or loosely coupled collaborative agreements. |

| Entry mode choice: Professional service companies focused on direct exporting or delivering the service directly to their clients and overseas customers because they offer customised service and tailored advice, training and consultancy. These are restricted to where their customers are (market niche); and where there is limited overseas competition. For example, Con2 focuses mainly on Nordic and European clients because they offer training and support on how to do business and export. Also they provide tailored networking software for bio-tech companies whether they are UK based or European SMEs. The company has to offer its services directly to the clients and not depend on agents or distributors except for the sales of its networking software. |

| Traditional manufacturers tended to rely extensively on agents and distributors in overseas markets to sell to their overseas customers. |

| Finally, the rest of the knowledge-intensive companies relied mainly on agents and distributors and on few occasions on advanced modes of entry, this may be because they need to have more control over their regional or country operations; and/or because laws in overseas markets makes it very difficult to operate through agents (in China and USA) and/or to manage their wide network of distributors in a certain market or region. Most of the companies reported the growing importance of internet as a new means of internationalising into various markets across the globe. It has its disadvantages as the companies do not know who is contacting them sometimes they are not just clients but also agents. Founders are usually weary of these potential agents. Some cases reported that they usually investigate the worthiness of these agents through supporting agencies in overseas markets (such as UK consulates) and/or through carrying out desk research on the financial position and reputation of the company. Others have resorted to of trial and error attempts whereby, the agent has to prove that s/he is trustworthy. Only, then does the relationship moves onto a new level characterised by trust and commitment. A relationship might cease to exist due to poor quality of the tie. As founder of Manu4 reported: |

| "I had to terminate relationship with several agents over the last five years (these were agents who approached the company through random search on the internet) .... Primarily because they have made us loose business with important customers ...and sometimes they generate limited sales and when I investigated I found out that for instance our Indian agent is not working exclusively for us , but he sells also products of our competitors..." |

| Early internationalisation trigger event: Two main patterns emerged: proactive and reactive approaches. Firstly, knowledge-intensive professional service companies adapted a reactive approach, whereby they started to export because of limited demand in the UK market, or because there was no further scope for domestic expansion. Similarly, traditional SMEs either started internationalising because of increased |
competition of in the home market and/or as a result of unsolicited orders (coincidental ties). However, the rest of the knowledge-intensive SMEs tended to proactively engage in exporting; through the active search for agents and distributors overseas.

**Trigger event subsequent internationalisation:** A mixed approach to internationalisation (proactive-reactive). Four of the knowledge intensive SMEs, increased their degree of internationalisation because of successful exporting attempt(s) in one market. This was particularly the case, in a difficult market; where overseas clients who were satisfied with company’s products refer them to other clients in the same country/region and/or other hear about the company’s success and approach the company (i.e the ripple effect). For example, one of knowledge-intensive companies managed to succeed in the Swedish market, which is characterised by strict quality standards and competition. Such was its success that one of the Swedish newspapers wrote about the company’s successful technology, which caused other clients from neighbouring Scandinavian countries approach the company and buy from, leading to the company’s penetration of the Eastern European markets.

Another scenario which was common in subsequent internationalisation stage, was that knowledge intensive companies developed legitimacy over time. This effect was that an increased number of overseas clients approached the companies and/or this legitimacy made the existing agents or suppliers more likely to refer with confidence the company to large MNCs and original manufacturers (OEMs).

Similarly, traditional manufacturers decided to further increase their exports because of the success in one market (which generated a large amount of profit for the company). Moreover, repeated success seems to be a key motivation for replicating the positive experience in other new markets. Finally, some of the companies decided to further internationalise as a response to diminishing profits in existing markets. For example, Manu7 sold some its products to clients in Russia and Croatia and this was through a close contact of the export manager and since the clients were satisfied with the product they referred the company to other clients subject to some special requirements and when the company met the requirements of Russian and Croatian clients they refereed them to other clients. This increased the foreign sales revenue by 50% which encouraged the company to replicate the same scenario in Far Eastern countries and to make some adaptations to suit their local needs.

The majority of heavy manufacturing knowledge-intensive SMEs had the mind-set that in order to grow and survive they have to excel in overseas markets and they continuously engaged in expanding. It is important to note that, sometimes this aggressive internationalisation behaviour is attributed to changes in management or the appointment of a new export manager and/or a new managing director with the mind-set to further expand. This triggers further international expansion into overseas markets. For example, Manu9 is a classic example of new venture (NV) that started off its international operations within one year of its establishment. The company had excess production capacity since the first year of its operations and decided that the only way to cope was to export to overseas markets. The export manager (who is now the owner of the company) actively engaged in building and creating relationships with various distributors in overseas markets and nurtured the relationships with them. When the export manager took over the company he was more able to expand aggressively to other regions around the world and capitalised on his strong business relationships with existing distributors to manage operations in their regions and devoted minimal amounts of time to follow up with them and focused more on developing new agents and distributors in new overseas markets.

To sum up, companies in general start off with either a reactive approach to the success in certain export markets which made them more willing
to repeat success in other markets following same template. Or as a result of success in existing markets companies either; found no room for further penetration into existing markets and decided to export elsewhere, or companies which became well established and strong reputation made other overseas clients approach company and/or agents to refer them to other clients in nearby markets.

Others continued to internationalise proactively into new markets, usually as a result of change in ownership (may be new generations taking over managing the export side of business) or change of management.

### Networking process

Although, each knowledge-intensive SME is idiosyncratic in its networking behaviour, most of professional services knowledge-intensive SMEs relied mainly on referrals, word of mouth and in some cases on advanced modes of entry if the market dictates this, or if they have strong relationships they develop joint ventures or loosely coupled collaborations. Each entrepreneur realises the value of relationships in promoting business but uses what is available and since they all offer specialized/tailored product - they focused on a particular market niche - their internationalisation behaviour is highly defined based on where their customers are and who are they. In other words, they all engaged in active networking but within the limitation of their market niche. For example, founder of SCE argued that:

"I approach the markets where there is a niche for products and limited competition... [.]. I didn’t chose to sell mainly to European clients simply because there is a limited need for our products and there is a lot of competition. However, for instance in Brazil there is a need to our product and there is a lot of business potential there. That is why I spent several’ years building my three networks (professional social and governmental networks) before starting my business..."

However, one of these professional service companies is a law firm and they relied extensively on inward internationalisation in EIS through offering legal support services for overseas SMEs investing in the UK. In addition, through their membership of a global alliance- to whom they pay subscription fee - they managed to create their own network of loosely coupled collaborative agreements with other large law firms from around the globe. This allowed the company to get several referrals for smaller projects in overseas markets and in exchange LW1 referred these large law firms to big clients in the UK and Europe. Moreover, the founder managed to establish strong relationships with large audit firms (such as KPMG and PWC) and they piggybacked on these companies in eighteen markets around the world. Thus the membership of this global consortium or alliance and the strong mixed relationship the founder established with top managers of the large audit firm helped the company to expand dramatically, thereby moving it into SIS.

The rest of the knowledge intensive SMEs (nine heavy manufacturers-both knowledge and traditional SMEs) depended mainly on agents and referrals as their key modes of operations. So they engaged in selecting agents and distributors anywhere around the world. Seven out of the nine SMES had moderately sparse networks and relied on a limited number of bridging relationships. The seven companies operated in diverse and relatively large number of markets and obtained a high percentage of foreign sales because of their international scope and diversity. They depended mainly on creating and building ties whenever possible anywhere in the world. They tend to have mainly weak-medium intentionally managed ties in EIS and SIS. As mentioned before some of these companies reported the role played by internet and how, in the last 6-7 years,
this helped the company to expand into new markets. This was through clients approaching SMEs through the internet (these ties are considered coincidental ties).

Some of these entrepreneurs reported that especially in SIS they tend, to focus mainly on those ties or relationships that generate the highest amount of overseas revenues. And it’s the responsibility of individual distributors and agents to deal with risks in overseas markets and maintain relationship with less significant clients in their respective markets. Hence sparse network could be managed if there are weak business ties and whenever a need arises, the overseas agents and clients contact the company. Most of these agency’s agreements are formal or contractual based and mainly based on commission.

The remaining two companies had high density/cohesive networks and at the same time relied on bridging relationships to enter overseas markets. These two firms have depended mainly on strong mixed relationships, which they have developed over the years. These strong business ties were put on hold and later reactivated when the company decided to expand after a period of de-internationalisation. Also both companies relied on their high density strong mixed relationships to manage the second tier (secondary networks of the company; in other words agents and distributors, branch managers are the ones who maintains and nurtures relationship with overseas clients and distributor networks).

The founder of manu8 explained "Having a large web of relationships is crucial to our business. \[\ldots\] and it takes time to develop and maintain strong relationships... \[\ldots\] which I would like to have with everyone I know. However, I am constraint in terms of time and resources ...so I rely on those strong relationships I chose very wisely \[\ldots\] based on extensive research and strong criteria) ...to maintain our relationships with important clients and overseas distributors ".

To sum up, knowledge intensive professional service SMEs operate in a moderate number of overseas markets and this is highly dependent on the nature of the services and products they offer and/or where their clients are located. However, they sometimes piggybacked large MNCs-with whom they developed relationships either directly through an introduction from a third party. At other times they used more advanced modes of entry in overseas markets because of a need in that market. For example, LW1 piggybacked large MNCs and relied on loosely coupled joint referral agreements to access diverse markets. Moreover, the other three supply only European markets and have only a joint venture/branch either in Brazil and/or the US. The reason behind having a joint venture in Brazil is because this country is an emerging market. This is quite risky and a branch is needed to manage overseas operations, which is usually managed by a close friend of the founder. Another example is that these three companies have clients in the USA, which prefer to deal with a US registered company and hence the need for establishing a branch there. This could be managed by anyone (either strong or weak tie) because of strong contractual enforcement in the USA.

The majority of heavy manufacturing knowledge-intensive SMEs tended to actively engage in weak business relationships with agents and distributors in overseas markets through directly pursuing them. Only two companies rely on their strong dense networks to access overseas markets and to gain access to structural holes.

The traditional SMEs depended mainly on agents /distributors networks and wherever they can sell they do so via low commitment entry modes.
During EIS these SMEs networks were mainly combination of coincidental weak business ties—which have been the reason companies internationalised and few semi-coincidental ties [SCTs]. These SCTs were mainly domestic ties which referred the company to clients /suppliers in overseas markets. As SMEs move into SIS, they become more actively engaged in exporting and searching for more agents /distributors. On other occasions they formed loosely coupled collaborative agreements as a response to success in overseas markets and/or the home market became saturated and the only option left for the company is to export. Some of these companies, particularly those which have limited international experience, tend at this stage to contact local supporting agencies such as the local chamber of commerce, UKTI and overseas consulates to gain the necessary support and learn how to export. Hence these companies had a moderately cohesive network and relied to a moderate extent on bridging relationships (agents) and have a moderate network size. These companies share moderation in terms of cohesiveness of their networks in EIS and SIS and also they operate in diverse, relatively numerous markets. Most of their relationships are strong business relationships and some ties were intentionally managed and/or coincidental ties with varying degrees of strength.

Co-evolutionary processes

| Pre-internationalisation stage | The main key strategic node was the former/employer of founders and the key relationships the founder(s) had with clients, and suppliers. Other key nodes where that of the founder(s) such as such as professional networks, social or family and friends networks and overseas governmental networks. For example, the founder of one of the professional services companies spend nearly 6 years developing 3 groups of relationship in the UK and Brazil before he started his business. These were 4 types of networks; the first is composed of experts and academics in the field through whom he later managed in order to learn the technicalities of construction and infrastructure work in Brazil. The second was social network such as religious links and extended family who offered support, accommodation and made it easier for the founder to stay in Brazil and travel around until he had hands on experience across different regions in the country. The third and fourth types of networks were business networks with suppliers and construction companies. The third scenario is through the creation of links with local and overseas governments and key decision makers in host country. This was the case with three of the professional services companies, which tailored their services by capitalising on the links they had established with local governments for instance (Con2 formed a loosely couple joint agreement with UKTI and several key research science parks offer support to bio-tech SMS in the UK and overseas on how to export, network and access funds and resources made available through the UK’s membership in EU and other sources of funds available through the UK government. Also Manu2 company is a construction and engineering consultancy company that specialises in offering health and safety training and compliance plan across a variety of construction related industries. The founder capitalised on his links with the UK government and expert knowledge of European and UK based health and safety regulations to offer services to clients and in several cases he lobbied the UK government to modify some legislation that made it nearly impossible for his clients to comply with regulations. This was the case is early internationalisation stage. |

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<table>
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<tr>
<th>Early Internationalisation stage</th>
<th>Three scenarios emerged:</th>
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<td></td>
<td><strong>Key strategic entry node:</strong> in some cases it was the result of coincidental or serendipitous events. For example, Manu12 which was originally a letter plate manufacturer had several coincidental ties with European markets that used the same letter plates as the UK. This was how they got their first few exporting attempts. OG2 which is an oil and gas company, had its first exporting order through buying one of the facilities owned by Shell company in the UK, which triggered an opportunity to sell to Shell inside and outside the UK.</td>
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<td></td>
<td>Another more common theme is active engagement in selecting and creating strategic nodes in overseas markets mainly agents/distributors and in risky markets or when there is a need for control of overseas operations. Advance modes of entry were created, the nodes that managed these advanced modes of entry (JVs, subsidiaries or branches) depended to a great extent on the nature of the host country. In risky markets like Middle Eastern and African markets the norm was to select in a calculative manner those relationships that have a strong reputation and financial position and/or with whom the company has established a strong relationship. In other less risky markets such as the USA and European markets, where the legal framework is strong, weak-medium business relationships were present with overseas contacts that managed these branches or subsidiaries.</td>
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<td>The final scenario is to piggyback on MNCs and/or be part of a global supply chain. This could take several forms. For example, Manu5 was approached by a UK MNC to supply them with testing equipment that they used in Middle Eastern and Asian markets. Moreover, it was approached by one of its overseas competitor in the US to recalibrate and fix some equipment and as a result of this interaction the company got referred to several North American companies which specialise in manufacturing testing equipment but relied on manu5 (their immediate competitor) to fix and maintain equipment because of the company’s highly skilled labour the company.</td>
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<td>Also membership of global alliances and/or global industry associations played a major role in internationalisation of three of the SME mentioned in this cluster.</td>
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| Strategic domestic nodes: | These were mainly the UK government and supporting agencies. They helped SMEs to learn how to export, sponsored them to participate in trade missions referred them to overseas UKTI teams and embassies. This is especially the case for companies that had limited or no international experience These domestic nodes were crucial for their internationalisation success. However those companies that had previous international experience preferred to do their own research and build relationships from scratch without relying (or partially relying) on the supporting agencies. |

<table>
<thead>
<tr>
<th>Subsequent internationalisation stage</th>
<th>Three scenarios emerged: Adding a new side to the business to further internationalise has been the practice of three professional services knowledge-intensive SMEs. This was either by adding complementary customised services to appeal to a broader range of customers and/or adding a new product.</th>
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<td>Secondly, after the success in some markets the companies become more actively engaged in further expansion into overseas markets usually</td>
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following the same internationalisation pattern through finding an appropriate node.

Thirdly, those companies that reported high dense and strong business relationships, they depended on relationships to get more access to referrals and structural holes in overseas markets (i.e. reactivation of ties established during PIS and EIS to further penetrate existing markets and even to enter new markets). For instance, Manu8 reactivated the strong connections one of its managing directors had established with UK embassies and UKTI in overseas markets (through his long history in industry), the company was given preferential treatment with regard to invitations to parties and welcome events that overseas consulates run and to which potential agents and clients are invited. Moreover, the said MD was offered the chance to use any of the embassy’s offices to conduct business meetings and, even more importantly, the embassy would call potential clients and agents for him as they are more likely to answer a call coming from the UK embassy than a cold call. This helped him follow up with clients and he managed to enter several overseas markets simultaneously in short span of time. Finally, the internet has served as a key internationalisation mode through which companies have created weak ties (entry nodes) in more distant overseas markets. Although this brings with it a lot of uncertainty and risk, if the founder(s) have connections with UK consulates or a friend in the industry and or in overseas market they might offer assurance and conduct background research about the reputation and stating of the agent or clients. This was the case for Manu7 through the export manager’s brother who is the company’s agent in Russia the company managed to pay for a private investigation agency (trustworthy one previously known to the export manager’s brother) to investigate a Belarusian agent that approached the company via the internet. And this practice was replicated with several prospective agents in ex-Soviet countries.

**Strategic domestic entry node:** same as EIS.
From Table 6.5, it could be inferred that the overall moderate internationaliser/networkers have a relatively idiosyncratic networking and internationalisation behaviour. There are some general tendencies across the sub-groups. These SMEs relied on strategic domestic and overseas entry nodes to diversify to a moderately large number of markets and into moderately diverse regions and markets. They varied in terms of their internationalisation intensity (percentage of foreign of sales), some focused on few regions to obtain the majority of their foreign sales revenues and others focused on more diverse markets to generate foreign sales. Each of these cases has relied on a moderate business dominated networks. However, they differed in their networking and internationalisation logics. Some companies adapted a proactive internationalisation approach whereby they decided to enter overseas markets through calculative assessment of the possibility of succeeding in these markets and/or the presence of a suitable tie or relationship that could help company enter and excel in the prospective markets. As their networks increase they tend to become more selective in terms of which ties to retain and which one to put on hold and/or terminate, whether these ties are with customers and suppliers.

As Manu10’s founder highlighted:

"Our relationship with clients is the strongest without a doubt and the main ones are certainly very close to us but I can’t get too personal with them but certainly it’s a close business relationships and when I say close I mean they know a lot about us and we know a lot about them...[...].... our relationship with suppliers is weakest among all of other relationships you asked about... If a problem arises I have to get involved otherwise nothing will be done... that is why I only have a close relationships with our main suppliers – for example, one in USA- and the rest we have a very weak relationships with ... primarily because they are small ones and they come and go according to our needs".
Also Lek’s founder mentioned that:

"Now we nearly operate in every corner of the world. I can’t keep track of every one.... I devote most of my energy and time on largest overseas clients we have... the ones that provide us with most of the profits and the rest of the clients ... although I would love to have a closer relationship with them sometimes they disappear and I lose them...".

From the above two quotes it is clear that some entrepreneurs tend to be calculative in terms which ties they devote more time and energy and tend to lose some of the smaller accounts. This is similar to the 80-20 rule in marketing, whereby a company devotes most of its resources towards a smaller number of large accounts or clients since they serve as the main source of income.

A summary of internationalisation profiles and network attachments of moderate internationaliser/networker is presented in Figure 6.7. Furthermore, the Lek company will be used as an exemplary case and is described in Appendix 2.8.
This is the biggest cluster of UK SMEs. It is composed of knowledge-intensive (professional services and heavy manufacturers) and some traditional SMEs (traditional manufacturers). These SMEs operate in a moderate number of markets and in diverse regions. These companies depended mainly on direct exporting through extensive reliance on distributors/agents and piggybacking on MNCs and original manufacturers. They only relied on loosely coupled partnerships and advanced modes of entry when needed. For example, if there is a need to work in collaboration with large MNCs or suppliers through developing a product or working together on a particular joint project. Also, the host country laws and regulations sometimes required the company to establish a branch or subsidiary. On few occasions, decision makers felt that it is important to have full or partial control of the international operations in in a particular market or region.

Finally, the internet has been used by some of these SMEs as a new mode of entry which proved to be an important tool to internationalise fast especially for well-established companies. However, there is an important element of risk associated with this mode of operation, whereby companies do not know whether or not a particular overseas agent or supplier is trust worthy. Some SMEs carried out a background check, through trusted contacts they had in these markets. Others tried the agent or supplier for a certain period of time before deciding to give him or her full trust.

-This cluster adopted two internationalisation approaches; proactive and reactive. Mainly, professional services knowledge-intensive SMEs and traditional manufacturers started their early internationalisation either as a response to an unsolicited order or the limited scope for further expansion in the home country and intense competition. By contrast, the heavy manufacturing knowledge-intensive SMEs adopted a proactive approach, whereby they actively engaged on finding overseas opportunities. As SMEs moved into the SIS, those SMEs that initially started off with a reactive approach in the EIS, became more proactively as a result in management or ownership change. Others adopted a reactive approach, through following the same successful internationalisation template in new markets.

-These SMEs have moderate network size, with varying degrees of network density and constraint. Knowledge-intensive SMEs, generally speaking, had large sparse networks. More precisely, knowledge-intensive professional services firms- in this cluster relied on bridging relationships and engaged in active creation of ties. They focused on a niche market. Moreover, they obtained insidership position in some global alliances through which they managed to secure loosely coupled partnerships/collaborations with large MNCs. Also, they created strategic links with governmental supporting agencies in the UK and Europe to secure business. The remaining of knowledge-intensive SMEs (heavy manufacturers) intentionally created weak business relationships with overseas distributors/agents and whenever a strong business tie was present, they made use of it to enter overseas networks with whom they are not directly connected.

Finally, the traditional SMEs had moderately cohesive networks composed mainly of strong business relationships in overseas markets. These traditional SMEs followed a reactive internationalisation approach though responding to unsolicited or planned orders and/or piggybacking on MNCs. With the success in overseas markets, these companies decided to engage more actively in overseas markets through approaching local supporting agencies.

Figure 6.7: A Summary of internationalisation profiles and network attachments of the UK moderate internationaliser/networker cluster
B.2 Egyptian SMEs taxonomies

The Egyptian government, before the 2011 revolution, made several attempts to offer help and support to SMEs in general and, to a lesser extent, to support internationalising SMEs in some particular sectors. The managing director of -the Social Fund for Development (SFD)-which is the only government support agency specified by law to offer support for SMEs-highlighted that the government focuses on some strategic sectors in order to offer support and to encourage them to export. He emphasised:

“We have limited financial resources and we have to be selective on whom we should support in terms of sponsorship to trade fairs and the like....[...].. Having said that we have only few sectors that have the potential to succeed overseas mainly these are: food processing, furniture and clothing... and these are even not that much’’.

Moreover, the head of incubators section in SFD estimated that the number of exporting SMEs accounts to only 3% and he highlighted:

“We have only 3% of our micro and Small and medium sized (SMEs) which truly export. ...[...].. Our official statistics are controversial and there is no one single static about actual number of exporting SMEs... by this I mean the ones that have repeatedly exported not just once. And to answer your question which are the sectors that tend to export... I will say we hardly have any high-tech companies that export let alone a high tech SME....”.

This shows that there are few high-tech/knowledge intensive companies in Egypt that internationalise compared to the large percentage of UK high tech/knowledge intensive firms. However, to allow for variation in SMEs several knowledge intensive companies were included purposefully in the Egyptian sample, namely two software companies, a granite and marble
designer/manufacturer and a medical supplies company. It is also worth mentioning that there are four professional services companies in the Egyptian sample, which offer engineering and consultancy services across a wide range of industries.

The networking and internationalisation behaviour of Egyptian SMEs differs significantly from UK SMEs in ways that suggest the influence of the institutional and cultural environment. The three clusters highlighted in Figure 6.4 are now discussed.

I) Extensive internationaliser/networker

This cluster is composed of three professional service knowledge intensive SMEs. These companies operate in a large number of markets and rely extensively on a large number of network ties in order to grow and survive. They had the highest scores regarding the number of markets and network size among the Egyptian cases. Table 6.6 sets out the key characteristics of this cluster.
Table 6.6: Internationalisation and networking processes of extensive internationaliser/networker

<table>
<thead>
<tr>
<th>Overview of cases</th>
<th>Internationalisation performance/outcomes tn</th>
<th>Network characteristics tn</th>
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</thead>
</table>
| These are three knowledge intensive-engineering/consultancy companies. They offer consultancy services in a wide range of industries ranging from waste water treatment; recycling and solid waste management; waste treatment and environmental protection and compliance. These companies started with a central nuclei (one company) or node and over time they formed their own industrial cluster. These companies had a highly dense/cohesive network to begin with a management system in place similar to interlocking board of directors. | Internationalisation performance tn:  
- PFS at tn: 80-100% (high)  
- Number of regions at tn: 5-7 (high)  
Number of markets tn: 13-15 (moderate—but these are the highest scores reported by Egyptian cases).  
- All three companies depended on inward internationalisation from North American and European countries. This took the form of either importing know-how from European and North American markets and/or depending on foreign donors/aids and international organisations from Europe, North America and Japan. These companies worked with donors on projects as subcontractor(s) of an MNC from the country where the aid or support is originated. Moreover, sometimes they companies work with these MNCs in projects in Egypt and other Arab countries (such as Saudi Arabia, Iraq, Oman, Yemen; Libya) and only one of them, Con2-eg, has a joint venture with a Malaysian consultancy firm and they work on offering solid waste management support and turnkey projects for factories and plants in Malaysia and the Middle Eastern markets. | Network Characteristics tn:  
- Average network size: ranged from 17-54 (moderate-high)  
- Average net density tn: varied significantly among three cases 10-42% (low-high)  
- Average net constraint tn: ranged from 24-44% (medium to high). |

(1) Network size is highly extensive if the score is ≥30 contacts; moderate if between 11-29 and low if ≤10  
(II) Network density is high if score is ≥20%; moderate if between 11-19%; low if ≤10%.  
(III) Network constraint is high if score is ≥30; moderate if between 11-29; low if score≤10

*There is a fourth company that is part of this industrial clustered but it is classed as a moderate internationaliser/networker

These three SMEs share very similar internationalisation patterns and outcomes/performance. However, they differ in their networking behaviour as shown in Table 6.6. Although they come from the same cluster and have at least one common founder in the three companies each company has its unique networking behaviour based on the networking logic of the main founder. These differences and similarities are discussed in Table 6.7.
**Table 6.7: Internationalisation and networking processes of extensive internationaliser/networker**

<table>
<thead>
<tr>
<th>Processes</th>
<th>Comments /description</th>
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| Internationalisation process | **Modes of entry:** Con2-eg has a variety of modes of entry to suit each market and the clients they have in each. They have a wholly owned subsidiary in Libya and two joint ventures in Malaysia and Syria. Also, they work as sub-contractors of MNCs in several Middle Eastern markets and on a project basis in other markets. They also inwardly internationalise through buying technology from USA, European and South African providers.  

For Con1-eg: modes of entry varied within each market, and in some markets the company started off as a sub-consultant and after success in these markets, a more advanced mode of entry was used. For example, the company initially had worked as a sub-consultant of a large Saudi Arabic consultancy firm. However, they recently decided to open a branch in Saudi Arabian and a similar story took place in Libya.  

Furthermore, the company used other entry modes. They have a representation office in Syria; they inwardly internationalised through working as a sub-consultant for a large international or regional consultancy companies on projects funded by foreign donors/aids and international organisations. For example, the company works as a sub consultant to a US MNC on projects in Egypt and other Arab countries with USAID funding. Some of these donors are international organisations such as UNIDO and UN and/or country specific aid that sponsor developmental projects in emerging economies.  

For SC1: They depended on a variety of entry modes. They worked on projects sponsored by international organisations such as the World Bank, UNIDO, and foreign donors on projects in Egypt and the Middle East. They also have several representation offices in Arab and Middle Eastern regions and finally they depended on piggybacking on large MNC from the UK, USA and other countries.  

**Entry mode choice:** The choice of entry modes in all of the three cases was highly dependent on the needs of overseas clients (which in this case are mainly governments and municipalities; large companies and even MNCs working in overseas markets that have to comply, for example, with environmental protection policies and laws). This shows that, for instance, that in the case of Libya, the Libyan government was the main client for Con2-eg; the co-founders decided that the best way to serve the Libyan market would be to have a wholly owned subsidiary. As a result Con1-eg piggybacked Con2-eg and worked as the main consultant to the Libyan government in other areas such as water and waste water treatment. Furthermore, Con1-eg has a relationship with a large Saudi Arabian consultancy company and through it they got several sub-consultancy projects and over time the company decided to have its own branch as it became more well-known and had a larger amount of work coming from

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Saudi Arabia.

**Early internationalisation trigger event:** This varied across the three cases and was driven primarily through the nuclei or nexus company Con1-eg. All three companies started their first internationalisation activity within the first three years of their establishment.

Con1-eg internationalised from day one since they started through their franchising agreement with US MNC, and through this agreement, they managed to work as a sub-consultant to the US MNC on projects sponsored by USAID.

As for SC1 it internationalised through the link that the main founder (Mr Y) had with Con1-eg’s founder who referred the company to a French donor, which was the start of the internationalisation of SC1 and they followed the same template as Con1-eg.

As for Con2-eg it internationalised through the external examiner of the main founder who was a British professor and he liked the PhD dissertation of the founder and offered to sponsor him to conduct a pilot project using the proposed technology in Egypt. Further, Con2-eg’s founder had an Egyptian supervisor who is Con1eg’s founder and they both worked together on this pilot project – that was sponsored by the British professor. This was a success and both then decided to open a company specialising in recycling and solid waste management.

**Trigger event subsequent internationalisation:** All three companies suffered from the decrease in donors’ money and limited projects that were available in Egypt and decided to pursue projects in Arab and Middle Eastern countries. This was done through former links with contacts in donors’ representation offices in Egypt who told them about potential bids in Iraq or other Arab markets. Also, they actively scanned the newspapers and other media sources in the search for bids offered by overseas governments and began to prepare proposals and expand. Moreover, they began to focus to a relatively moderate extent on the local market as well (which is evident in the period of decreased foreign revenues and increased local sales). Over time they began to capitalise on each of the founder(s) personal links and relationships such as Con1-eg’s link with Saudi or Syrian partners and Con2-eg’s link with Libyan and Malaysian clients in order to further expand. They reached the stage where Con2-eg managed to secure a large sum of capital through a large Arab investor who saw the company and decided to invest more in it in exchange for 50 percent ownership and this gave the company the financial strength to take on broad large BOT projects (i.e turnkey projects) in the Middle East, which helped the other two companies to expand as well and engage in large projects. So it’s the network that this cluster created that helped all the three companies to further internationalise.
All of these three companies could be considered early start-up companies or new ventures because they started their first international operations immediately or soon after the company’s inception. However, it is worth noting that this was not in the form of outward internationalisation but rather through inward internationalisation. However, they entered the subsequent internationalisation stage, after a long period of time which is mainly because of the decrease in the donor’ money.

**Networking process**

The networking logic of this cluster is unique compared to the rest of the Egyptian sample. This cluster of companies started off with two individuals (the main founders of the nuclei company “Con1-eg” who worked together in one of developmental projects in Egypt). This was under the supervision of a large US consultancy MNC. They got to know each other and both were promoted to the position of vice-presidents. This made them close to the American expatriates who ran and supervised the project; through frequent positive interaction, their relationships with expatriates became very strong. Each founder brought with him a wealth of diversified networks (a largely diversified portfolio of ties). The first Founder Mr. A is an engineer who has worked with several governmental ministries and agencies; he had very strong links with ministry of environmental affairs, social fund for development (SFD) and other key ministries in Egypt. He then joined the development project - run by a US MNC- and was the first Egyptian to be hired in this project as a consultant. He was well connected to several ministries and agencies; a connection he used later on to obtain business for his company and to know about potential bids the company can apply for. The second founder, Mr G, is a professor at the Faculty of Engineering, at Cairo University. He has been fortunate in the sense that among his cohort of fellow graduates several have become ministers and occupied high ranked governmental positions. It also offered him access to important information and opportunities, as he highlighted:

“My position as a university professor and from Faculty of Engineering served as a key platform through which I met and developed strong relationships with elite of the society, these people are well-educated and often have a PhD degree which makes them occupy top ranks ... [...] ...this helped me a lot domestically and to gain access to potential bids that might come up ...However, they didn’t have any influence in the decision regarding who is to win the bid”.

He has also worked as a free-lance consultant for a number of years which has made him a well-known name in consultancy business. Over time, when a particular development project came to an end, both Mr A and Mr G decided that it was time to start their own business and capitalised on the strong relationship they had with the US MNC and negotiated the franchising.

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61 This cluster also has a fourth company that is more of a manufacturing/consultancy company that offers support and advice regarding full management of compost production and it has a factory that manufactures compost as well. This company has a different internationalisation pathway compared to the others, whereby it focused on a lesser number of markets and does not depend on donor’ funding directly. It works in a small number of large projects in overseas markets which accounts for most of its foreign sales revenue. Its networking behaviour is similar to these three in PIS and EIS since this company has at least one common founder. But in SIS, it has focused on few clients to whom it offers support and consultancy on compost plants establishment and on exporting its compost products directly to customer. This company is included in the moderate internationaliser/networker cluster.
agreement, in a way that allows them a degree of freedom and to add their name as a subtitle to the US consultancy name. This also gave them more control over the operation and adaptation of their services to the Arab Middle Eastern context. The franchising agreement involved having a US expatriate to supervise the company and offer the necessary support and know-how. This was a crucial move that helped the company to get to work as a sub-consultant for any project that the US company was involved in and, in most cases, to be able to qualify for bids on projects sponsored by USAID in Egypt. Moreover, this made large clients (MNCs in Egypt and other clients) trust that this is a good company, although it is very small in size and had no established presence in the Egyptian market (unlike most of its domestic competitors). This was a key contributing factor behind the company’s success during EIS. The links that both founders had with different ministries and agencies helped them know about potential governmental bids - most likely sponsored by a foreign donor/aid. They also hired the best technical staff - through Mr G’s links with Cairo University, to prepare good technical and financial proposals to win these governmental bids. At a certain point in time, through the links both had with Ministry of Environmental Affairs they got to meet SC1’s founder (Mr Y). In the beginning he was just an employee specialising in environmental affairs in Con1-eg. However, when the Egyptian government began to pay more attention to environmental protection, the company had a lot of demand, even in excess of its capacity. This made Mr Y and the other two founders to establish a different company (SC1), which specialises only in environmental protection consultancy and to be primarily managed by Mr Y. He had strong links with all governmental bodies, responsible for environmental affairs including ministries and agencies.

Furthermore, the link Mr G had with the USAID representation office and other foreign donors (such as Finnish and Danish Aid) helped the SC1 get to know about possible bids.

Finally, university professor Mr G was engaged in the joint supervision of Mr H (the founder of Con2-eg) with a British Professor. After Mr H’s viva, it emerged that the external examiner, who was from Nottingham University, was fascinated by the dissertation idea concerning a certain technological solution of recycled products. He offered to sponsor Mr H to carry out a pilot project in Egypt to see if whether this technology could be implemented. Mr H came back and worked with Mr G on the pilot project and they decided between them to establish a company that specialises in solid waste and recycling consultancy. And again the management was left to Mr H. He then approached Ministry of Military Production and the national research institute that were carrying out a joint project in more than 50 factories owned by Egyptian armed forces. These factories were having a significant problems and bottlenecks in their production processes. Mr H then suggested an alternative technological solution that would solve their problems. In the beginning they refused and insisted on hiring German experts to solve the problem but they failed to them sort out. He then persuaded them to try his technological solution and if it didn’t work he would not receive payment for anything. It turned out to be a huge success and since then he has managed to expand and grow and to be even
nominated to overseas governments such as the Saudi Arabian or Libyan governments as a potential engineering consultancy company, which was how this company expanded.

Moving into SIS, the success of the three companies and their joint collaboration helped those companies to expand into overseas markets nearly on a concurrent or simultaneous fashion. For example, entry to Libya was initiated by Con2-eg and then SC1 and Con1-eg followed. There were incidences were two of these companies came together to put a proposal forward to win a certain bid and if they got this bid they worked together on the project. However, each company had been highly influenced by the networking logic of its main founder. SC1’s founder (Mr Y) follows a fatalistic-calculative networking logic whereby he chooses to retain those relationships with clients that will yield maximum benefit and let go of those which will not lead to future business or medium-term benefits. This started to be the case after the company became well known and had strong legitimacy in domestic and overseas markets. He mentioned that:

"I usually carry out an Eftar (dinner) every year during Ramadan (an Islamic holy month, where people fast and then gather together to break their fast) and invite to this event my clients, NGO’s, municipalities and even those clients who I have never dealt with... this creates a friendly gesture and an atmosphere where we share and eat together.... This as you know creates a social bond that makes it easier to do business together in the future as the Egyptian proverb says... we eat and break bread together so we cannot sabotage the relationship. ... As it has created some form of social bondage. ... I do not mean to say that I’m opportunistic I strongly believe that I have to work and God will then make a way and it’s all a matter of destiny, if it is meant to be it will be regardless if I exert an effort or not’’.

On the other hand, Con2-eg’s main founder is an aggressive networker he is by default a risk taker. He would create opportunities to succeed.

He highlighted ‘I hate this stereotype that we have embedded in our society, which only foreigners can do it and they are the ones who can succeed and become global companies. We can do it and even be better than them. I know its God and all is a matter of destiny.. But he gave us brain and if we don’t use it to succeed we are sinning—excuse me for this metaphor— but its true I proved this to you just now with Libyan example, it is well known that it’s impossible to work with Libyan government or establish a company there unless you know someone in a strategic position, I didn’t have any one but I preserved and insisted to convince them that I have the solution for their problem and since the German experts they brought in failed to solve the problem. I convinced them that they will not lose anything if they try mine and it worked’’.

As for Con1-eg’s two main founders followed a mixed networking logic (reactive-proactive approach), whereby they rely on the
relationships they have with, governmental agencies and officials to get referrals about possible bids inviting applications to to some extent, and in several instances they proactively utilised and created relationships with US MNCs and other donor through scanning for bids in local newspapers and media. However, as he company began to have a strong status they proactively approached overseas clients in Middle Eastern markets.

All of these entrepreneurs do not believe in mixing family and personal friends with business. So they have hardly relied on social or personal family relationships. However, they relied more on strong business relationships they have accumulated over time. They relied on a mixture of intentionally managed ties and these ties served as key bridge to access other weaker relationships with clients. It’s also worth mentioning that if any of these companies wins a bid and the foreign donor have not specified a particular overseas consultancy firm, the company then collaborates with one of the large consultancy firms from all over the world, with whom they got to know through working on different projects in Egypt and Middle East.

<table>
<thead>
<tr>
<th>Co-evolutionary processes</th>
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<tbody>
<tr>
<td><strong>Pre-internationalisation stage</strong></td>
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<tr>
<td><strong>Key strategic entry node:</strong> Link with the US MNC, from whom they got the franchising agreement.</td>
</tr>
<tr>
<td><strong>Key strategic domestic node:</strong> Links with Cairo University that served as an important platform to gain access to top officials; ministries. Furthermore, previous employment of those founders with key governmental agencies and ministries.</td>
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</tbody>
</table>

| **Early Internationalisation stage** |
| **Key strategic entry node:** Donors/foreign aid source; local ministries; industry relationships that helped the SMEs to enter new markets such as Syria and Saudi Arabia; large consultancy firms; MNCs and Egyptian government. |
| **Key strategic domestic node:** Governmental agencies, ministries and municipalities. That helped companies to expand domestically. |

| **Subsequent internationalisation stage** |
| **Key strategic entry node:** cross referencing and collaboration between the three companies and loosely coupled collaborative agreements these companies have with overseas partners and clients. And to a lesser extent, foreign donors. |
Tables 6.6 and 6.7 showed the uniqueness of this cluster of firms and how they formed their own informal industry cluster to seize domestic and international opportunities. Although these companies faced the same institutional voids in external and internal environments as the rest of Egyptian SMEs, they made use of these institutional voids for their own advantage. These companies have a strong influence over the key decision makers in the government. For instance, both SC1 and Con1-eg have been used as key advisors on drafts of environmental protection laws and regulations, private sector participation in key strategic areas (such as water and wastewater). In addition, con2-eg had strong links with military agencies where they advised and suggested ways to improve production processes in the factories owned by the armed forces which were replicated in several governorates in Egypt.

The Egyptian government referred Con2-eg to the Libyan government, which was an opportunity that the founder followed up and managed to enter the Libyan market. Both SC1 and con1 piggybacked on Con2-eg into Libyan market.

Furthermore, each founder has brought in his own portfolio compose of diverse ties which played different functions and roles across the three stages of the SMEs lifecycle. Although all three founders are fatalistic, as most Egyptians are, each had intentionally created ties and relationships in a different ways that maximised the benefit of their companies based on their networking logic and behaviour.

A summary of internationalisation profiles and network attachments of the Egyptian extensive internationaliser/network is provided in Figure 6.8. Also, an example of extensive internationaliser/networker, the Con2-eg company is described as an illustrative case in Appendix 2.9.
The Egyptian extensive internationaliser/networker SMEs were also early start up knowledge intensive SMEs which operated in a large number of markets and regions. They also reported very high percentage of foreign sales. However, these companies relied both on inward and outward internationalisation. They had a unique mode of entry, which is working on projects sponsored by foreign donors and/or aid and usually as a subcontractor of large MNCs and domestic companies. During early internationalisation stage [EIS] they relied mainly on inward internationalisation, few sub-contracting contracts in less distant markets usually triggered by the founder(s) strong business relationships and also they relied on few advanced modes of entry in countries where there was a large amount of work and the clients (usually governments and municipalities) request an established presence in their overseas markets. As these SMEs moved into the subsequent internationalisation stage [SIS] they began to outwardly internationalise more aggressively and relied on direct exporting their services to new markets and using more advanced modes of entry such as branches and wholly owned subsidiaries to further penetrate existing markets.

*These SMEs had large networks, with varying degrees of network density and constraint. It has a unique networking behaviour because it is composed of a group of companies that formed their own informal industry cluster in professional services sector. This cluster started off with a nuclei company with two main founders and then two companies were created as sister companies specialising in different areas of engineering consultancy with a leading founder who is mainly responsible for networking behaviour of the company. The links with sister companies also served as bridging relationships to access otherwise unconnected networks.

These companies relied extensively on donors/foreign aid bodies in their EIS through working on projects in Egypt funded by donors and worked as subcontractors for large MNCs operating in Egypt. Those projects usually came through the link the nuclei company had with the US MNC with whom they have a franchising agreement. And they aggressively searched for opportunities through scanning newspapers and media sources for potential bids by donors. However, the key network ties each of company had been based on its leading founder approach. These SMEs adapted a mixed (proactive-reactive) networking approach. For instance, two of the leading founders adapted a rather fatalistic-calculative networking approach through which they actively engaged in forming and creating relationships, weighing benefits against costs, at the same time they believe it’s a matter of destiny and they do what they can to find opportunities to create relationships but if it is destined to take place it will. Moreover, the leading founder of nuclei company adapted a mixed networking logic whereby he made use of his links from previous employment and Cairo University to find domestic clients and actively created relationships with overseas donors (in EIS) and clients (in SIS).

*Although according to the crude measure used in this research to denote high, medium, and low network size, this cluster has the highest number of network size among the Egyptian SMEs. However, this cluster has moderate network size compared to its UK counterpart.

**Figure 6.8:** A summary of the internationalisation profiles and network attachments of the Egyptian extensive internationaliser/networker cluster
II) Moderate internationalisers/networkers

This cluster has nine SMEs that operate in a moderate number of overseas markets and have medium-sized networks. The networking and internationalisation processes of these companies are set out in Table 6.8.

Table 6.8: internationalisation and networking processes of moderate internationaliser/networker

<table>
<thead>
<tr>
<th>Internationalisation performance/outcomes tn</th>
<th>Network Characteristics tn</th>
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<tbody>
<tr>
<td>This cluster is composed of five knowledge-intensive and three traditional SMEs.</td>
<td>- Average network size: 5-14 (moderate)</td>
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<tr>
<td>- All of the eight companies operate in a moderate number of markets and moderate-high number of regions. However, they vary in terms of the percentage of foreign sales. Most of them have medium-high percentage of foreign sales, with the exception of one company that has more domestic sales than foreign sales. What is striking about these companies is that they tend to have at least one major client in each of the markets they operate in, rather than having a number of clients in each market.</td>
<td>- Average net density tn: ranged from 4%-35% (low-high)</td>
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<tr>
<td></td>
<td>- Average net constraint: 4-44% (low-high)</td>
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<td></td>
<td>- All of the nine companies started off with highly dense networks but density decreased over time. However, basis of tie initiation and how the network evolved differed across the companies. Three companies had on average low levels of network density and constraint, suggesting that they have sparse networks composed of several bridging ties (access to structural holes). The other five SMEs have highly dense networks and a smaller number of bridging relationships.</td>
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Table 6.8: Continued

| Internationalisation process | **Modes of entry/choice**: Varied across the nine cases. Most of the companies depended mainly on direct and indirect exporting through representatives and/or subsidiaries of an MNC (such as global retail store branches like Metro and Carrefour) and/or overseas MNCs. Moreover, most of these companies had at least two or more advanced modes of entry such as branch, partnerships and joint ventures. Few companies developed joint ventures with Asian or European suppliers. Some companies reported that the company works together with the supplier to make sure they meet the quality standards and requirements of the company (especially if this supplier is from China as they have their doubts about the quality of Chinese products). Another scenario is the presence of a relative/friend and/or an Egyptian in overseas markets - mainly these are strong social ties – SMEs tend to be more at ease and prefer to form JVs or branches in overseas markets. Finally, a rather less common approach – which was used by three out of the nine companies, is the use of E-commerce and the internet as means of expanding to non-Arab/ Middle Eastern countries. This has been taking place during subsequent internationalisation stage, whereby selling to European and North American countries requires compliance with strict quality standards and requirements. Some companies had even to wait until they obtained international certification (such as ISO) before they advertised their products on E-bay or Amazon. Finally, it is evident that the process of internationalisation has been a gradual process since the majority of these entrepreneurs have limited or no previous international experience. And they usually wait until they have obtained the necessary experiential knowledge and confidence to further internationalise into more diverse markets. For example, the founder of MC company reported: ‘We only managed to internationalise to Europe and America after we were sure we have gain the confidence and experience – through exporting to countries similar to us; namely Gulf countries –.....then we thought it’s about time to export to Europe and America (11 years after the company’s establishment) ... [...].. but we got firstly certified by ISO to increase the clients confidence in our products’.

The only time when these companies exported to distant markets in EIS, was either through a referral from a strong trust worthy relationship (usually from a close friend from previous employment and/ or a client whom the entrepreneur had known for a long time) or from a family member or friend who had migrated to one of the Western countries. The Founder(s) then capitalised on...
these relationships and established a branch or a joint venture in these distant markets.

Four companies out of the nine SMEs are new venture companies. However, they did not actively engage in searching for agents or clients; rather this was triggered by the presence of a family member overseas, a former school friend who moved to one of the Gulf countries to find a job and/or referral from a trustworthy relationship. For example, the founder FR2 entered USA and Canada because the advice and a referral from a family member living in Canada. He helped him understand the Canadian market and even referred him to another Egyptian (whom the founder had not known previously) who became a regional manager of the different company branches in different states.

The remaining five companies followed a gradual internationalisation process, which was partly because of the limited degree of, and sometimes complete absence of, international experience and the need to gain confidence and learn how to export. Steps were taken to resolve this issue to the extent that two companies hired export managers and professionals to teach them how to export, and co-founders of one of these companies went a step further, returning to University to undertake an MBA course hoping to be able to understand how to do business and export.

**Early internationalisation trigger event:** This was either through a friend or a family member who had migrated or was living in a particular overseas market; or a former colleague or industry friend, whom the founder had known for a number of years. Sometimes companies started their early internationalisation through an active search for overseas clients/agents because of limited demand in their home country.

Some companies (three companies) reported that they had wanted to internationalise from the early years of their establishment, especially those companies that were established in the late 80’s or beginning of the 90’s but had been unable to do so due the semi-closed nature of the Egyptian economy. These SMEs struggled even to import crucial supplies because of the closed economy and had to rely only on the quotas given by the government for each manufacturer. For example, this was the case with the flour and cotton supplies used by food and clothing manufacturers. As soon as the economy opened up more in the mid-nineties they began to engage in international trade (through importing and exporting).

**Subsequent internationalisation Trigger event:** These companies increased the scale and scope of their internationalisation after they had reached the stage where they felt confident enough to export and had gained the international experience they lacked (through experiential knowledge or operating in similar/less distant markets and/or through acquiring knowledge by taking courses and/or hiring professionals to help the companies set up their export department).
Moreover, some companies have created their own "informal industrial clusters" - such as grouping together their competitors and companies operating in similar or related industries and formed some informal industrial consortium or loosely coupled alliances and exerted force on the export minister (and supporting agencies) to offer them support to participate in overseas trade fairs. They sometimes lobbied the government to lower the tariffs on important supplies and even to allow these supplies enter the Egyptian borders through customs without having them confiscated. For example, FR2 and FR3 are located in same the industrial zone in Alexandria and they have suffered from lack of support, high taxes, bureaucracy and tariffs on imported wood. They because acquainted as they were part of the same industrial zone and together they formed an informal alliance with other furniture producers in Alexandria. They then elected a representative, who was the founder of FR2 - because his company was a truly international company exporting to Europe and North America. Moreover, through the family connection of FR2’s founder living outside Egypt they managed to export to Europe and North America. Exporting to these markets is viewed by most Egyptians as an exception not the norm.

Furthermore, the representative spoke on behalf of the furniture companies to the export minister who finally agreed to lower taxes and customs on imported wood (this is one way of lobbying the government).

### Networking process

These companies followed a similar networking pattern in their PIS. They relied on strong social and mixed relationship with family members/ friends and/or former colleagues to establish the company and launch its domestic operations. This is evident in the high density scores these companies had in PIS.

Moving into the EIS, some of these companies - namely five companies - had high dense networks that they formed in order to cope with the obstacles inherent in the context of home country and also to cope with internationalisation risks. For example, a flower manufacturer and producer, approached expo-link and the international Marketing Centre (IMC) to ask for support in participating in overseas fairs. He wanted the IMC to sponsor him to travel to Italy and the Netherlands to see the latest in the flower industry but they refused. He also approached SFD to ask for a loan but they also refused him. The primarily reason was that flower production is not among the sectors that these agencies target and they thought that flower production and implantations was a naïve idea. The founder then decided to self-finance and travelled to the Netherlands. He obtained sample seeds of different flowers and began experimenting with them. At a certain point the SFD sponsored the founder and other manufacturers to attend a workshop in Greece (funded by the Greek government), he went around and wanted to import some flower samples from Greece. He contacted the customs authority in Cairo International airport to inform them that he would have small containers with 20 samples. They refused to let these samples into the country and confiscated the products. This was because they wanted a bribe to let them to the country. The founder had to rely on his colleagues (who had attended the workshop
with him) to take each a sample with him/her for personal use. The authorities allowed them to pass and he collected these samples from his colleagues. In order to avoid this in the future he gathered and contacted most of the flower manufacturers in Egypt (small ones) and formed an informal industry association for flower manufacturers. They began talking as a group to officials and supporting agencies and finally they managed to get the support they needed; lower taxes and fewer custom barriers.

The rest of the companies in this cluster tried to capitalise on their personal social networks to expand into overseas markets and get support they needed. However, more importantly the founder(s) consulted everyone he knew to introduce him/her to gatekeeper(s) in government and/or overseas distribution companies and clients. These bridging relationships directed the companies at least to get to know whom they could talk to in various governmental organisations. Moreover, because of the lack of transparency and information availability in Egypt, the strong relationships those companies had with professionals (such as professors in universities and friends in the industry) helped them to find out about sources of support available to SMEs.

On several occasions, when the IMC or expo-link saw the success and potential of some SMEs they directly approached them and offered financial support to help the companies improve and upgrade their production processes. In addition, they sponsored SMEs to participate in specialist fairs and obtain international certification, which is very expensive to self-finance. This has made these companies more confident and more able to internationalise into a larger number of markets.

To sum up, for moderate internationalises/ networkers during PIS, strong socially dense networks were crucial for the SMEs establishment and early internationalisation. These mainly involved the intentional reactivation of old relationships (which entails the intentional managing of strong pre-existing relationships in order to get support and/or get referred or introduced to a bridging relationship to access support and resources).

During EIS, SMEs either intentionally created a few overseas relationships and/or asked their close and strong contacts to refer them to trustworthy entry nodes in overseas markets as primarily means of internationalisation, which sometimes involved the creation of joint ventures/branches. Hence, there is an increase in the number of semi-coincidental ties.

As SMEs moved into SIS, they became more actively engaged in forming relationships in domestic and overseas markets through the formation of informal industry associations which pressurised supporting agencies and government to act in favour of these companies. Also, other companies were approached by supporting agencies due to their potential and strong reputation in domestic and overseas markets (often small in number). This helped SMEs to participate in trade fairs and meet overseas clients and agents and further expand internationally. Again this is reflected in the increase in the number of semi-coincidental ties.
It is worth mentioning that since it’s embedded in Egyptian culture that relationships are a way of life and perhaps the only way to do business. Most of these entrepreneurs invest a lot of time and energy in nurturing and maintaining the strong relationships they have developed with overseas clients and this has implications of increased trust over time, which means more orders and repeated business. Secondly, they can only manage few overseas relationships, since nurturing relationships takes significant time and effort.

As Fr3’s founder highlighted: ‘’ My primary focus is to have repeated business from overseas markets … how can I ensure this. […] …. Since as I told you before our products (Egyptian products in general) have bad reputation of being of poor quality especially in overseas markets …. I can only make the overseas client to trust me by asking him to come and visit me here … I show him around invite him for dinner … so we have more personal relationship… and then when he sees that I meet his specification and offer good quality products … this brings more business to me and this is how we survived’’.

This stage (SIS) was characterised by strong mixed relationships across all of the nine cases.

### Co-evolutionary processes

<table>
<thead>
<tr>
<th>Co-evolutionary processes</th>
<th>Pre-internationalisation stage</th>
<th>Early Internationalisation stage</th>
<th>Subsequent internationalisation stage</th>
</tr>
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</table>
| Key strategic entry nodes:  Links with networks of distributors that came from previous employment, family and friends living overseas or referrals coming from family and friends living in Egypt. | Moreover, the creation of close and strong relationships with global retailers and wholesalers, restaurants and representatives of overseas companies in Egypt helped the company to sell to these clients and retailers overseas in EIS stage. | **Key strategic entry nodes:** Referrals from close family/friends to connections overseas. Also, clients and agents companies directly approached. Moreover, several strong relationships were created between the SMEs and overseas suppliers  
**Key domestic nodes:** Informal industry association created by SMEs that served as a lobbying channel. Referrals from close friends and family members about whom can the company contact in the government or supporting agencies served as main conduit through which companies managed to access support and finalise the registration and formal documentations needed. | Supporting agencies sponsorship to overseas trades and fairs. Furthermore, agents and distributors were directly approached by companies as they began to have more experiential knowledge of internationalisation. Finally, the use of ICT (E-commerce, E-bay and Amazon). |
As shown in Table 6.8, this cluster showed general tendencies when coping with the risks and problems inherent in overseas and domestic markets. As discussed previously, in order to obtain support from governmental agencies, companies had to resort to their personal/social networks and/or create their own groups and clusters to lobby the government. Others had to prove themselves in domestic and overseas markets to get noticed by supporting agencies such as IMC and expo-link, which only support companies that have a proven track record of success in domestic and overseas markets.

A summary of internationalisation profiles and network attachments of moderate internationaliser/networker is presented in Figure 6.9. Moreover, the DF Company is discussed as an exemplary case in Appendix 2.10.
These SMEs operated in a moderate number of markets and regions. They also obtained high percentage of sales from overseas markets*. They used different modes of entry. Their main focus was on direct and indirect exporting (through representatives/subsidiaries of MNCs in Egypt). Also, they used advanced modes of entry (such as joint ventures), if a strong relationship in overseas markets was present through, for example, an extended family member and/or friend. Three companies reported the use of E-commerce and internet as one way to reach out for European clients.

Consistent with the traditional view of internationalisation, SMEs that did not have previous international experience followed a gradual internationalisation pattern (they internationalised into nearby markets). However, these companies internationalised to more distant markets only if they had a strong contact in these markets (such as a close friend or family member and sometimes through a referral from a trust worthy contact).

Regarding their internationalisation approach/strategy these SMEs adopted a reactive approach to internationalisation during the early internationalisation stage [EIS]. They started their first exporting attempt because of the limited demand in home country and/or an response to unsolicited or unplanned order. However, as SMEs moved into the subsequent internationalisation stage [SIS] they adapted a proactive approach to internationalisation, whereby they became more confident and started approaching other markets. Some of these companies created their own ‘informal industrial cluster’, through which they lobbied the Egyptian government to create a more favourable importing/exporting conditions and have access to financial and non-financial support .

SMEs in this cluster have moderate number of contacts in their networks with varying degrees of network density and constraint. Five out of eight SMEs, reported low degrees of density and network constraint. This means that they have sparse composed of several bridging relationships. These SMEs relied heavily on strong relationships, which helped them to overcome challenges and fill-in institutional voids inherent in the Egyptian institutional context. They relied primarily on their personal social networks to obtain access to resources that were crucial for the firm’s survival and growth.

Furthermore, these social ties served as an important strategic bridge to key gatekeepers and decision-makers in government. These bridging relationships were crucial for SMEs to get access to support, resources and approvals, which had a direct impact on the company’s domestic and overseas operations.

These companies adopted a reactive networking logic, through relying on the trade fairs organised by Social Fund for development to meet overseas clients. Moreover, they made use of their immediate social network to get access to support and overseas clients.

However, three companies resorted to forming their own informal industry clusters to lobby the Egyptian government to relax some tariffs on key imported goods and to get access to support to participate for example in overseas trade fairs. These companies reported high levels of network density and constraint, because these informal clusters were the main conduits through which companies gained access to support and resources. Also, their personal networks (composed of both strong business and social ties) were crucial for the SMEs international expansion.

*Only one company obtained a small percentage of foreign sales from overseas markets.

**Figure 6.9:** A summary of internationalisation profiles and network attachments of Egyptian moderate internationaliser/networker cluster
III) Hybrid internationaliser/networker

The category "hybrid internationaliser/networker" refers to SMEs that have a moderate network size but operate in a small number of markets. They tend to have a high percentage of foreign sales driven primarily by few overseas clients in a small number of markets. Only three of the nine companies in this cluster has reached the subsequent internationalisation stage. The remaining five companies are still in their early internationalisation stage mainly because they are infrequent internationalisers. They primarily focus on the domestic market, not in terms of the percentage of foreign sales [PFS] - these companies tend to have large orders coming from a few overseas clients- but rather in terms of the time and effort devoted to the domestic markets as opposed to overseas markets. For example, the Founder of Manu2-eg mentioned that:

"It is important to succeed in the domestic market first and then overseas. I think this is the way we know how to do business and this is how we have been educated....[...].... Only few exceptional cases manage to export to European and North American clients .... They have very strict rules, quality standards and different consumer tastes....[...]... look at the number of Egyptian SMEs that actually export out of the total number of small companies in Egypt. They won’t exceed 10%.... it is good that we manage to sell to other Arab countries"..

Table 6.9, sets out in detail the internationalisation and networking processes of hybrid internationaliser/networker SMEs.
Table 6.9: Internationalisation and networking processes of hybrid internationaliser/networker

<table>
<thead>
<tr>
<th>Overview of cases</th>
<th>Internationalisation performance/outcomes</th>
<th>Network characteristics</th>
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| This cluster has nine SMEs. Seven are traditional SMEs and two are knowledge intensive companies. | - PFS at tn: varied significantly from less than 10-90 % (low-high).  
- Number of regions at tn: 2-4 (moderate).  
- Number of markets tn: 5-8 (low).  
- Two of the nine SMEs one knowledge intensive and one traditional company) - reported a high percentage of foreign sales compared to the rest of the SMEs in this cluster. | - Average network size: 11-14 (moderate)  
- Average net density tn: mostly low density (less than 10%), with exception of two companies with high density over 30%  
- Average net constraint: varied 5-54% (low-high). However, most of the companies had moderate constraint level with exception of one company that had nearly 54%.  
- All of these companies had relatively dense networks in the PIS stage and they relied heavily on them to get the necessary support to reach clients both domestically and internationally and to gain access to supporting agencies.  
A key characteristic of this cluster—mainly the traditional SMEs—relied heavily on domestic trade fairs sponsored and organised by SFD. There are two types of fairs, one specialised fair mainly for furniture companies and one for Egyptian products in general, ranging from clothing to granite manufacturing equipment. The furniture fair is a domestic one and has been a key factor in the SMEs domestic expansion and also for companies to start their first concurrent exporting attempts in the form of indirect exporting. Overseas clients come to this fair and buy furniture and shipped it to their home country. The latter type of fair where all the products are grouped together had been inefficient, because clients—visiting to this fair—came to have a look around and perhaps make one-off purchases. This fair is not a specialized fair and SMEs did not have the chance to learn from overseas manufacturers and meet large clients and/or distributors. Moving into the SIS, companies began focusing their internationalisation efforts on winning few more overseas clients; they meet these every year at the furniture fair in Cairo. However, they devote more time and effort in maintaining and enhancing relationships with existing clients.  
Hence, in EIS and SIS, networks between SMEs are mainly composed of bridging relationships (those ties which were initiated via a bridging relationship—being a trade fair or a referral from a close friend/family). |
| Internationalisation process | **_modes of entry/choice:** The majority of these companies—with exception of two—relied extensively on direct or indirect exporting (this refers to cases where an overseas client buys the company’s products in Egypt through a domestic trade fair and/or referral).

Two out of the nine companies relied extensively in the EIS on piggybacking large MNCs through their branches in Egypt (such as flora and fine) and/or through piggybacking small companies owned by Egyptians who live overseas; this was usually triggered by a referral from a friend or a colleague of the entrepreneur.

Accordingly, the choice of entry mode was usually triggered by strong bridging relationship—a friend / family member, a colleague- and/or through a friend of a friend relationship that connects the company to otherwise unconnected ties. Moreover, the role of SFD as a bridging relationship through the trade fairs has been one of key means through which companies started to export in the first place.

However, there is a unique mode of entry utilised by one of these companies. It is a clothing manufacturer [Manu5-eg] located near a free trade zone in the city of Port Said. This is a tariff free zone where overseas and local clients can buy products without paying tariffs. His cotton sportswear design and clothing attracted the attention of several overseas Middle Eastern clients, who usually wear larger sizes than those manufactured by overseas clothing companies. He reported:

"Selling to overseas clients—through Port Said free trade zone—was a huge boosting factor for me. I have lacked the confidence that my products would appeal to overseas clients, so having repeated business was a great experience. After passing through a lot of obstacles and challenges trying to sell to domestic customers who only think that quality sportswear is only manufactured by overseas companies like: Nike and Adidas ... I began actually targeting overseas clients and adding new lines to my business such as computer covers and so forth." |

Table 6.9: Continued
Which appealed to several overseas clients and that was a great success”.

**Early internationalisation trigger event:** This was either through participating in trade fairs organised by SFD in Egypt where overseas clients came and bought products and shipped to their own countries and/or through referrals of founder’s family members, friends and colleagues about possible ties in overseas markets. They were usually Egyptians living in overseas markets. Also, some companies participated in overseas trade fairs organised by SFD that involves wide range of Egyptian made products (non-specialised fairs), which created a few potential leads companies followed up with. This shows a tendency to adopt a reactive approach to internationalisation.

**Trigger event subsequent internationalisation:** Only three out of the nine companies in this cluster reached to SIS. This was a result of coincidental ties whereby subsidiaries and branches of MNCs operating in Egypt approached two of the three companies and began buying from them, and having ensured the quality of the product, they referred the company to other branches in the Middle East.

The founder of the third company - Manu5-eg - thought it was time to approach overseas markets after breaking even with regard to the start-up cost. He then began asking friends and family if they knew where he could get financial support to participate in overseas fairs. He was referred to SFD, which sponsored him to travel to a fair in South Africa. He went there and sold few items (as a one off transaction) and came back with new ideas and built up a small factory to serve both local and overseas clients.

The primary reason why the rest of the companies did not reach SIS is that they were not confident enough to export and they lacked the means to further internationalise, due to the limited support offered by SFD and other supporting agencies. Moreover, these entrepreneurs tend to accept the status quo and rely on the limited support that is readily available through their existing social networks, rather than building and engaging actively in establishing new ties. This is perhaps a reflection of the nature of Egyptian culture whereby entrepreneurs believe that success is a matter of destiny and they tend to be more fatalistic, as the founder of FD2 highlighted:

"There is a maximum to what I can do; I see what is available and who could help me ..... The Government offers limited support and selling my products (pastries and puddings) through the all-inclusive Egyptian fair that took place in Italy .... It led to some leads but that’s all .... I want to be able to travel to specialist trade fairs and to
learn how to export and what are the latest up-to-date technologies used in my industry... but there is no support or such ideology among the decision makers. They have a target to achieve.... In terms of the number of companies that particulate in trade fairs each year and that’s all ...regardless if we benefit or not... bottom-line. Is that it is all a matter of God’s will..... no matter how much effort you put if it’s not destined to be it won’t be .... I tried and made use of what I have and what is available......".

| Networking process | Mostly companies relied on the strong social bridging relationships that they had in PIS to reach overseas clients and start their exporting activities. This was through family/friends, former colleagues and or employers. These strong bridges referred companies to key trustworthy overseas relationships with other Egyptians living aboard and through them companies entered to overseas markets. Furthermore, these bridging relationships served as a key source of information about support available for SMEs –mainly directing companies to SFD and the like.

The key feature about this cluster in that these companies focused on a few overseas clients in a few markets that were a result of trade fair sponsored by SFD and focused on nurturing these relationships and to be sure of gaining these overseas clients’ trust. The difficulty of gaining trust is attributed to the poor reputation of the Egyptian product in overseas markets. Also, it is known that Egyptians could cheat even if the client has previously seen the product in the fair. This made overseas clients reluctant to buy Egyptian products which forced Egyptian manufactures to devote more time and effort to secure repeated business rather than a one-off transaction. This is one of the key country specific risks that the founder of FR1 addressed:

"We have a very poor reputation abroad... people think our products are of poor quality. The client has to see the product in person....[...]. I mean they have to see it and even then they have to ensure that you are not just making a good prototype... they have to come and investigate ... see your factory, technology or machines you use ... Moreover, they tend to have very strict quality standards and requirements especially from European clients... and they usually make small orders and if they like our products then they will come again... to be honest with you I invest a lot of time building strong personal relationships with my overseas clients ... I invited them to come here, visit me and often ask about them...... This is key to have repeated business".
Also, the founder of Manu1-eg, which is a granite manufacturing company emphasised that:

"Although we manufacture and cut granite and marble that is usually used by large hotels and resorts.... We can’t change or play with these hard stones... clients have to see what do we offer ... to illustrate my point.. one incident we were exporting to Hilton Kiewit and we were referred to them through Cairo Hilton ..... they refused to accept our shipment until they saw what we offered ......[...]... another incident a European client once returned our shipment because we failed to meet some of his requirements although it wasn’t entirely my fault it was because I relied on a friend of a friend whom I have never seen to do proper packaging as requested by overseas client ....but he failed and I lost a lot of money due to expensive transportation cost and I lost the client. 
This is why we have to continually build and reinforce our relationship especially with European or American clients..."

Those companies (only three) that managed to reach the subsequent internalisation stage [SIS] relied on weak business ties that were the result of a chance rather than active engagement in increasing the internationalisation activity of the company. They adopted a reactive approach in terms of receiving help from immediate relationships and/or, in most of the cases especially those companies that the government focused on supporting; namely furniture and food processing companies. It was SFD that approached them and offered to sponsor them to participate in a domestic fair that involved domestic and overseas clients. These companies focused on building strong personal relationships with overseas clients to ensure that they would have repeated business and they were satisfied with status quo rather than actively increasing their internationalisation breadth and scope.

### Co-evolutionary processes

<table>
<thead>
<tr>
<th>Pre-internationalisation stage</th>
<th>Key strategic entry nodes:</th>
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<tbody>
<tr>
<td>Family/friends of founder(s) who acted as a bridge and connected the company to overseas agents and/or partners. These partners were Egyptian immigrants living in overseas countries. Entrepreneurs have the tendency to find it</td>
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easier and preferable to work with Egyptians overseas. As the founder of Manu2-eg argued:

"I would prefer to work with an Egyptian living aboard... it’s easier to communicate and there is an element of trust because we are both from the same country ...and when it comes to dealing with people from other cultures such as Spain or Eastern European. it takes time to develop trust and sometimes there is cultural and/or personality barriers ".

**Strategic domestic node:** Also, the family/friends (i.e. founders’ own social network) served as a key source of domestic expansion and a resource for information about the support available for SMEs. These relationships’ mentioned to the entrepreneurs about SFD services and support.

<table>
<thead>
<tr>
<th>Early Internationalisation stage</th>
<th><strong>Key strategic entry nodes:</strong> SFD domestic trade fairs and/or non-specialist overseas fairs organised by SFD.</th>
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</thead>
<tbody>
<tr>
<td>Subsequent internationalisation stage</td>
<td><strong>Key strategic entry nodes:</strong> Subsidiaries and branches of MNCs operating in Egypt. Moreover, private supporting agencies which sponsored one company to participate in Italian pastry fair lead to further internationalisation in to the European market. This company is FD2 which is a pastry and pudding manufacturer. It was approached by a private council that supported entrepreneurs from a particular religious background and sponsored the entrepreneur to participate in one of the biggest fairs in the world in Italy. Through this fair the founder met up with several clients and some Egyptians living in Europe, he used them as agents to supply European countries.</td>
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</table>
From table 6.19, it is evident that hybrid internationaliser/networkers displayed a reactive networking and internationalisation logics. These companies had relied on a small number (with the exception of one company) of dense and close networks in order to start their companies, internationalise and find sources of support. Their networks are highly dependent on bridging relationships and they also operate in a small number of markets in few regions through having one or two clients per market at the most.

A summary of internationalisation profiles and network attachments of hybrid internationaliser/networker is presented in Figure 6.10. Moreover, the Manu5-eg is described as an exemplary case in Appendix 2.11.

*This cluster is composed of traditional and knowledge-intensive SMEs. They operate in a limited number of markets and regions and have obtained a small amount of their sales revenues from overseas markets. They relied mainly on direct and indirect exporting and piggybacking on large MNCs through their representatives and/or subsidiaries in Egypt. On several occasions, they only exported to overseas companies owned by Egyptians; as this creates a certain degree of initial trust and understanding. Moreover, these companies adopted a reactive internationalisation approach, which involved indirect exporting through participation in trade fairs organised by one of local supporting agencies in home country. These fairs generated few overseas leads that SMEs focused on and devoted all of their effort to nurture and maintain these relationships.

This cluster of Egyptian SMEs is composed of seven traditional SMEs that had moderate size networks which were sparse and composed of several bridging relationships. During the EIS, these bridging relationships were crucial for the company to approach overseas clients, for example, through trade fairs organised by SFD. This was one of the main routes through which companies managed to secure business with few clients in several overseas markets (one or two clients in each market). Other bridging relationships were strong relationships that helped the company to enter overseas markets and obtain support from governmental agencies. Most of the traditional SMEs have not reached the SIS, because they primarily focused on maintaining existing relationships with overseas clients and were reluctant to expand further into new markets. Only few of the traditional SMEs managed to reach the SIS as a result of unplanned events for example, unsolicited orders or well-performing local supporting agencies such as IMC approached these companies and offered crucial support.

The remaining two SMEs are knowledge-intensive SMEs. They had moderate network size. Their networks were characterised by a high degree of cohesiveness and a limited number of bridging relationships. These companies relied on their dense and social relationships in order to internationalise and enter overseas markets through selling to Egyptian family members or friends living abroad. This cluster of SMEs adopted a reactive networking approach and had more domestic relationships than overseas ones.

*This cluster is not referred to as limited internationaliser/networker, because it operates in a limited number of markets but have moderate number of contacts. Since the two main clustering variables used to cluster SMEs were the average network size and number of markets at tn. Although these SMEs have a moderate number of contacts in their network they are mainly domestic relationships rather than overseas ones. Moreover, only two companies out of the eight SMEs in this cluster reported high percentage of foreign sales because they were approached by well performing supporting agencies (IMC and expo-link, which were funded and supervised by foreign donors or aids). These supporting agencies approach only well-known and established SMEs that have a proven track record of domestic success and few successful exporting attempts.

**Figure 6.10: A summary of internationalisation profiles and network attachments of Egyptian hybrid internationaliser/networker**
Conclusion

Based on the above taxonomies of clusters it is clear that there are significant differences between the networking and internationalisation behaviours of the UK and Egyptian SMEs. Moreover, it emerged that within each sample there were differences and that some idiosyncratic behaviours were present which made each case different from others even within the same cluster. However, SMEs are embedded in the same institutional context and from a theoretical point of view they are structurally equivalent in the sense that they face the same problems obstacles. These factors can also be expected to shape the internationalisation and networking behaviour of SMEs. The next chapter discusses the antecedents/contingences that shape SME behaviour.
Chapter 7
ANTECEDANTS OF SMEs
INTERNATIONALISATION AND NETWORKING PROCESSES

Introduction

As shown in chapter 6, that SMEs from UK and Egypt portray different internationalisation and networking behaviours and patterns. The question is whether these differences can in part be attributed to local institutional context in which SMEs are embedded. Given their limited resources SMEs tend to seek support from formal sources, such as governmental supporting agencies, and/or informal sources usually through their social networks. This depends to a great extent on what formal support and resources are available for SMEs and whether or not they can access that support.

Moreover, the previous international experience of the entrepreneur is likely to influence whether the SME needs to obtain support via formal means or whether the support and access to resources the SME needs is sought only through informal means. The entrepreneur’s previous international experience could act as a filtration system and a critical lens through which he or she would assess whether support from governmental agencies is needed and whether this support is likely to benefit the SME (Minniti and Bygrave, 2001; Manolova, Brush, Edelman and Greene, 2002; Wright, Westhead and Ucbasaran, 2007). This chapter investigates these contingent features which may be regarded as potential antecedents of SMEs internationalisation and networking processes.
Home country institutional context

The local context in which the SME is embedded potentially shapes the networking and internationalisation behaviours of SMEs (Uzzi, 1999). SMEs embedded in strong institutional contexts—characterised by strong well developed market systems, strong law enforcement, educational systems and well developed infrastructure—are more likely to succeed and become innovative and creative (Covin and Miller, 2013; Morck and Yeung, 2003). Moreover, SMEs embedded in well developed economies such as the US and UK, tend to have a relative abundance of the resources that entrepreneurs need to succeed (Covin and Miller, 2013). The competitive nature of such economies suggests that in order to succeed SMEs are obliged to be proactive and innovative, because these are key requirements for their survival and growth (Zahra and Neubaum, 1998; Schumpeter, 1942; Covin and Miller, 2013).

On the other hand, less developed economies suffer from weak institutional contexts, whereby the enactment of laws and regulations is inefficient, corruption and bureaucracy are prevalent, and educational systems and infrastructures are dysfunctional. They have what Khanna and Palepu (1997) referred to as "institutional voids". These authors argued that a country's level of economic development is contingent upon how efficient the market is in helping transactions between buyers and sellers to take place, in terms of its law enforcement systems (such as contract enforcement and the court system), and the degree of information transparency and availability and infrastructure that aids companies to operate smoothly. Khanna and Palepu (1997) classified markets on a continuum whereby at one extreme are the advanced economies with strong institutional systems that offer the support and facilities necessary for the operations of companies. At the other extreme are developing economies which experience market failure, where companies have to spend a long time to fill in these
institutional gaps in order to operate and function. In the middle are the emerging economies, which are economies that have a high degree of growth and have some reforms in place directed towards helping their companies grow and become more competitive.

Based on the above discussion, emerging economies are characterised by limited physical and non-physical resources (Covin and Miller, 2013) and weak institutional systems composed of several institutional voids. Companies need to find ways to fill in these voids and compensate for the weak support they often get from governmental institutions and legal systems (Khanna and Parelu, 1997). In the case of SMEs, these deficiencies in institutional context are compounded by SMEs’ scarce resources and limited experience which make it extremely difficult for them to operate. Therefore, they tend to resort to other informal means of governing agreements to survive and grow in local and overseas markets (Miller, Lee, Chang and Breton-Miller, 2009). Furthermore, entrepreneurs from clan based collectivist cultures, who value and favour strong cohesive relationships, tend to compensate for these voids by relying on their personal relationships to access resources, information and the help necessary but unattainable through obtain from formal means of governance and support embedded in their local contexts (Uzzi, 1997; Miller et al., 2009; Hofeste, 2001). These entrepreneurs also tend to focus more on establishing businesses primarily driven out of need and necessity, they tend to be more risk averse and prefer to maintain their status quo with very little or limited innovation or creativity (Schumpeter, 1942; Covin and Miller, 2013).

On the other hand, entrepreneurs from more advanced economies to rely more on formal means of governance– for example, contractual agreements– when dealing with external parties and putting forward economic transactions, because in advanced economies, the legal enforcements of contracts is generally more reliable. They are embedded in contexts that
well-endowed with the physical and information resources that are crucial for their domestic and overseas operations. Also, these entrepreneurs—unlike those in emerging or developing economies—tend to focus on excelling and succeeding in domestic and overseas markets, either through focusing on being among the pioneers or best in the industry or through pursing innovation and creativity to excel over their competitors (Khanna and Parelu, 1997; Miller et al, 2009). Furthermore, entrepreneurs from individualistic advanced economies tend to rely more on contractual obligations and more formal means of governance in their buyer-seller relationships.

According to the World Bank (2013) country classification, the UK is classed as a high income developed economy and Egypt is classed as a low-middle income developing economy. However, according to a FTSE (2010) report, the UK is classified as a developed economy and Egypt as classified as a secondary emerging economy. One could argue that Egypt—before the revolution, was at the lower end of the emerging economies spectrum. This position is characterised by a relatively reasonable institutional framework where some reforms and practices have been put in place to ease and facilitate the commercial operations of firms, including the presence of Social Fund for Development [SFD] and the International Marketing Centre [IMC] and expo-link—which are governmental agencies devoted to supporting SMEs (Khanna and Parelu, 1997; FTSE Global Equity Index Series, 2010).

However, a range of indicators show that namely Egypt has significantly more institutional voids than does the UK. According to the Global Entrepreneurship Monitor Reports, Egypt scores low on the presence of government programmes at national and regional level to support new and growing firms. Coping with government bureaucracy, regulations and

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63 This is FTSE group Global equity index series, country classification (2010), which classifies Egypt as a secondary emerging economy.
licensing, is an obstacle facing SMEs in Egypt, while difficulties are also reported with obtaining permits and licences (GEM, 2010). In 2010 Egypt occupied the 41st rank in terms of the efficiency of government support programmes compared to the 20th rank occupied by the UK. Moreover, data from the World Bank report on ease of doing business (2011) shows that Egypt occupied the 94th position in terms of ease of doing business and UK occupied the 4th position. This shows a high discrepancy between both countries in terms of regulatory institutions in terms of offering smarter regulations to support entrepreneurs/SMEs.

They indicate that Egypt has considerably greater voids in its institutional system than does the UK. This is consistent with data for 2010 obtained by the World Economic Forum (2011) from its Executive Opinion Survey, which score Egypt considerably higher than the UK for indicators of institutional voids such as corruption, irregular payments and bribes, favouritism in decisions of government officials, and lack of transparency in government policymaking.

These differences between Egypt and the UK have implications for how Egyptian entrepreneurs operate in local and overseas markets and for the way they create and depend on relationships to access the resources and support they need to fill in those institutional gaps (Covin and Miller, 2013).

There is a significant discrepancy between the level of economic and institutional development of Egypt and the UK. Each institutional context has inherent characteristics and mechanisms that could either hinder and/or facilitate the SMEs’ establishment, survival and

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64 Where possible data refers to 2010, the year immediately preceding the 2011 revolution in Egypt, which matches the timing of the fieldwork.

65 This report rates country’s regulatory environment as conductive to business operations, whereby the score of 1 means the most conductive regulatory environment and 189 the worst regulatory environment. This is a composite score based on ten different items regarding ease of doing business for entrepreneurs for example, the ease of starting up a business and trading across borders. This is based on 2010 data obtained from World Bank report (2011) on ease of doing business for entrepreneurs. [http://www.doingbusiness.org/~/media/GLAWB/Doing%20Business/Documents/Annual-Reports/English/DB11-FullReport.pdf](http://www.doingbusiness.org/~/media/GLAWB/Doing%20Business/Documents/Annual-Reports/English/DB11-FullReport.pdf) (Accessed on 22.01.2014)
growth. The following section describes and highlights the key institutional voids and obstacles highlighted by Egyptian and UK SMEs.

**Egyptian Institutional characteristics**

Table 7.1 provides the summary of key institutional conditions and characteristics as highlighted by the Egyptian SMEs studied.
Table 7.1: Key institutional/contextual characteristics

<table>
<thead>
<tr>
<th>Characteristics of home country institutional context (Egypt)</th>
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<tbody>
<tr>
<td>Level of institutional development</td>
</tr>
<tr>
<td>- Efficient law enactment and/or stability of legal system.</td>
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The majority of SMEs reported that there is always uncertainty and turbulence when it comes to laws and regulations in Egypt (see also Elbanna and Child, 2007). They argued that the environment is in a continuous state of flux and always changes, which sometimes makes it very difficult to export and to know what is going to happen in the near foreseeable future and they just have to go with the flow.

For example, the founder of SFW1, which manufactures E-learning software, also pursued another line of business in recycled plastic (basically to avoid having all his eggs in one basket). He used to export the recycled plastic to China, and he said that all of a sudden, he learned from the newspaper that the Egyptian export minister had banned exporting recycled plastics to China for no apparent reason. He reported:

“One day we woke up and found that our export minister [...]. [...] restricted exporting of recycled plastics and if you do so you pay a fine of 1000$ per ton and our profit was minimal 200 $ per ton [...]. [...] We had a contract and we had to fulfil our commitment. We tried to talk to the officials but no use and as you know this is Egypt, and you wake up every day there is always a change it is a very uncertain business environment, you cannot predict for a 5 years in future not even one year; as tomorrow something dramatic could happen. Hosni Mubarak (at that time was still president of Egypt) could die tomorrow and the Egyptian pound will depreciate against the dollar and becomes worth 20 cents. The whole world will collapse. So for this other line of business I had a huge stress and it may have made me declare bankruptcy. But we finally found a contact that exceptionally opened a way for us to meet the minister. You cannot meet the minister on your own [...]. [...] you know how are things in Egypt. So through this contact (who was the head of the chamber of commerce in
Alexandria) we met the minister and it was sorted and it took about six month to get it sorted..... But eventually we got this problem sorted out. Unfortunately because of this problem I incurred a lot of losses which made me close this line of business and stick to software as it is a much safer option"

Others reported that only way to cope with such changes is to be in close contact with key decision makers and to at least know what is going to happen in the foreseeable future, this helps companies to act promptly. Since it is rare that founders of SMEs know someone in a top governmental position, they tend to rely on their immediate social network to find a good referral to some of key decision makers.

For example, Manul-eg’s founder said:

'' From inside the government for instance getting the licence to start working if it costs 1 pound you will pay 20 pounds.. In order to finish it you have to pay a lot of gifts, you find open drawers; payments under the table .....[...] .... and the governmental employees do not know anything and even if they know that there is this problem with certification or whatever you have two options: either pay a lot of money to improve yourself and your operations or you pay ... well, I asked a friend about who is in charge - decision maker ,who is the greedy employee .. My friend gave me the name of a middle level employee and told me pay him and he will get all the papers sorted for you. ... You will tell me then spend your money on improving yourself and be up to the certification or approval committee standards... but I would say we are pressurised because this container needs to be delivered to the client as quickly as possible. .........[...]... But you also even when you pay and try to do the necessary changes you need to keep paying every single governmental agency and worker or
anyone involved money to get things moving otherwise you will be stuck and spend a lot of time to get it done’.

Also, others said these institutional voids are the main reason there are few exporting SMEs in Egypt. For instance, Manu3-eg’s founder pinpointed that problems inherent in the Egyptian environment are one of the main reasons why only a very small percentage of Egyptian SMEs export to overseas market compared to emerging economies such as Indonesia and China.

"I travelled to Taiwan, China, Indonesia, Korea and exporting there is a big issue.[...]...... in these small and medium companies exports are nearly about 80% of total exporting side but here in Egypt its only 3% his is based on official statistics [...]...The reasons behind this are numerous .. A key one is that these markets and countries foster and support exporting and international trade coming from small and medium companies. In Egypt there are numerous obstacles for this such as official documents and letter of credit that is submitted to official authorities concerned with exporting such as banks; the general exporting association...[...]...they ask for loads of papers and the supporting documents that take time and are too complicated and at the same time they do not guarantee you will get your money....."

He further argued one way is to have strong relationships with large MNCs in Egypt and to export indirectly through them by delivering first to other factories in Egypt rather than incurring and dealing with the above mentioned problems.

"Most of our work has a risk factor, for example, when I deliver or ship the product to a certain overseas client and then they would after this say no this product has this or that problem and I would lose about 60000 pounds worth of products and shipment I can’t handle such loses or the clients might delay my payment so what I do is that I directly deliver to the
factory here. ... The clients I dealt with loved our products and I offer them good prices. I have some manufacturing protocols with big companies that we manufacture directly to them such as Flora (I have production lines devoted to them and I also have a manufacturing contract for a Lebanese company to manufacture it its branch here in Egypt). And also I have a deal with big companies in Egypt to supply them with their needs of paper products and tissues such as: GM, Raya, and some big hospitals.... [ ... ] ...and some banks (national bank of Egypt and the CIB Bank) and I have to say that I have worked so hard to maintain strong relationship with them through my previous employment and also after I stated my own business. These relationships helped me a lot to promote and grow my business and indirectly approach overseas markets".

Other entrepreneurs reported another key problem, namely questions about the proper enactment of bilateral and regional free trade agreement such as COMESA and other agreements with Arab countries, USA and Israel. As Manu5-eg’s founder reported:

"In 2011, I wanted to make use of the collaborative agreement (joint trade agreement) between Egypt and China and asked social funded for development (SFD) to give me the protocol to read they refused to give it to me..... As I want to find a Chinese partner to work with him ... the Chinese partner will supply know-how and name and in exchange the I will help him reap benefits of operating in Egypt through geographic proximity to key African and European markets "strategic location" and cheap electricity and infrastructure and thirdly and most importantly Egypt has several trade agreements like COMESA, Arab league and Quiz agreement between Egypt, USA and Israel so the joint product will be exported to these markets with no tariffs. .... But what can I say we have all of these agreements and we never use them ...either because the governmental employees have no
immediate gain out of it... or simply they are unaware of it... However, I managed to convince my Chinese partner about this agreement and he thought this is a great opportunity for cooperation and we will soon start working together...... [...]... to answer your question whether I knew him beforehand....the answer is that I knew him through a very close friend who has worked with him for years and this introduction melted the ice and made it easier for us to sort of trust each other and work together because of the strong relationship we both have with this common friend".

Also, as SW2’s founder said:

"We have several Bilateral trade agreements that would make it very easy for us to export but we are unable to do so because...[...] ... We have for example: a bilateral agreement with Tunisia whereby Egyptian software manufacturers can export to Tunisia and vice versa... with no tariffs and this would encourage a lot of collaboration between the two countries... but this can never happen because our authorities make it very difficult for the Tunisian companies to sell their products here in Egypt and the certification and approvals could take up to five years on average for no significant reason and so when we try to export out product and get the approval what the Tunisian authorities will do is simply stop our products to be sold ".

Another factor that was mentioned by most of the respondents was the role of governmental supporting agencies in the home country. Most of the cases pinpointed several major deficiencies in the support offered to SMEs in general and support offered to exporting SMEs in particular.
Manu5-eg’s founder summarised the key problem in the support system in Egypt by saying:

"Our government could offer support to SMEs through two ways; directly and indirectly. Direct support is through helping SMEs to participate in trade fairs...[...]... which is like taking the company by its hand and make it present its products in a particular fair-which is usually organised by SFD- and the company then sells its products directly to whoever comes to buy from it... or it could offer indirect support through preparing an overall system that fosters and enhances the SMEs capability if it has the potential to internationalise... the government actually oversees this type of support indirect support and they are hardly playing an effective role in upgrading the export capability of SMEs...[...]... We are now not like it was in the 50’s or 60’s where Egypt was mainly a closed economy, now we have GATT and COMESA trade agreements...[...]... we are open to overseas clients we are close—as never before- to American clients... This necessitates a global mind-set and thinking on part of the government...which of course is not present...[...]... this is why I joined the Japanese aid council in Egypt and paid a subscription fee...Just to learn how to export and focus on international markets."

Opinions varied concerning the effectiveness of support SMEs received from supporting agencies. Most of the traditional companies used the support of one of the three main supporting agencies available in Egypt namely, the Social Fund for Development [SFD], International Marketing Centre [IMC and expo-link -which is a department in IMC (mainly dedicated to offer support to exporting SMEs).

Those companies benefited the most from support offered by SFD, which by the Egyptian law is the primary source of support for SMEs. The basic requirement for SMEs to benefit
from support offered by the SFD is to prepare a feasibility study of a viable business idea and a certificate of registration. If the SFD approves the plan the company could get a loan through being referred to one of key governmental banks (such as Suez Canal bank, National bank and or Agricultural Credit bank). They then get tax exemption for ten years and SFD sponsors them to participate in either domestic specialist fairs (such as the Fairnex fair, which is a trade fair in Cairo that takes place every year and where all of the furniture manufactures present their products). Domestic and overseas clients are invited to this fair. This fair in particular has been key driving force for the internationalisation of furniture manufacturers.

However, other traditional companies take a different view and argued that the SFD only sponsors them to participate in overseas trade fairs that are non-specialist and cover a wide range of Egyptian made products. On a few occasions this lead to a few business leads, but its success was very limited.

The founder of MC Company, which is a company that produces small medical equipment, used in surgery and operations, highlighted the problem:

"SFD sponsored me and others to all-inclusive Egyptian products trade fair in Italy and we were given a very limited space to set up our booth and beside me there was a guy who presented clothing and food and next to him was someone who produces carpets. [...] This was no use at all, clients were confused and only bought few items from the fair and that’s all... I didn’t like this I went and talked to our commercial attaché who was present in the fair and was appointed by SFD to organise this fair.... and told him that we need to have separate partitions for different products and/or specialist fairs... his response was you should thank God you got the chance to come to Italy.... All he cares about is to say that we
have sponsored X number of Egyptian SMEs to attend a fair in Italy and he gets paid accordingly ... no one monitors if we have benefited or not and/or if it was successful of not”.

However, several respondents mentioned that the services of offered by IMC and expo-link were beneficial and crucial for companies in terms of helping them obtain international certification (such as ISO) and to participate in specialised international fairs and/or sponsor them to attend for courses on how to run business and so forth. Yet not everyone was able to access such services and it was based on certain conditions.

As Manu1-eg’s founder argued:

“I would have wanted to have IMC to sponsor me to go to the biggest marble and granite manufacturers that takes place every year in Europe. I approached them and they refused saying that you will not be able to sell your products there. Although ... through my wife (who is half Greek) I managed to show my products and designs to Greek manufacturers and hotel and they were very impressed and I have one large client in Greece.... I have to tell you that unless you know someone in IMC and/or you are one of big players who control the economy you will not get such support”.

Moreover, FD2’s founder noted that:

“The bottom-line to get support from such centres (namely IMC) [...][...] which is by the way sponsored by European money [...][...] it has European managers that’s why it offers good service but it is still under influence of Egyptians... anyway the only way to get such funds and help is to be related to someone who is among big players in the industry who can nominate you to the committee that decides which companies to sponsor .... And/or you know someone inside the IMC”.

It is evident from the above quotes that corruption and a lack of a strategic mind-set among the key decisions in the supporting agencies were the main key drivers for the inefficiency of supporting agencies.

Other companies attributed their success to the support they got from IMC and Expo-link for example, EB’s export manager noted:

"IMC approached us and offered to pay for our website development and offered to pay us to upgrade our technologies and it was very crucial to be able to meet international requirements".

Only four out of the fourteen traditional companies benefited from the IMC and in all of these cases, the IMC was the one that approached these companies. These are successful companies both on domestic and international level and they were approached after they became established. This might suggest the general tendency of IMC and expo-link to approach only companies that have a proven record of success and with the potential to succeed. Two of the remaining companies managed to get support by being nominated to the key decision makers through links with large MNCs operating in Egypt.

Five out of the fourteen traditional SMEs acted as institutional entrepreneurs, whereby they created their own informal industry clusters and/or co-option of manufacturers in a particular industry and negotiated and lobbied key decision makers to change laws and facilitate imports of particular raw materials and supplies crucial to the company’s operations.
Good examples are presented by the FR2 and FR3 furniture companies in an industrial zone in Alexandria; they are located near other furniture manufacturers. The founder of FR2 managed to form an informal industry association composed of furniture manufacturers in Alexandria and spoke on their behalf to the local council and then to the export minister regarding tariffs on imported wood. This forced the minister to reduced tariffs on certain types on imported wood.

However, knowledge-intensive SMEs relied on their own networks and relationships in order to seek the support and resources they needed in order to survive and grow domestically and internationally. This was through relying on the support of the scientific community to get referrals to sell their products to local and overseas academics. For example, the founder of SW2, which is a manufacturer of a specialist statistical software, relied on his mother’s and father’s links with Helwan University, where most of them are University professors, to sell his statistical package to Masters and PhD students. These students in turn referred the company to other PhD students studying overseas.

Other knowledge-intensive companies formed their own informal group of engineering consultancies and positioned themselves as a cluster and built upon the relationships that the founders had with government officials in different ministries and municipalities. These governmental officials and ministries relied on these consultancy companies to get advice on how to develop significant sectors in the economy (such as water and waste water treatment, and recycling). This powerful position gave the companies the upper hand on advising key decision makers in drafting laws and regulations that was approved by the Egyptian parliament and had brought business to two of these companies. Table 7.2 summarises the
role of supporting agencies in Egypt and its impact on SMEs’ domestic and overseas operations.
Table 7.2: Role of Egyptian supporting agencies

<table>
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<tr>
<th>Characteristics of Home country institutional context (Egypt)</th>
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<tbody>
<tr>
<td>level of institutional development</td>
</tr>
<tr>
<td>-Support offered by the Government to support exporting activities of SMEs</td>
</tr>
</tbody>
</table>
- Industry associations.

- For the traditional industries there are only few chambers of commerce and industry associations.

- These formal industry associations and local chambers of commerce had no effective role. Few companies were members of chamber s of commerce but reported that they offered no help or support.

To access resources and support SMEs, they resorted to either accepting the situation the way it is and making use of few clients they managed to come across in overseas or local trade fairs; or trying to find links to key decision makers in supporting agencies and other ministries to access support and resources.

Or some companies acted as institutional entrepreneurs by creating informal industry associations to lobby the government for their own benefit.
Overseas Egyptian consultants and embassies

- No support was offered to most of SMEs who approached Egyptian embassies in overseas markets

Ease of starting company

- On average companies it took companies nearly four years if not more to register the company and establish the business. Some SMEs started operating even before the registration and the legal establishment of the company was finalised as the founder of FD1 co. reported:

"It took me five years to finalise the documents need to register my company ...[...] ... I couldn't wait that long to start operating I used my brother’s name who has his own company and worked until I finalised the legal establishment of the company".

- This delays the start of the start of the company and makes it impossible to start working until it is legally established.

- This has been reported as one of the main reasons it took companies several years to start operating overseas founders were occupied with dealing with bureaucracy and establishing their companies than focusing on building their capabilities and processes to suit overseas markets as the founder of FR1 reported:

"I was unable to think even of exporting except after sorting out registration and needed licences to start operating and then get exporting licence ... this took me up to seven years to expand domestically and then started thinking of exporting"

- SMEs often ask their family and friends if they know someone who could refer them to a top ranked governmental official or even a lower level employee who has special relationship with managers who are responsible for signing documents and papers and these lower level employee often serve as a key facilitators and catalysts to get things signed and done in a quick manner. For example, Manu1-eg’s founder highlighted that:

"I have to say if it was not for my brother's father in- law who referred me to a guy working in registration authorities here in Cairo that helped me get the paper signed –unfortunately you have to give him a gift – I would have waited for years to get the licence sorted out ...although I know someone in local council but he didn’t help me...!!"

Availability of information and knowledge

Refers to the availability of information about different types of support available for SMEs. It has reportedly been a common problem that SMEs were not aware of the support availability to neither them nor what they should do to get support and help.

This has an impact on the early start-up of the company. Some SMEs were fortunate they got to know through family/friends and colleagues that there are lands in industrial zones in different parts of Egypt that is available at subsidised rate for SMEs. They were better off than other SMEs.

Those SMEs who knew (through their personal contacts) that the SFD sponsored and organised trade fairs –to whom overseas clients were invited- managed to secure business with overseas clients compared to those SMEs who did not know about the SFD’s trade fairs.

In particular one company out of the four

- Importance of strong bridging relationships was the primary means through which furniture companies and other traditional companies knew about trade fair organised by SFD, the possibility to obtain subsidised facilities in industrial zones.
who struggled to find a cheap and affordable place to start their business (They incurred losses and it took them years to breakeven). Also, the possibility of getting tax exemption for ten years was only available for the beneficiaries of SFD who took loans and repaid them within pre-set time. As founder of FD2 argued:

"I didn’t know that here is such thing called tax exemption…. I have been operating for a number of years and when a friend told me I went to SFD and said I want to apply for this exemption… they refused because I was an older established SME not a new one… If I had known this would have saved me a lot of money".

furniture companies interviewed was not aware of the Fairnexus fair, which was one of the primary means other companies managed to indirectly and directly export to some of overseas clients. The founder of FR1 stated that:

"You see the main problem here in Egypt is information is not available and it’s very difficult even to know from where you can get such information… I didn’t know about this fair for years and now I think it is too late for me to compete against those furniture companies that go there every year…"
To summarise, corruption and other sources of uncertainty within the Egyptian institutions obliges the SME decision makers to rely on a personalised social network links to sidestep the system or get anything done (for example, permissions and licences). Also, there are voids apparent in the governmental support offered to SMEs. These encourage the Egyptian entrepreneurs to search for information and assistance through informal channels often involving personal relationships.

**UK institutional Characteristics**

The majority of UK companies stated that there is a strong legal system in place and that primarily they rely on business relationships especially in their domestic operations. However, when it comes to overseas operations, this depends to a great extent on the host country’s legal and institutional system. In those countries where there is a high degree of risk companies either opt for establishing a joint venture/branch and/or finding an agent who works primarily on a commission basis. In other words, this risk is mediated through reliance on an informed (or connected) local actor.

Some companies followed a calculative approach when choosing overseas agents and/or distributors through extensive research and recommendation from overseas UK consulates and UKTI teams. They then assess the agent’s financial position, reputation and connections in the given overseas market and chose the one(s) that match these criteria. Other SMEs followed a trial and error approach whereby they try a number of agents in different markets and usually sell through them a small number of orders, and once these agents prove to be worthwhile the company sells more through them.
For example, Manu4 explored several agents in Egypt before settling on one, since they had lost a significant amount of business because of their former Egyptian agent and they thus wanted to find one to replace him. They tried several agents and chose the one that proved to be more committed and generated more profit. However, instead of offering him a fixed salary they chose to work on commission basis and also offered support to the clients when needed through sending British experts to the clients’ location for maintenance and so forth.

The second factor addressed by most of the respondents was the role of governmental supporting agencies in the home country. Twelve companies used the services offered by local chambers of commerce and UKTI and they generally had positive experiences with them. There were exceptions; however, for example, Manu4’s export manager noted that:

"They didn’t help us at all (UKTI and local chamber of commerce) ...[...].. Because they are not involved in the tobacco business and there is no requirement for them to be. I do occasionally use UKTI for trade missions but I will definitely not use them for research ....In fact I am going to go to Korea in January and they are trying to persuade me to use their research facility and I will not because the government research facilities aren’t as good as my own knowledge of the markets. There is one exception which is China because it’s very difficult to gain access to market knowledge, so that’s why we are working with Sheffield University. We just completed a project with them because they have Chinese nationals working with them....and they provide them and certainly me with access to information that I couldn’t get hold of myself. ......".

He also added:
"Regarding UKTI and other governmental supporting agencies, I find working with them is not very useful because of the nature of our market and it is a very niche one. If we were in agriculture or medical fields where it is a clear cut area or segments of industry these companies will benefit and find the information they need from these agencies. However, the tobacco industry is a very niche one and relatively small compared to pharmaceuticals. In addition, these agencies don’t have the information I have for instance I have on my computer information about every manufacturing factory in the world within our industry. I have built this over years, because with my previous employer ..... Although it was an engineering company I was partially involved with tobacco industry as well. So I knew a lot of people in the tobacco industry and I think it’s all about the people that you know in any business ...but I can pick the phone and call any one in any place in the world, but you can only do that only through time in the business”.

Also, other SMEs mentioned that the support offered to small companies is very limited and ineffective compared to that lent to larger companies as the business development manager of Manu6 reported:

"In my previous appointment, I tried to use them unsuccessfully. If you are small company they are not interested. Big companies like Rolls Royce they are more interested in helping you and working with you. I didn’t find support offered to the smaller companies particularly helpful, no. ....[...].... The other aspect that has to be borne in mind with our product is that it’s quite technically involved. I know we say it’s loosely tightening up nuts and bolts, but a lot of people that I’ve dealt with initially in exports through the Black Country or Birmingham Chamber of Commerce; they struggle to understand the concept of our product. Understanding it is one way to find out which company or market sector we should be looking at in a specific country".
The above quotations suggested that international experience and business networks built over the years offered an alternative - perhaps a better alternative - to seeking support from local supporting agencies.

On the other hand, other companies found the support they got from supporting agencies very helpful. As the founder of Manu5 reported:

“*The UKTI absolutely and the local chamber were key domestic relationships that helped me a lot… …in the UK specifically we have been lucky that we didn’t need so much help ... the help from UK has been that good I did not need in any other help ... so I been lucky in that regard because help here was superb ....they were key to our survival*”.

The key characteristics of UK institutional context and the respondents' assessment of the effectiveness of governmental support agencies is summarized in Tables 7.3 and 7.4.
## Table 7.3: Key institutional characteristics in the UK

### Characteristics of home country institutional context (UK)

<table>
<thead>
<tr>
<th>level of institutional development</th>
<th>Explanation Comments</th>
<th>Impact on company’s domestic operations</th>
<th>Impact on Internationalisation process</th>
<th>Impact on networking process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency law enactment and/or stability of law system.</td>
<td>Strong legal framework, which is evident in the strong reliance on contracts as key governance mechanism and the basis of most of transactions and dealings with suppliers, customers and competitors</td>
<td>It is reflected in reliance on contracts between company and its UK distributors and everything is defined in a contractual form. For example, as the founder of OG2 stated: “To protect myself from opportunistic behaviour I disclose the terms and conditions in contracts and if a problem occurs I can take the concerned party to court”. Also, the export manager of Manu10 argued that: &quot;We never came across someone who copied our technology to our best knowledge, because all of our processes are patented although some of those patents are coming to an end now…”</td>
<td>This has an implication that most of the relationships companies had tend to be more contractual based/business relationships. This is evident in the domination of weak business relationships that SMEs have with agents/distributors in domestic and overseas markets. However, on the other hand, this makes it easier for the company to have a larger number of contacts in their network and to expand into more markets. This was suggested by the export and sales manager of Manu8, said: &quot;I usually approach UKTI and British consulates in different markets and I ask for a potential list of clients and I choose one of them... I have a certain criteria in mind such as this agent’s links, reputation and financial position and once I select him or her, we write contracts and specify our terms and conditions. However, in those markets where it is really ineffective to have contracts like African countries I usually work on a commission basis. If the agent brings in profits he gets paid and this is how I actually was able to handle the large number of overseas agents that we have in different parts of the world&quot;.</td>
<td></td>
</tr>
</tbody>
</table>
Table 7.4: The role of UK supporting agencies

<table>
<thead>
<tr>
<th>Characteristics of Home country institutional context (UK)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>level of institutional development</td>
<td>Explanation Comments</td>
</tr>
<tr>
<td>-Support offered by the Government to support exporting activities of SMEs and the start-up of the company.</td>
<td>- These include support for SMEs through offering courses and training on how to export. For example, the passport to export programme run by chamber of commerce and UKTI teams. Also the OMIS services which is a service that allows SMEs to get in touch with regional and overseas UKTI teams. Also other services mentioned by cases was the introduction party or ball that is sometimes carried out in UK consulates overseas where UK businessmen and potential clients and distributors are invited.</td>
</tr>
</tbody>
</table>

66 From UKTI.gov.Uk/exports (accessed on 19th of Novber, 2013)
meetings with UK entrepreneurs, they were more cooperative willing to answer calls coming from UK embassy rather than a mere old call from a stranger.

SMEs that joined overseas industry alliances and/or industry associations were able to create loosely coupled collaborative agreements whereby, each partner would refer clients to the other and/or share the business together.

| Industry associations. | -These are industry associations that are either free to join and/or require a membership fee. Companies that are located in science parks such as the Oxford and Cambridge science parks, are automatically member of Oxford and Cambridge science park networks (called one nucleus ) and are given support and even sponsored to participate in scientific conferences in the UK and Europe. | Some industry associations were crucial in terms of serving as a pool or platform through which SMEs met with their competitors and/or suppliers and managed to form collaborative agreements with them to create opportunities and share costs. | SMEs were the ones who intentionally joined global and local industry associations in order to further internationalise in to overseas markets. For example, the business development manager of LW1 highlighted:  
"We joined this global alliance whereby it is made of SMEs and larger professional service companies and its sort of a loosely coupled collaboration , I refer work to my partners and they do the same to me and what is even better is that we
sometimes share business if it is too much for one company to handle... […] … this helped our company to diversify to different parts of the world we are if you like piggybacking on larger players..

<table>
<thead>
<tr>
<th>Ease of starting company</th>
<th>- Not an issue for UK companies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of information and knowledge</td>
<td>The lack of awareness and the highly fragmented UKTI and chamber of commerce and the like was one of main complaints SMEs reported, - which was the case 10 years ago- this made it very difficult for SMEs. As the founder of Manu7 noted:  &quot;It was very difficult years ago.... They improved now ... but the UKTI and chambers and other regional supporting agencies were fragmented and all over the place... you don’t know who is who and who belongs to who and what do they offer that is different...!!!... To me this is confusing that is why I didn’t approach them until recently when the government began advertising about what they offer and they became more integrated&quot;.</td>
<td>Some SMEs were not aware of the services available and support offered by different supporting agencies and there was also confusion about who represents whom. This might have caused some companies like Manu7 to search for other ways to enter new markets.</td>
</tr>
</tbody>
</table>
Entrepreneur’s previous international experience

As seen from the clusters of SMEs described in Chapter 6, the level of an entrepreneur’s international experience could play an important role in the internationalisation of SMEs and the decision as to which entry node to choose.

The previous international experience of entrepreneurs has been found to be strongly linked to the success rate of SME internationalisation growth (Reuber and Fischer, 1997; Reid, 1981; Mayer and Flynn, 1973). These studies suggest that the more the SME’s founder or management team is exposed to foreign markets the higher the probability that the SMEs will succeed in foreign markets. This is closely linked with studies that argued the entrepreneurial orientation plays a significant role in the international success and growth of SMEs (Sharma and Bromstermo, 2003; Crick and Spence, 2005; Ellis and Pecotish, 2001). The latter group argue that the more opportunistic and innovative the entrepreneur, the more likely they will be more active in recognising and creating opportunities as they emerge in overseas markets.

To assess the extent to which an entrepreneur’s international experience is associated with the internationalisation performance of SMEs, respondents were asked if they have had hands-on experience in dealing with overseas markets prior starting their companies and/or joining the company. This could be acquired either through working with an MNC, working in overseas markets and/or being in charge of business development and exporting activities.
The UK SME decision makers had more international experience compared to their Egyptian counterparts. The presence of international experience prior to the start-up of the company and/or before joining the company is set out in Table 7.5.  

Table 7.5: Assessment of UK and Egyptian entrepreneurs’ prior international experience

<table>
<thead>
<tr>
<th>Description</th>
<th>UK</th>
<th>Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of founders and/or key decision makers: such as export and/or business development managers who had prior international experience.</td>
<td>In twelve out of the twenty SMEs, at least one of the founders or management team had industry related experience and/or at least sales experience. However, in only eight companies, SME decision makers did they have international experience before joining the company.</td>
<td>In six out of twenty SMEs, at least one of the founder(s) had international experience and that was mainly through working with an MNC branch in Egypt and/or in one of the Arab countries.</td>
</tr>
<tr>
<td>Description</td>
<td>These eight SMEs had more than 50% foreign sales. However, they varied in terms of the number of markets they operate in and the diversity of these markets. Some SMEs (four out of the eight companies) operated in very small number of markets and few regions. The remaining twelve SMEs had been either; active in terms of searching for opportunities by themselves in overseas markets; adopting more of a reactive approach to internationalisation; and/or a proactive-reactive approach to internationalisation whereby they start their first international activities as a response. For example, to a serendipitous event and after this initial success they become more active in terms of searching for international opportunities.</td>
<td>These six companies had over 40% foreign sales and operated in a low-moderate number of markets and between 2-7 regions. The remaining 14 cases were either reactive and/or active in terms of their internationalisation approach in early and subsequent internationalisation stages.</td>
</tr>
</tbody>
</table>

Although this section will use the average number of markets in which the SME managed to enter and operate, caution must be taken into account as a few cases might have entered one market at EIS and withdrawn from it in SIS. Since this is just a tentative measure to capture internationalisation behaviour over time, the researcher felt it could still be used as a crude measure to the extent to which some companies might be more active and/or reactive than others.
It became evident that the presence of previous international experience among the UK entrepreneurs made them less inclined to rely on formal sources of assistance, namely governmental supporting agencies. Similarly, Egyptian entrepreneurs who had previous international experience were more likely to use informal means of support (mainly social networks) to compensate for the institutional voids inherent in the Egyptian institutional context. The relevant cross tabulation are shown in Tables 7.6 and 7.7.

**Table 7.6: Cross tabulation of the presence of UK entrepreneurs prior international experience and the type of support used.**

<table>
<thead>
<tr>
<th>Presence of prior international experience of entrepreneur</th>
<th>Used formal support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(yes)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2(no)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Table 7.7: Cross tabulation of the presence of Egyptian entrepreneurs’ prior international Experience and the type of support used**

<table>
<thead>
<tr>
<th>Presence of prior international experience of the entrepreneur</th>
<th>Used formal support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(yes)</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2(no)</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Although small numbers do not permit a definitive conclusion, it can be seen from Tables 7.6 and 7.7 that there is a tendency for the SME entrepreneurs who have prior experience to make lower use of formal means of support.
In order to avoid violating one of the key assumptions of the Chi-square test (some cells have expected frequencies less than five). To investigate the tendency further I aggregated the two samples (40 SMEs). Tables 7.8-7.9 present results of the two countries together (40 SMEs).

**Table 7.8: Cross tabulation for the complied sample of UK and Egyptian SMEs.**

<table>
<thead>
<tr>
<th>Presence of prior international experience of entrepreneur</th>
<th>Used formal support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(yes)</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>2(no)</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>

**Table 7.9: Chi-square test for the complied UK and Egyptian SMEs**

<table>
<thead>
<tr>
<th>Chi Square tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.095</td>
<td>1</td>
<td>.079</td>
<td>.101</td>
<td>.076</td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>2.019</td>
<td>1</td>
<td>.155</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>3.249</td>
<td>1</td>
<td>.071</td>
<td>.101</td>
<td>.076</td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.60.
b. Computed only for a 2x2 table

By looking at raw figures in Tables 7.6-7.8 there is a weak association between the presence of prior international experience of SME decision maker and the use of personal social networks rather than use of formal support offered by government supporting agencies.
However, there is no significant statistical association between the presence of entrepreneurs international experience and the type of support s/he use, where $X^2(1) = 3.905$, $p>0.05$.

It is evident from the complied sample cross tabulation that 79% of those entrepreneurs who had previous international experience relied on informal means to seek support.

These results suggest that there is a slight association between the presence of entrepreneur’s prior experience and the tendency to use informal means of support (mainly social networks). In addition, these results suggest that absence of entrepreneurs’ previous international experience tends to oblige the SME to rely on formal means of support to prosper both domestically and internationally.

**Conclusion**

Chapters 5 and 6 highlighted the fact that UK SMEs focused more on building large sparse networks compared to their Egyptian counterparts who focused primarily on dense (highly cohesive) networks. These differences between the two countries have implications for how SME decision-makers initiate and use network relationships to access information and other support to compensate for institutional voids. The presence of voids creates the necessity for adaptation and the prevailing culture points to ‘natural’ ways of doing so.

The qualitative findings presented in this chapter portrayed the problems posited by institutional voids in Egypt. Some common themes among Egyptian SMEs emerged. For example, entrepreneurs believed that the only way to get round such institutional obstacles was to cultivate personal contacts that could open doors to high-level officials. Even when access was gained through this networking, gifts and under-the-table payments would normally be required to get action taken. Moreover,
knowing the right person in relevant institutions and/or having a personal connection who could affect that link, is what some respondents referred to as "wasta".

"Wasta" is an Egyptian cultural norm, whereby young adults grow up knowing that the key way to move around and get things done (Hutchings and Weir, 2006). For example, the founder of Manu7-eg argued that:

"I know the only way to get a job or even a driving licence is to know someone in the traffic control agency…. Without this wasta [connection] I would have waited for years or even paid a large sum of money…. I apply this principle in my day-to-day business operations …sorry to say this but this is the only way you can survive in this country’’.

This heavy reliance on personal links limited the number and type of overseas markets to which the Egyptian SMEs felt comfortable to enter – primarily to those in the Middle East region with which network partners had their own links and knowledge.

These dysfunctionalities were absent from the replies of the UK SMEs. They experienced few institutional voids relating to export support. While their evaluation of institutional export support agencies, notably UKTI was varied, in contrast to Egypt this variation was not due to difficulties in accessing relevant officials or in the latter’s indifference unless inducements were given to them. It was rather due to the lack, in some cases, of the officials’ specialised foreign market knowledge relevant to the SME’s area of business.

In general the UK companies had developed a range of network contacts, such as with customers, chambers of commerce and professional advisors, which they could utilize to support their international expansion over a wide range of foreign markets. In contrast to the case of Egypt, these contacts were primarily of a ‘business’ (non-social) nature and the firms’ relations with them had a contractual basis. They normally developed such contacts through their own initiative rather than relying on referral through social ties.
CHAPTER 8
DISCUSSION AND CONCLUSIONS

Introduction

This closing chapter summarizes the key findings of the research in relation to the four research questions set out in Chapter 1. These are:

1. What are the different internationalisation patterns of Egyptian and UK SMEs over time?
2. What are the network development patterns of Egyptian and UK SMEs over time?
3. Is there co-evolution between the internationalisation and network development patterns of Egyptian and UK SMEs over time? If so, what are the underlying reasons for the co-evolution between the internationalisation and network development patterns based on the understanding and interpretations provided by the UK and Egyptian SME decision makers?
4. What are the key antecedents or contingencies of SMEs internationalisation and networking behaviours?

The chapter also discusses how the research offers theoretical and methodological contributions in relation to conventional knowledge about SME internationalisation and networking theories. Finally, implications and suggestions for future research are presented.
1. SME internationalisation patterns

This study offers a novel integrative framework to enhance our understanding of the internationalisation patterns of well-established SMEs over time. It applied three different analytical approaches.

The first approach involves the identification of internationalisation patterns at specific points in time and tracing their change over time (Kutschker, Baurle, and Schmid, 1997; Jones and Coviello, 2005). Through analyzing the key internationalisation outcomes at different points in time, I found that Egyptian SMEs tend to exhibit more restricted internationalisation behaviour, insofar as they operated in fewer overseas markets and in a smaller number of regions compared to the UK companies. Moreover, Egyptian SMEs focused mainly on increasing their internationalisation scale (percentage of foreign sales), whereas UK SMEs focused on increasing their internationalisation scope and geographical coverage (breadth of internationalisation).

The second approach introduced the speed of early and subsequent internationalisation as an additional measure. This revealed that early start ups do exist in both countries and that they tend to follow the born global pattern identified by Knight, Madsen and Servais (2004) and Knight and Cavusgil (1996; 2005). However, not all early start ups continue to follow the same pattern of internationalisation; some companies slowed down and others have not even

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68 To recap, Chapter 5 identified different internationalisation patterns through focusing on international performance/outcomes at different points in time (namely, percentage of foreign sales, number of regions and overseas markets). In Chapter 6, focused on understanding the internationalisation patterns through identification of different internationalisation profiles of SMEs (based on the three internationalisation performance/outcomes) and the internationalisation process (focusing on aspects such as entry modes used and choice behind their choice, the trigger and motivation of early and subsequent internationalisation and the choice of overseas markets).

69 This does not mean that UK SMEs relatively speaking did not have high percentage of foreign sales, they focused on generating foreign sales revenue from a large number of diverse overseas markets compared to their Egyptian counterparts.

70 Early start-ups are those SMEs that started their first international activity within the first three years of the company’s inception. The use of three years as a cut-off point to differentiate between early start-up and traditional SMEs is somewhat arbitrary (following Knight and Cavusgil, 1996; 2005, Oviatt and McDougall, 1994). Furthermore, six years was used as a cut-off point to differentiate between early subsequent internationalisers and traditional subsequent internationalisers. It is argued that six years is just enough for an SME to sustain stability with a greater likelihood of survival.
reached the subsequent internationalisation stage. One of the key reasons for this is that those SMEs, which continued to rely on their existing networks, were somehow blinkered and constrained by their existing personal networks; they were subjected to what Coleman (1988) referred to as a closure effect. This was more the case with Egyptian SMEs since they tend to rely and focus more on a highly cohesive network of relationships.

Comparing the internationalisation performance of rapid internationalisers (both in the early and subsequent internationalisation stages) and traditional SMEs, some patterns emerged. In the UK, rapid internationalisers – those SMEs which followed an accelerated internationalisation both in early and subsequent internationalisation stages – outperformed traditional SMEs in terms of internationalisation scale; but they operated in fewer markets and regions. This indicates the fact that slow internationalisation might indicate a greater focus by entrepreneurs on increasing internationalisation diversity and scope. By contrast, Egyptian rapid internationalisers – those SMEs which followed an accelerated internationalisation both in early and subsequent internationalisation stages – outperformed traditional SMEs in terms of internalisation scale, scope and geographical diversity.

This means that tracing the change in overall internationalisation performance of SMEs from different contexts over time is better understood through focusing on the scope, the degree of geographical diversity and speed of internationalisation (both early and subsequent) rather than just focusing on the scale of internationalisation.

The use of different internationalisation performance measures helped to identify the general tendencies of Egyptian and UK SMEs internationalisation behaviour over time. Nevertheless, despite these general tendencies, a closer examination of the underlying dynamics revealed
some distinct internationalisation patterns. These were identified through exploratory clustering of the UK and Egyptian SMEs based on different levels of internationalisation performance, assessed in terms of their number of overseas markets. This opened the way to an in-depth qualitative investigation of the underlying internationalisation mechanisms and behaviour of different SME clusters, which is the third approach used in this study.

The resulting taxonomy of SMEs showed that there are within-country differences in the internationalisation behaviour of SMEs. For example, moderately-performing internationalisers in the UK operated in a relatively large number of diverse markets, they relied on agents and distributors and piggybacking on the foreign business of MNCs. These SMEs operated in a range of sectors (such as professional services and heavy manufacturers) and spread across the knowledge intensity spectrum (mainly knowledge intensive and traditional SMEs). These differences in sector and knowledge intensity to some extent shaped the internationalisation logic adopted by SMEs. For example, knowledge intensive heavy manufacturers – which are companies that exploit existing knowledge and adapt it to suit different industries – engaged in proactive internationalisation in early and subsequent internationalisation stages. They actively researched different markets where they could sell their product to different overseas clients in different industries. However, knowledge intensive professional services and traditional manufacturers adopted a reactive internationalisation approach (through responding to unsolicited orders and/or exporting to overseas markets because of intense competition in home market). As they moved into the subsequent internationalisation stage they tended to diverge. Some continued to adopt a reactive approach whereby they wanted to replicate the success they had in their first export markets and they followed the same internationalisation template. Others became more proactive as a result of stimuli such as a change of management or ownership of SME.
Moreover, the mode of entry choice is not uniform across members of the same cluster but rather is contingent upon the availability of a particular type of tie (for example, a family member or a friend) or possibility of finding right contact in overseas market, conditions in host country and/or the internationalisation logic of the management.

These clusters showed that there is more than one way to internationalise and that SMEs could change their internationalisation process and adopt several modes of entry at different points in time and to serve different purposes. The particular internationalisation pattern(s) that an SME might follow could be attributed to the nature of its product and the strategic choice made by its management.

SME key decision makers have several strategic choices. They could follow a proactive calculative approach, a reactive approach or a mixed approach. They might have the intention from the start of their business to internationalise into multiple and diverse markets. These entrepreneurs are more likely to adopt a proactive and calculative approach to internationalisation. Other entrepreneurs adopt a reactive approach when opportunities arise, such as following a client into overseas markets or an unsolicited order, or when a problem in the domestic market forces the company to internationalise or increase its internationalisation. Finally, mixed internationalisation was another common logic, whereby companies might start off their internationalisation through being merely a reactive internationaliser and because of certain trigger events or critical incidences they then shift their internationalisation pattern to a more proactive approach in the subsequent internationalisation stage. Some companies might even adopt several internationalisation logics during the same phase. This is apparent in some of the cases, where at a given point in
time the company could have both unsolicited orders and intentionally managed ties leading to entry to new markets.

Clustering the companies exposed some similarities in terms of certain general internationalisation profiles but also highlighted some differences between SMEs belonging to the same cluster. These differences could sometimes be attributed to the type of the SME or the sector it belongs to, or could be idiosyncratic to the SME itself.

To summarise, this research offered a novel holistic and integrative approach to the way internationalisation process and patterns can be understood. The internationalisation process could be understood through focusing on the following three aspects (1) the internationalisation performance at different points in time, as assessed by changes in the scale, scope and degree of internationalisation spread. This throws light on the general tendencies of SMEs from different contexts or countries; (2) the dynamic nature of the internationalisation process which involves issues such as change of entry modes, types of modes, and taking into account the changes in external environment as the key driver for early and subsequent internationalisation of SME; (3) identifying patterns of speed or of internationalisation through understanding the patterns of early and traditional SMEs.

**Contributions to the literature on SME internationalisation and international entrepreneurship**

Research on SME internationalisation has broadly speaking differentiated between two types of SMEs: (1) traditional SMEs which tend to follow an incremental and gradual internationalisation process and (2) international new ventures and "born global". The latter are companies that seek from inception to internationalise into several markets to achieve competitive advantage (Oviatt and McDougall, 1994; Knight and Cauvisgil, 1996; Rennie,
1993; Jones, 1999). This denotes that they follow an accelerated internationalisation pattern whereby they start their first international activities soon after inception into several markets and achieve at least 25 percent of their sales from overseas markets (Knight and Cavusgil, 1996). Other types of ventures or SMEs have been also addressed such as born again globals (Bell et al, 2003). These studies use different internationalisation approaches as a basis for distinguishing contrasting types of "ventures"(Jones, Coviello and Tang, 2011: 636).

However, these types of SMEs could retrench their international operations for a period of time and then re-internationalise and/or slow down after some time (Jones et al., 2011). This means that these types of SMEs could change their internationalisation behaviour at different points in time and could follow different internationalisation patterns simultaneously. This makes these patterns of internationalisation a strategic choice that the entrepreneur can choose from and change over a particular period of time depending to a great extent on the changes in the external context (Mudambi and Zahra, 2007; Jones et al., 2011; Chetty and Campbell-Hunt, 2004).

Furthermore, international entrepreneurship research has focused mainly on high tech SMEs operating in knowledge intensive industries with only a limited focus on other types of SMEs operating in traditional or low tech industries. The main argument is that high-tech companies at the high end of knowledge intensity usually focus on niche markets and tend to internationalise to a large number of markets (Jones, 1999; 2009; Madsen and Servias, 1997). Finally, recent reviewers of the international entrepreneurship literature have called for the question of what takes place after the foundation and first internationalisation attempt of SMEs to be addressed (cf. Zettinig and Benson-Rea, 2008; Kuivalainen et al., 2012a).
Relatively few studies have addressed this last question, and the evolutionary patterns of SMEs internationalisation have been tackled through a rather simplistic and reductionist approach. For example, studies have focused on the change of entry mode over time (Hashai, 2011), internationalisation scale and scope (Loane and Bell, 2005; Kuivalainen, Sundqvist and Servais, 2007), degree of geographical concentration/diversification (Katsikeas et al., 2005) and impact of psychic distance on SMEs internationalisation (Johanson and Valhne, 1977; Jones, 2009). These studies offer some understanding of the degree of SME internationalisation but they do not take into account the fact that having a high level of internationalisation (percentage of foreign sales) does not necessarily mean that an SME is also geographically diverse and operates in a large number of overseas markets. Moreover, where a firm chooses to locate its international operations and which markets it chooses have been addressed widely in the literature on MNC and to a lesser extent with reference to SMEs (Kuivalainen, Sundqvist and Saarenketo, 2013).

This present research closes the above-mentioned gaps in the literature through attempting to answer what happens after the initial internationalisation of the SME and how the SMEs internationalisation evolves over time. It also includes low-tech and traditional SMEs in its sample in order to identify any differences in their respective behaviours. It draws our attention to the different patterns of internationalisation pursued by SMEs rather than simply classifying the SMEs into two or three main types of ventures, such as born globals, traditional and born again globals (Jones et al., 2011).

The present research also contributes to the literature examining internationalisation patterns through offering two different ways to understand such patterns over time through identification of different internationalisation profiles at different points in time and through
exploring in depth the internationalisation dynamics over time of different clusters of SMEs. This shows that adopting a simplistic and reductionist approach fails to offer a comprehensive view of the complexity of phenomena under investigation.

2. SME network development patterns

Significant differences were found in networking behaviour over time. UK SMEs had a general tendency to increase their network size over time. By contrast, Egyptian SMEs network size increased from pre-internationalisation to the early internationalisation stage, but then remained the same as the SMEs moved into the subsequent internationalisation stage. The qualitative evidence showed that Egyptian SMEs focused on having a smaller network size and nurturing relationships that were established during the first two stages of their life cycle. Moreover, the network density and constraint of both UK and Egyptian SMEs decreased over time, implying that SMEs networks evolved into sparse (less cohesive) networks composed of large number of bridging relationships. This suggests that bridging relationships offered key advantages to SMEs as they moved into the subsequent internationalisation stage.

The qualitative findings suggested that SMEs from both countries used bridging relationships differently, and that this is highly impacted by the home-host countries combination. Egyptian SMEs tend to use referrals from strong and close relationships to have access to key gatekeepers in government and other strategic domestic networks (such as network of supporting agencies) to get information and have access to resources that are needed to survive in domestic and overseas markets. Moreover, they rely on strong bridging relationships to establish relationships with overseas contacts in order to operate in overseas markets.
The UK SMEs, on the other hand, rely mainly on weak bridging relationships to use them for example as a marketing tool to increase their sales volume and/or enter new markets. They tend to rely on bridging relationships in overseas markets through the use of UKTI teams and consulates networks around the world to gain access to clients and potential agents.

These findings suggest general tendencies in SME networking behaviour over time. However, as shown in Chapter 6, the networking behaviour of each SME changes from one stage to another and the way networks evolve differs from one cluster to another. This could be attributed to the fact that each entrepreneur draws a different set of benefits and resources that matches his/her particular situation making the use of networks idiosyncratic to SME.

This was highlighted by the exploratory taxonomies of SMEs explained in Chapter 6, whereby members of a particular cluster portrayed some similarities in their networking behaviour. For example, the moderate networkers in both UK and Egypt, generally focus on having a relatively moderate number of contacts in their networks and to rely on bridging relationships to access crucial resources. At the same time, the moderate networkers differed in their networking approach and strategy based on their membership of a particular sector/industry and sometimes based on the individual entrepreneur’s strategic choice on how to use networks and on his/her particular situation. For example, the knowledge-intensive UK SMEs – both manufacturing and professional service SMEs – were proactively engaged in creating and establishing ties with overseas contacts (distributors and agents) but differed in the way they made use of bridging relationships. The manufacturing SMEs only relied on bridging relationship to access overseas networks to which they were not directly connected (such as networks of distributors). By contrast, the professional service companies focused
more on obtaining insidership to global alliances to secure loosely coupled partnerships with MNCs and overseas competitors cross-referring work to each other, and sometimes they work collaboratively together on big accounts or clients.

As for the Egyptian moderately-performing networkers, they were more reliant on bridging relationships whereby their networks were medium-sized and composed of a relatively large number of bridging relationships. These were mainly strong social bridging relationships (often family and friends) that helped SMEs to have access to support and key decision makers and gatekeepers in the governmental and supporting agencies that helped them get needed support to internationalise. In the same cluster, sector also played a role in the way SMEs used relationships. For example, traditional manufacturing SMEs relied to a great extent on fairs organised by Social Fund for Development (SFD) to sell their products to overseas clients. The rest of SMEs, which could not benefit from support offered by the SFD and other agencies, created their own informal clusters of relationships with competitors and small manufacturers to lobby the government and have access to resources. Hence they reported having dense and cohesive networks.

Moreover, SMEs clusters showed some commonalities in terms of using certain types of strategic entry nodes and in how these changed over time. For example, Egyptian extensive internationalisers relied on donors or foreign aid as the key entry node for the early internationalisation stage, and in the subsequent internationalisation stage they relied on direct exporting and establishing branches, usually managed by a strong tie, in overseas market. By contrast, UK extensive internationalisers utilised a different types of entry nodes. During the early internationalisation stage, they piggybacked domestic clients and reactivated pre-existing relationships with former clients – these were clients the founder(s) knew
through previous employment – in overseas markets. In the subsequent internationalisation stage they intentionally created relationships with key strategic entry nodes and to a lesser extent made use of coincidental ties such as unsolicited orders.

Accordingly, clustering of the SMEs demonstrated some similarities in the network attachments used by members of a particular cluster, but it also highlighted the idiosyncratic nature of their network behaviour that could be explained partially through membership of a particular sector. On the whole, however, networking could be better explained through investigating the entrepreneurs’ logic. Firstly, entrepreneurs could adopt a reactive networking approach which was usually a response to changes in external environment whether this be favourable (such as unsolicited orders) or unfavourable (such as termination of a relationship or the need to establish a branch in a risky market); or through a rational choice through actively creating relationships with key domestic contacts to help them cope with obstacles and difficulties they might face in domestic and international levels.

Secondly, entrepreneurs could follow a rational and calculative networking logic whereby the SMEs actively engage in creating relationships to expand their international operations through striving to use the most efficient and effective networking approach that would serve the purpose at the least possible cost.

Thirdly, a mixed approach could be used whereby at a certain point SMEs could adopt reactive and proactive networking logic depending on the opportunities and circumstances of the SME and on which internationalisation stage it is. For example, SMEs could respond to unsolicited orders in their subsequent internationalisation stage (which emerged mainly because of its increased legitimacy) and also to engage in proactive creating and establishing new ties in new overseas markets.
Another example of mixed networking logic is highlighted by some of Egyptian entrepreneurs. They chose to follow a balanced networking approach whereby they relied on highly cohesive networks in the domestic market and on bridging relationships in overseas markets. The former would help SME to expand domestically and access needed resources to fill in institutional voids and latter would serve a key platform through which they can enter overseas markets. For these entrepreneurs this seemed to be the optimal approach to survive domestically and internationally. These logics could change over time and be used to serve different purposes.

Contributions to the networking and international entrepreneurship literature

It is well established in the international entrepreneurship literature that networks are crucial for the SMEs internationalisation success, because they serve as platforms through which SMEs can access needed resources and can help them to overcome their liabilities of smallness and newness (Harris and Wheeler, 2005; Chetty and Agndal, 2007; Covicello and Murno, 1996; 1997; Knight and Cavusgil, 1996; Rugman and Verbeke, 2007; Ojala, 2009). The majority of scholars have treated networks as an independent variable whereby they examined how the networks impact the SMEs internationalisation processes and outcomes. Fewer studies have treated networks as a dependent variable and examined how networks are affected by entrepreneurial actions and processes (Hoang and Antoncic, 2003; Slotte-Kock and Covicello, 2009).

In addition, very few studies have examined how an SME’s network shapes and creates opportunities and how the actions and strategies of SME entrepreneurs also shape network development over time. This means that research examining the way networks evolve over
time and how they shape and create benefits for the SMEs is limited (Hoang and Antoncic, 2003). As discussed in Chapter 2, the literature addressing networks and SMEs internationalisation can be grouped into three main streams. These respectively treat networks as an independent variable, as a dependent variable, or as interdependent with internationalisation.

Although these steams of literature enrich our understanding of how networks influence and are influenced by SME actions such as internationalisation, they suffer from some shortcomings noted in Chapter 2. The first shortcoming concerns the methodology used by these studies to understand the phenomena under investigation and the dynamic nature of SME networks. They have mostly either adopted a cross-sectional approach where they gathered data at different points in time and focused primarily on pre-determined sets of relationships or groups of relationships (such as business, social, mixed ties) and/or on the number of ties (network size). Others focused on few case studies (usually between three and ten cases) and tried to identify some network strategies or types of relationships that were beneficial to the company (e.g., Freeman, Edwards and Schroder, 2006; Hilmersson and Jansson, 2012; Blomstermo et al., 2004; Hallen and Eiesnhardt, 2012). The benefits drawn from networks and how the SME uses them to serve different internationalisation needs and purposes and at different points in time has been vaguely researched and further understanding of the process through which entrepreneur and SME use resources and benefits available through their different network relationships is warranted.

Secondly, these studies adopt a rather simplistic and reductionist approach when trying to examine network evolution over time and/or focused on one or two aspects of networks – for example the structural dimensions and usefulness of ties – or on one level of analysis such as
dyadic relationships or inter-organisational relationships (Slotte-Kock and Coviello, 2009). Studies that cross different levels of analysis are rare and the few that have addressed different levels of analysis were primarily concerned with overall network and dyadic relationships (Slotte-Kock and Coviello, 2009). How external changes in the environment and in the SME’s specific situation over time impact the networking logic, choice of ties and network development over time has scarcely been researched.

Thirdly, very few studies have focused on how to manage and make best use of different network ties, and different network types, such as dense versus sparse networks. Previous research has not provided a good understanding of how entrepreneurs create and manage networks of relationships in ways that help SMEs to cope with different threats inherent in their external environment (in home or host country), and to maximise the benefits from dense and highly cohesive versus sparse networks characterised by a large number of bridging relationships. Finally, the darker side of networks is still vague and limited especially the possibility that networks can constraint SME success and growth (Coleman, 1988; Sasi and Arenius, 2008).

The present research helps to meet these shortcomings in the existing literature through drawing our attention to three main insights. Firstly, it uses different structural measures regarding SMEs network attachment across the three main stages of SMEs life cycle, traces the overall development over time and examines which network characteristics co-develop with each other within stages and across stages. This offers a view on network development pattern from a quantitative point of view.
Secondly, based on qualitative findings and exploratory clustering of SMEs shows some similarities between members of the same category and highlights the fact that networking behaviour is somehow idiosyncratic to the SME. It was found that Egyptian SMEs in general tend to have dense and highly cohesive networks because of the way entrepreneurs value and view relationships (reflecting a collectivist culture). While the level of density decreases over time, it was found that dense networks developed during pre-internationalisation stage were crucial for the subsequent internationalisation of SME. On the other hand, UK SMEs tend to be more actively managed in developing large networks dominated by weak business (contractual relationships). Indeed, those SMEs which relied on highly cohesive networks were under performing in terms of their internationalisation scope and diversity due to constraining effect of their existing networks. Moreover, UK SMEs were more aggressive in terms of their networking behaviour and relied mainly on weak relationships. Also, the use of family and friends (personal social networks) was more common among Egyptian SMEs compared to the UK SMEs. This could be attributed to culture and/or the benefits Egyptian entrepreneur can draw from their social networks that help them fill in institutional voids and get support they need to internationalise.

Thirdly, this research advances our understanding of the entry node concept through indicating how different clusters of firms change their entry nodes from one stage to another and also adds the concept of strategic domestic node that is crucial for SMEs domestic survival.

Fourthly, this research identified at different stages of an SME’s lifecycle, the different benefits it draws from its network social capital. Egyptian SMEs for instance used their strong relationships with family/friends in overseas markets to enter risky and more distant
markets. This was evident through the reactivation of these ties in early and subsequent internationalisation stage when SMEs decided to increase their degree of internationalisation. By contrast, UK SMEs that relied on dense networks (composed of strong social ties with family/friends) were constrained by these networks and they focused all of their internationalisation efforts on overseas markets in which their family and friends live or to those overseas market where family/friends could refer them to a key contact there. This is an example of the positive and negative sides of social capital (for more detailed examples on the dark side of social capital please refer to exemplary cases in Appendices 2.6-2.11).

3. SME internationalisation and network co-evolutionary patterns

The link between networks and internationalisation has been investigated through positioning one of them as dependent and the other as an independent variable. The key finding of this research is that it is very difficult to distinguish which one causes the other. In some instances, networks are the key driver for internationalisation and in other incidences networks are formed and changed because of the internationalisation strategies and behaviour of SMEs.

The primary contribution of this study is that it argues that internationalisation and networking processes co-influence one another and co-develop together. Moreover it closes a key gap in literature concerning what happens after the initial internationalisation of the SMEs in terms of internationalisation behaviour of the company and its network development.

This study found that different network variables such as network density, size and level of constraint are correlated with internationalisation outcomes within stages and across stages.
For example, network density (cohesive networks that were established during pre-
internationalisation stage) was found to be crucial for the Egyptian SMEs’
internationalisation scope and diversity in the subsequent internationalisation stage. However,
network density in the early internationalisation stage restricted the SME’s subsequent
internationalisation. By contrast, UK SMEs tended to rely on bridging relationships they
established during the pre-internationalisation stage to increase their internationalisation
diversity and scope in the subsequent internationalisation stage.

The application of co-evolutionary reasoning advanced our understanding of the general
interplay between different network and internationalisation variables of UK and Egyptian
SMEs, portraying some general co-evolutionary patterns between them. The UK SMEs
showed a clear association between their number of contacts and their level of
internationalisation diversity and scope. On the other hand, Egyptian SMEs showed a clear
association between network density (cohesiveness) and the three internationalisation
performance outcomes. This could be attributed to the collectivist nature of Egyptian culture
and important of strong and close relationships resulting in highly cohesive networks.

This research pioneers an exploratory co-evolutionary taxonomy of SMEs which shows in
detail how the two processes are interdependent and co-influence one another. For example,
the UK limited internationalisers and networkers are SMEs that have a limited number of
contacts and operate in a limited number of markets. These were typically knowledge
intensive professional service SMEs, which were constrained by their existing personal
networks and only thought in terms of whom they know or can have access to enter overseas
markets. By contrast, Egyptian hybrid internationalisers and networkers were mainly
traditional SMEs that operated in a limited number of markets and had a moderate network
size. Their network was largely composed of domestic relationships that were crucial for the SMEs domestic expansion and only few large clients in overseas markets.

Contributions to the study of international entrepreneurship

The co-evolutionary perspective enabled me to investigate how SMEs adapted their networking and internationalisation behaviour to changes and challenges inherent in the macro environment. It encouraged different levels of analysis at the entrepreneur level (micro), company level (meso), and country/context level (macro). Moreover, it provided a way through which the dynamic nature of the two processes could be investigated. Overall, it drew attention to four important insights.

Firstly, interaction between networking and internationalisation behaviours over time could be understood through investigation of the patterns of association between the key structural measures at different points in time. This offers a helicopter view of general tendencies in the behaviour of SMEs from different countries.

Secondly, the use of qualitative findings and exploratory co-evolutionary taxonomies permitted an examination into the unique behaviour of SMEs rather than focusing on typical cases or forcing patterns into a simplistic linear form. Furthermore, taking the position that internationalisation and network co-influence one another resolves the two contradictory positions as to what influences what, and avoids narrowing our understanding to rather simplistic definitions of internationalisation process and network development which have tended to characterize some studies of international entrepreneurship. Thirdly, there have been calls to link networking characteristics to SMEs internationalisation performance. This
study has demonstrated that the link between network characteristics and performance differs by stage and by country.

Finally, how networks are manipulated and used to suit the different internalisation needs and logics and how internationalisation shapes the SMEs network was investigated. This provides a holistic view of SMEs’ evolutionary and dialectic behaviours over time characterized by "continuous process of selection, variation and retention" in an attempt to respond to and/or shape the external environment (Slotte-Kock and Coviello, 2009:45; Ring and Van De Van, 1992; 1995).

**Methodological contributions emerging from use of the co-evolutionary perspective**

To the best of my knowledge, the application and use of a co-evolutionary perspective remains unusual in the context of SMEs internationalisation. Studies that have used co-evolution as a guiding framework can be divided into three main types: (1) studies focusing on a single case study and addressing the co-evolution of the company or case under investigation and how it co-evolved with the external environment over a long period of time. For example, Pajunen and Maunula (2008) used a co-evolutionary perspective in their study of born global company co-evolution with the industry and external environment. They focused on one case study and identified how a company’s internationalisation and resource path changed as the industry changed 71; (2) conceptual papers arguing for the advantage of studying how firms respond and adapt to changes in external environment and/or how they

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71 Coviello (2006) used three case studies to explore how their networking behaviour developed over time. However, her study did not focus on the co-evolution of internationalisation and networking processes.
could influence the environment in their favour (c.f. Slotte-Kock and Coviello, 2010; Pajunen and Maunula, 2008; Lewin and Volberda, 1999; Zettinig, Benson-Rea, 2008; Child and Rodrigues, 2011); (3) studies focusing on the macro level, for example on how the country’s institutional development affects intra-firm networks, alliances and/or a particular industry (McDermott, 2007; Huygens, Baden-Fuller, Van Den Bosch, and Volberda, H. W. , 2009; Koza and Lewin, 2010).

To address co-evolution from a methodological point of view, I had to (1) examine critical events (internationalisation and networking incidences) over time; (2) identify how SMEs respond to changes in external environment either by adapting to changes or attempting to change the environment in a way to maximise SMEs benefit and reduce risks inherent in the external environment; (3) examine how the two processes co-influence one another at different points in time and how they affect SMEs internationalisation performance outcomes; (4) take into account how path dependency (i.e. antecedents) affects internationalisation and networking behaviour, as well as how networking and internationalisation behaviour at one point in time affect the evolution of networking and internationalisation at a subsequent point in time (Pajunen and Maunula, 2008; Volberda and Lewin, 2003; Lewin and Volberda, 1999).

To do so, I had first to collect data for over a period of time that was sufficient to uncover the internationalisation and networking history of well-established SMEs. The objective was to collect data from SMEs using a multiple case study approach that were sufficient to uncover recurring themes and allowed for enough variation to understand the phenomena under investigation. I collected in-depth qualitative data from 40 SMEs – 20 from each country – to permit different types and levels of analysis. For purposes of quantitative analysis, twenty cases from each country are just sufficient to conduct certain non-parametric statistical tests.
These tests enabled me to identify general tendencies and overall patterns of association over time. Moreover, having a sample size of twenty case studies in each country was also just sufficient to conduct an exploratory clustering of SMEs. Drawing on these SME cluster and using qualitative data has been a viable tool for the researcher to understand the underlying mechanisms and dynamics of internationalisation and networking over time.

The use of Coviello’s (2005) "bi-focal" approach to data analysis provided a comprehensive overview of the SMEs behaviour over time (p.40). This approach calls for using both quantitative and qualitative data analysis techniques to understand dynamic behaviour. Coviello (2005) recommended the use of structural network measures and qualitative data to understand the dynamics of network development. The present study extends the use of this approach and uses a mixed approach to data analysis to understand the co-evolution of networks and internationalisation. An attraction of qualitative data is that it can be codified into numbers which enhance the robustness of qualitative arguments.

The application of quantitative measures (such as internationalisation outcomes and structural network variables) combined with qualitative data enabled me to understand the dynamics of the two processes at different points in time. Moreover, it was possible to identify casualties between the two processes over time and to adopt both longitudinal and cross-sectional perspectives. For example, a cross-sectional statistical approach allowed me to conduct some preliminary tests of the impact of previous international experience on entrepreneurs’ use of informal versus formal means of support.

To summarize, the application of a co-evolutionary perspective is a complex task and requires the use of several methods and techniques. Moreover, it involves compilation of long
histories and chronologies of events and critical incidences over time, which is a demanding and time-consuming process. Also, it is not always possible to collect longitudinal data from companies and the only option then is to rely on retrospective approach, which is primarily dependent on the memory of respondents. It is crucial to ensure that the researcher should inquire about the critical events that are most probably embedded in the respondents’ minds. Data triangulation is also of utmost importance, through secondary sources and multiple informants whenever possible. On the other hand, the co-evolutionary approach provides the researcher with considerable flexibility to investigate complex phenomena using different levels of analysis and different approaches.

4. Antecedents and contingencies of SME internationalisation and networking behaviour

As shown in Chapter 7, key institutional and contextual differences had an impact on the internationalisation and networking behaviour of UK compared to Egyptian SMEs. These institutional differences either hindered or facilitated the internationalisation process of SMEs. They had an important impact on how different entrepreneurs used their network ties and relationships to compensate for institutional voids and/or make use of institutional support. Moreover, the presence of previous international experience of the entrepreneurs served as an antecedent to the behaviour of SMEs over time. Accordingly, the institutional context and the entrepreneurs’ previous international experience had an important bearing on SMEs’ internationalisation and networking behaviours.

Egyptian SMEs reported significant problems and restrictions imposed on them as a result of a weak and dysfunctional institutional context. They reported problems of gaining access to

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72 As shown Chapter 7, raw figures in cross tabulation highlighted a slight tendency of entrepreneurs’ with previous international experience and the used of informal means of support. This is also supported by qualitative evidence highlighted in Chapter 7.
support offered by public agencies and problems with the frequent changes in the laws and regulations regarding exports and taffies on imported goods. There were additional problems and difficulties related to starting up their companies, and obtaining financial support to develop their companies. This generally made it difficult for SMEs to operate in a diverse number of markets and limited their ability to expand internationally following their initial exports.

By contrast, the UK institutional context generally facilitated the internationalisation of SMEs, through offering financial support, sponsorship to participate in different trade missions and international conferences, referrals to overseas clients and agents, information and export know-how. Largely as a consequence, the UK SMEs were more international and operated in a larger number of diverse overseas markets compared to their Egyptian counterparts.

The main reason for this contrast reported by respondents was that Egyptian SMEs had to spend more time and effort to fill the voids inherent in the institutional context compared to their UK counterparts. One of the key adaptive mechanisms reported by Egyptian SMEs is a reliance on various network attachments in different ways to fill in these voids or make use of the available support. The institutional context, to a great extent, shaped how network relationships were managed, used and developed over time.

The UK SMEs networks were dominated by weak business relationships. These were more often defined by contracts and formal means of governance. This was, to a great extent, the approach adopted by SMEs when it came to creating relationships with overseas contacts. For example, relationships with agents or distributors were defined by contract in host countries
where there was a strong legal framework. However, in host countries where there was a weak legal framework and/or they were risky markets, the general tendency was to have weak ties and to deal with agents or distributors on the basis of commission and/or trial and error. This finding points to the need to take institutional context of both home and host country into account.

On the other hand, Egyptian SMEs had more dense and cohesive networks dominated by strong social ties especially during the pre-internationalisation and early internationalisation stages. These dense networks and close relationships were the main conduits through which Egyptian entrepreneurs managed to get access to support or a strategic referral to a key gatekeeper or a decision maker in support and governmental agencies. Although this could be the key approach through which SMEs could access support and resources, they displayed the range of approaches and networking logics described in Chapter 7 when it came to filling in institutional voids inherent in the Egyptian context.

Egyptian SMEs could follow a combination of different approaches at different points in time or even simultaneously. For example, an SME might rely on bridging relationships to obtain support in terms of financial sponsorship to participate in a fair in one overseas market and rely on its strong relationships with a relative in another overseas market.

Another interesting antecedent is the previous international experience enjoyed by the entrepreneur and how this had an impact on the internationalisation and networking behaviours of SMEs. UK and Egyptian SME decision makers who had no previous international experience, tended to rely more heavily on formal means of support and/or their
personal networks\textsuperscript{73}. In the UK, two main network attachment patterns emerged. In the first, entrepreneurs who did not have previous international experience and did not have relationships that could support them depended mainly on supporting agencies in their initial internationalisation stage. In the second, other SMEs which found the support provided by the governmental agencies to be of limited use, or thought they could internationalise without the help of the supporting agencies, were more willing to make use of existing network links or create new ones.

Egyptian SMEs without previous international experience also followed two main patterns. They relied on supporting agencies and accepted the limited support they offered and/or relied on their personal networks to gain access to resources that were not made readily available for them. Second, they depended on their personal networks to obtain referrals to key gatekeepers and decision makers in supporting agencies to access support.

Regarding internationalisation patterns followed by SMEs that had no previous international experience, Egyptian SMEs tended to follow more of a gradual internationalisation pattern and UK SMEs tended to operate on a more global scale once they decided to internationalise. By contrast, both Egyptian and UK entrepreneurs with previous international experience tended to rely on informal means of support. In other words, they relied on their network relationships to gain access to crucial resources and information. However, the benefits obtained from these informal means varied from one country to another. For example, UK SMEs relied on weak bridging relationships –such as an overseas agent to access information and knowledge about other distributors or clients in other regions. Egyptian SMEs relied on

\textsuperscript{73} The focus is on whether SMEs considered the supporting agencies as an important contributing factor to their internationalisation or not without taking into account when they played a role in early or subsequent internationalisation of the SME.
strong bridging relationships (family member or a close friend) to enter more risky markets (such as European markets).

**Contributions to the literature on institutions and international entrepreneurship literature**

Most international entrepreneurship scholars have overlooked the impact of institutional context on SMEs internationalisation (Jones, Coviello and Tang, 2011). Institutional contexts facilitate or hinder SME internationalisation (Kiss and Danis, 2008). The institutional context of emerging economies tends to be weak, with many institutional voids or dysfunctions (Khanna and Palepu, 1997). This obliges SMEs to find ways to fill or cope with these voids. One approach is to rely on network relationships in a way that helps SME to overcome or even compensate the limitations inherent in the institutional context in which they are embedded. The literature to date has treated the institutional context as an external factor and hardly examined how SMEs use internal processes (such as networking) to overcome deficiencies inherent in the institutional context (Tracey & Phillips, 2011).

The present study contributes to the international entrepreneurship literature by drawing attention to the differential impact that institutional contexts have on SMEs’ internationalisation and networking behaviours. It contrasts two distinct contexts – namely a weak emerging and a developed economy – that have different levels of institutional development. The Egyptian context provides a good example of a dysfunctional institutional context whereby SMEs reported significant obstacles and problems that slow down their internationalisation and have an important bearing on the way they make use of their networks to fill in voids and compensate for the limited support they have. By contrast, the
UK context tends to foster and help SMEs internationalisation by offering relatively efficient support through formal means such as supporting agencies.

My study suggests that institutional context will have an impact on the type of relationships SMEs will use (formal versus informal relationships) and the internationalisation pattern they are likely to follow whether this be to internationalise to nearby markets or to more distant and diverse markets. These findings are similar to those reported by Ciravegna, Lopez and Kundu (2013). They found that the use of networks differs according to the differences in country of origin, when they compared the behaviour of high-tech SMEs from Latin America and Europe. They argued that the use of networks differed between the two countries. However, my research focuses on the use of formal and informal means of support as well as highlighting the key benefits obtained from different network attachments in contrasting emerging and developed country contexts. Moreover, my research recognises the importance of the previous international experience of the entrepreneur but extends this view by touching upon the link between international experience and the use of formal versus informal means of support, arguing that this is an avenue for future research.

The contributions outlined in the foregoing discussion lead to a revised analytical framework, which can now be compared with the a priori frameworks presented in Chapter 3.

**Revised Research Framework**

My study began with a generic framework(s) derived from existing literature. It then developed a revised framework informed by the insights that emerged from empirical data. This framework is more specific than the generic frameworks presented in figures 3.1 and 3.2.
Figures 8.1 and 8.2 present the generic a priori research framework, while Figure 8.3 presents the revised framework.

**Figure 8.1: Internationalisation co-evolution of New Ventures**
Figure 8.2: Internationalisation co-evolution of Traditional SMEs
Figure 8.3: Revised analytical framework

- Internationalisation behaviour (over time):
  - Internationalisation profiles
  - Internationalisation process (entry mode, entry mode choice)
  - Internationalisation logic/approach

- Networking behaviour (over time):
  - Network profiles (overall network structural configuration at different points in time)
  - Networking process (tie choice, tie types, strength)
  - Networking logic (choice of overall network attachment patterns and individual tie selection, retrenchment, reactivation or termination) based on benefits and costs obtained from network ties.

- Antecedents/contingencies
  - Entrepreneur’s International Experience
  - Home country Institutional Context
  - Type of company (Traditional vs knowledge intensive)

- External Environment (Host country)

- Entry node

- Internationalisation performance at Tn

- Learning through feedback

- Percentage of foreign sales
- No. of market
- No. of regions
The initial a priori generic framework assumed that there are two main types of internationalising SMEs, namely new ventures (NVs) and traditional SMEs. I proposed two main patterns of internationalisation. The first assumes an accelerated internationalisation and suggests that NV SMEs will rapidly internationalise into few export markets and that their main internationalisation motivation is to explore new markets. Over time, such SMEs will focus on exploiting knowledge they have gained from overseas markets and focus on further penetration of existing markets rather than exploring new markets. By contrast, the traditional SMEs will focus on increasing their domestic expansion after spending some time during their start-up phase exploring the domestic market. In later stages when home markets becomes saturated they will begin internationalising to overseas markets through exploring new opportunities (new markets) and then make use of the experiential knowledge gained from exporting to further penetrate existing markets.

Regarding network development, both types of SMEs would rely in the start-up phase on their initial stock of social capital and over time their network will evolve from the structural and relational point of view. This would have an impact on the firm’s performance.

Analysis of my data indicated that SMEs did not necessarily conform to these envisaged internationalisation patterns or to the two categories of SME. It was clear that SMEs did not on the whole follow a linear or uniform pattern of internationalisation and network development patterns but rather differed within and across countries, as well as to some extent between different sectors.

The resulting framework in Figure 8.3 is more specific and is divided into three main parts. The first part describes key antecedents that shape SMEs internationalisation and networking
behaviour over time. The second part involves the co-evolution of network and internationalisation over time. It suggests the different ways through which these co-evolutionary patterns could be assessed, for example internationalisation and networking could be examined through identifying different internationalisation profiles and network configurations and attachments at different points in time. Also, understanding the underlying processes dynamics and mechanisms through co-evolutionary taxonomies as those analysed in Chapter 6, offers another perspective on co-evolutionary patterns.

Moreover, the host country is now shown to have an impact on the type of network tie and on the entry mode used by SME. For example, risky markets – such as African countries- might necessitate the use of more advanced mode of entry such as a branch or a subsidiary which is managed by someone the SME trusts and has a close relationship with.

The third part of the revised analytical framework includes the current internationalisation performance of the SME. A feedback loop denotes the learning effect of networking and internationalisation processes, suggesting that SMEs engage in continuous learning and sometimes change the way they behave based on the experiences they incur in different overseas markets and in different interactions.

The next section discusses the managerial and practical implications of the research, followed by limitations and suggested avenues for future investigation.

74 Although the type of company is not identified separately in Chapter 7 as a key antecedent, it is evident from the taxonomies of SMEs that sector has a partial impact on the way SMEs internationalise and network.
Managerial Implications

As shown, there is no one best way to internationalise and/or use networks. However, managers of SMEs in a particular cluster could position themselves compared to other SMEs in other clusters and identify key obstacles hindering them from improving their international performance and learn how other companies use networks. For example, Egyptian managers could attempt to gather and form informal industry clusters with other manufacturers in the industry or even small suppliers and supporting industries to exercise pressure on the government to minimise certain risks or provide a particular type of scare support. Moreover, these managers can try to achieve a balance between dense close networks they have and some strategically bridging relationships-often weak relationships- in order to have access to crucial resources and support and also to be able to seek new sources of information and knowledge (Burt, 2009). Egyptian managers should try to avoid being blinkered in regard to their immediate social networks and try to actively seek opportunities from other sources such as weak ties.

UK managers could position themselves against more successful SMEs and try to follow a similar pattern. This is the process of identifying bench marks and attempting to understand how these benchmark companies reached a certain position and what were the key internationalisation and networking logics they used. Furthermore, those UK SMEs that do not have previous international experience could make use of the support available through local chambers of commerce and UKTI. In overseas markets where British consulates and commercial offices are present, they can contact potential agents and clients on behalf of SMEs, which should improve the chances of building useful local relationships.
As more general advice, managers should assess firstly their immediate network of relationships and make use of the support and resources that are made readily available through these networks. However, they need to be more aware of the limitations their existing social networks could create (their “dark side”), and therefore also build other weaker ties and bridging relationships to access resources that are not readily available.

However, there needs to be caution because SMEs are usually managed by only one or two individuals, and they rarely have a dedicated export or business development department. Building a large sparse network could be difficult to manage or being involved too much in nurturing and maintain strong ties will leave no time for further expansion. Hence optimally speaking, SMEs should focus on few strong relationships and several weak relationships (whether these are direct or bridging relationships). Another possibility would be to focus on establishing a few strategic relationships (strong ties) and rely on them to manage the second tier of the SME’s network. For example SMEs could have a strong relationship with a certain agent in a particular country and rely on that agent to manage relationships with other distributors in the region.

So far, I have discussed implications for internationalised SMEs. Table 8.1, suggests some recommendations for internationalising SMEs or would be internationalising SMEs.

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75 As suggested by Han (2006).
Table 8.1: recommendations for newly internationalising SMEs

<table>
<thead>
<tr>
<th>Implications/recommendations</th>
<th>Description</th>
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<tbody>
<tr>
<td>SMEs operating in a dysfunctional home institutional context</td>
<td>SMEs should gather information about the different sources of support available to internationalising SMEs and make the best use of the available support. Given the fact that these types of support are normally not well advertised. SMEs could start by building relationships with a few numbers of overseas clients—they might come across through trade fairs—and focus on maintaining these relationships. Also, make use of immigrants living in overseas markets, as an initial point of entry to these markets. Moreover, the use of E-bay and Amazon as means of internationalisation could enhance the SMEs chances to expand to several overseas markets with minimal cost.</td>
</tr>
<tr>
<td>SMEs operating in a strong home institutional context</td>
<td>SMEs should search for global or regional alliances through which they can gain access to MNCs or original manufacturers and form loosely coupled collaborative agreements with them. Through the cross referencing each other. In other words, each party refers potential clients to the other. SME decision makers without previous international experience should contact the local and overseas supporting agencies (such as embassies and consulates) and to make use of family/friends connections in overseas markets in their first internationalisation attempts. However, a balanced approach is crucial for the success of would-be internationalisers as heavy reliance on personal networks could restrict the SMEs internationalisation or reliance only on formal means of support (such as supporting agencies) could have limited usefulness after the initial entry to the overseas markets. SMEs should also aim at creating a portfolio of relationships composed of different types of relationships with varying degrees of strength. Finally, the use of internet as a new route to rapidly internationalise into overseas markets is also recommended. Because, SMEs should use the internet as initial means of entering overseas markets. However, over time face-to-face contact with clients may be crucial especially for SMEs offering complicated or high tech products.</td>
</tr>
</tbody>
</table>

**Implications for Policy Makers**

In advanced economies such as the UK, where there is a rather strong system of governmental support, few new implications emerge from this study. Support should be devoted to SMEs that are not currently exporting as the main focus of the UKTI and local
chambers of commerce is on those companies that want to export. Secondly, more attention should be given to highly specialised knowledge intensive SMEs that operate in a very narrow market niche and to offer tailored support for them. For example, export-promotion agencies could make better use of specialised experts, linking them to the needs of the niche SMEs. The reason is that sometimes the products/services are very technical and not well understood by trade advisors, thus making the services they offer to the company irrelevant.

Finally, calling potential clients and/or distributors in overseas markets on behalf of the SME as an initial point of contact can serve as a good foundation for building the credibility of the SME and hence as a start to its networking in that market.

For less developed economies such as Egypt, where there are weak support systems, several implications arise. Firstly, policy makers need to increase the awareness and clarity of the types of support available for SMEs. This should be done through having transparent criteria and requirements for who should benefit from a particular type of support. Secondly, they need to make the procedures through which SMEs obtain support more straightforward. Thirdly, organising specialized overseas trade fairs focused on different industrial sectors – rather than having all-encompassing trade fairs – would benefit SMEs seeking clients from their industry and to learn from other manufacturers. However, it is appreciated that additional costs would probably be involved in pursuing this more bespoke policy.

Fourthly, supporting agencies should focus on helping SMEs to develop their exporting capabilities and skills. Fifthly, offering tailored advice to SMEs at different stages of development is of the utmost importance. For example, making use of incubator systems for micro SMEs and or emerging projects and using export promotion programmes to teach SMEs how to export, and finally a more advanced support programme for established
exporters. Sixthly, unification of support offered to SMEs and working collaboratively with industry associations and chambers of commerce in order to offer tailored and joined-up support for SMEs. Furthermore, use could be made of foreign aid and donations given by foreign governments (such as the French and Japanese governments and trade councils) to offer more support to SMEs and even using these funds to sponsor SMEs to exhibit and attend fairs in these respective markets. Finally, educating and choosing the right commercial attachés in overseas consulates is crucial. The possibility of liaising with potential clients and agents in overseas markets is usually an overlooked aspect by Egyptian overseas commercial attachés.

**Limitations and Directions for Future Research**

This study did not focus on a particular selection of sectors or industries as possible sources of systematic variation in the internationalisation and networking behaviour of SMEs. It was an exploratory study which purposefully included different types of SMEs from different sectors in order to gain insights into the key underlying mechanisms of UK and Egyptian SMEs in general, rather than being confined to particular types one types of company or sector. Nevertheless, since generalisation is a major goal of scientific enquiry calling for widely applicable frameworks, a larger scale study focusing on well-defined types of SMEs and/or sectors should provide more specific insights into the impact of sector-specific factors on SMEs’ internationalisation and networking behaviours (Murmann, 2014).

Secondly, the study relied on a retrospective approach to data collection and covered a long time span of the SME’s life cycle. Respondents may therefore have had a problem remembering the details of phenomena under investigation, though they did not mention this.
However, triangulation of data and evidence was used to enhance the validity of the research. Finally this study focused on ego’s perspective of network; other actors’ perspectives were not taken into account. This was due to the reluctance of key decision-makers in the firms to permit others to be interviewed, as well as to the difficulty of approaching actors in overseas markets. The variation identified in this study suggests that it would be fruitful for future investigations comparing the co-evolution of their internationalization and network development to incorporate multiple case studies of SMEs in different contexts.76

Given the complexity of this research, the time and resources it took to collect in-depth data, I had to collect data from a limited number of SMEs, just sufficient to identify recurrent themes and patterns. Therefore my results cannot be generalised to the wider population. However some aspects of this research could be codified and replicated in a larger–scale survey based with the intention of enhancing external validity and generalizability.

The use of co-evolution as an explanatory guiding framework in this study draws our attention to several avenues for future research. Firstly, in the UK sample, it was evident that changes in management and ownership of SMEs can have a significant impact on the increase in the degree of internationalisation of SMEs. Such changes occurred either through the companies being bought out by one of their managers or becoming spin-offs from the original owners. These new types of SMEs could follow a different internationalisation behaviour compared to traditional SMEs. Future research could investigate the differences in internationalisation behaviours of management buy-outs, spin-off and traditional SMEs. Moreover, spin-offs and management buy-outs draw our attention to different networking behaviours compared to traditional SMEs. For example, the management buyouts and spin-

76 This suggestion was first made at a presentation of a paper to the 2012 British Academy of Management written by the researcher and her supervisor (Narooz and Child, 2012).
offs in the UK sample adopted a proactive networking approach, whereby they were concurrently engaged in creating a large number of weak ties with agents and distributors in new overseas markets.

Secondly, the speed of the subsequent internationalisation stage has been rarely investigated in the existing literature. For example, the conditions and factors that make one SME a faster internationaliser than others in the subsequent internationalisation stage are under researched. This study shed some light on the triggers of subsequent internationalisation and used a cut-off period of six years which is an arbitrary measure of subsequent internationalisation speed. Future studies should investigate the dynamics of subsequent internationalisation speed and different internationalisation patterns/pathways of SMEs that follow. They could, for example, compare the behaviour of accelerated subsequent internationalisationers and traditional or incremental subsequent internationalisers, and those SMEs that remain stagnant or maintain their status quo, informed by the preliminary insights offered by the present study.

Thirdly, the possible causal relationships between network variables (for example, network size) during one stage of SME’s life cycle and internationalisation performance (such as number of markets) at a subsequent stage have been highlighted in this research. These internal causalities are context specific and future studies could investigate them further investigated in different contexts, such as for example different countries.

Fourthly, this study has shed some light on the key benefits and costs associated with network relationships. However, a larger study using a more rigorous and codified categorisation of
different benefits and costs of SMEs network during the three stages of SMEs life cycle would enrich our understanding of the good and the bad sides of network relationships.

Fifthly, this study draws our attention to the implications of institutional voids inherent in emerging/developing economies and how these affect the internationalisation and networking behaviour of SMEs. One approach pursued by Egyptian SMEs was to create informal industry associations (either with immediate competitors or other small manufacturers and suppliers) to lobby the Egyptian government to offer them support and or relax some of impeding laws and constraints that have a direct impact on internationalisation performance. The other approach followed by SMEs was to depend extensively on their immediate social networks to get the support they needed to fill in these voids and/or through them to obtain a strategic referral to key decision makers.

Sixthly, Burt’s (2009) network duality concept provides a rich area for network researchers. This was one of the networking modes that SMEs in both countries used at a certain point in time, whereby SMEs tried to achieve a balance between maintaining close and strong network relationships yet also to some extent relying on weak bridging relationships. The question that poses itself is how can SMEs achieve this balance given the resource and time limitations they have. A related insight, is that although bridging relationships play an important role in providing access to resources and other benefits to SMEs, there is a possibility that over time bridges decay and cease to exist, either due to limited usefulness or simply to the two unconnected ties developing a strong relationship together so they do not need the bridging relationships anymore (Burt, 2002; Min and Mitsuhashi, 2012). This is a fruitful area for future research.

77 In the research, I came across two main patterns of bridge decay. If the bridging relationship is a strong one, it is costly and often difficult for the entrepreneur to terminate that relationship. Establishing a good relationship with a third party to whom he was introduced to by the
Finally, one of key areas for future research is how national cultural and institutional differences play a role in shaping the internationalisation and networking behaviours of SMEs. A comparison should include both developed and less developed economies. In the latter, depending on social relationships to do business is often deemed a “natural” thing to do (i.e., they have a collectivist culture). This is different in the case of the more individualistic cultures found in many developed countries such as the UK, whereby the focus is on success and opportunity recognition through one’s own effort.
Appendices

Appendix 1.1: National samples of UK and Egyptian SMEs

Table 1.1.1: Egyptian SMEs

<table>
<thead>
<tr>
<th>Cases</th>
<th>Description</th>
<th>Age</th>
<th>Current number of employees</th>
<th>Timing of first internationalisation attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EB Beauty product manufacturer</td>
<td>12 years</td>
<td>30</td>
<td>One year after inception</td>
</tr>
<tr>
<td>2</td>
<td>SFW1 Software developer and applications</td>
<td>14 years</td>
<td>14</td>
<td>Two years after inception</td>
</tr>
<tr>
<td>3</td>
<td>SC1 Engineering consultancy</td>
<td>13 years</td>
<td>30</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>4</td>
<td>Con2-eng Engineering consultancy</td>
<td>17 years</td>
<td>167</td>
<td>One year after inception</td>
</tr>
<tr>
<td>5</td>
<td>Con3-eng Recycling and compost manufacturing</td>
<td>15 years</td>
<td>*280</td>
<td>Three years after inception</td>
</tr>
<tr>
<td>6</td>
<td>Con-eng Engineering consultancy</td>
<td>10 years</td>
<td>70</td>
<td>One year after inception</td>
</tr>
<tr>
<td>7</td>
<td>Manu6-eng Furniture manufacturer</td>
<td>14 years</td>
<td>6</td>
<td>11 years after inception</td>
</tr>
<tr>
<td>8</td>
<td>Manu5-eng Clothing manufacturer</td>
<td>25 years</td>
<td>50</td>
<td>13 years after inception</td>
</tr>
<tr>
<td>9</td>
<td>Manu4-eng Clothing manufacturer</td>
<td>14 years</td>
<td>65</td>
<td>One year after inception</td>
</tr>
<tr>
<td>10</td>
<td>fd2 food processing</td>
<td>22 years</td>
<td>25</td>
<td>7 years after inception</td>
</tr>
<tr>
<td>11</td>
<td>Manu2-eng rubber and tires manufacturer</td>
<td>15 years</td>
<td>48</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>12</td>
<td>SW2 tailored statistical packages</td>
<td>12 years</td>
<td>7</td>
<td>Two year after inception</td>
</tr>
<tr>
<td>13</td>
<td>DF co. flower manufacturer</td>
<td>16 years</td>
<td>15</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>14</td>
<td>Manu3-eng paper manufacturer</td>
<td>11 years</td>
<td>40</td>
<td>5 years after inception</td>
</tr>
<tr>
<td>15</td>
<td>MC disposable surgical equipment</td>
<td>18 years</td>
<td>162</td>
<td>5 years after inception</td>
</tr>
<tr>
<td>16</td>
<td>FR2 furniture manufacturer</td>
<td>22 years</td>
<td>80</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>17</td>
<td>FR3 furniture manufacturer</td>
<td>18 years</td>
<td>108</td>
<td>3 years after inception</td>
</tr>
<tr>
<td>18</td>
<td>FR1 furniture manufacturer</td>
<td>25 years</td>
<td>100</td>
<td>14 years after inception</td>
</tr>
<tr>
<td>19</td>
<td>FD1 food processing</td>
<td>25 years</td>
<td>80</td>
<td>11 years after inception</td>
</tr>
<tr>
<td>20</td>
<td>Manu1-eng ceramic and granite manufacturer</td>
<td>16 years</td>
<td>120</td>
<td>3 years after inception</td>
</tr>
</tbody>
</table>

*When contacted, this company had 240 employees but it acquired a small factory one month before data collection.
<table>
<thead>
<tr>
<th></th>
<th>cases</th>
<th>Description</th>
<th>Age</th>
<th>Current number of employees</th>
<th>Timing of first internationalisation attempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lek</td>
<td>Management consultancy</td>
<td>Over 25 years</td>
<td>250</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>2</td>
<td>SCE</td>
<td>Industrial automation solutions</td>
<td>15 years</td>
<td>10</td>
<td>Less than a year from inception</td>
</tr>
<tr>
<td>3</td>
<td>SM</td>
<td>Surgical and medical equipment</td>
<td>Over 60 years</td>
<td>250</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>4</td>
<td>OG2</td>
<td>Oil and Gas</td>
<td>19 years</td>
<td>10</td>
<td>6 years after inception</td>
</tr>
<tr>
<td>5</td>
<td>LW1</td>
<td>Law firm</td>
<td>Over 100 years ago</td>
<td>250</td>
<td>After 80 years from inception</td>
</tr>
<tr>
<td>6</td>
<td>Con1</td>
<td>Engineering consultancy</td>
<td>16 years</td>
<td>16</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>7</td>
<td>Manu5</td>
<td>Tensile/force testing machine and equipment</td>
<td>62 years</td>
<td>16</td>
<td>39 years after inception</td>
</tr>
<tr>
<td>8</td>
<td>Manu4</td>
<td>Tobacco manufacturer</td>
<td>64 years</td>
<td>26</td>
<td>One year after inception</td>
</tr>
<tr>
<td>9</td>
<td>Manu10</td>
<td>Filter manufacturer</td>
<td>50 years</td>
<td>20</td>
<td>31 years after inception</td>
</tr>
<tr>
<td>10</td>
<td>Manu3</td>
<td>Bearing housing manufacturer</td>
<td>28 years</td>
<td>11</td>
<td>18 years after inception</td>
</tr>
<tr>
<td>11</td>
<td>Con2</td>
<td>Software and consultancy</td>
<td>10 years</td>
<td>Less than 10</td>
<td>One year after inception</td>
</tr>
<tr>
<td>12</td>
<td>Manu7</td>
<td>Door and window frame manufacturer</td>
<td>22 years</td>
<td>45</td>
<td>8 years after inception.</td>
</tr>
<tr>
<td>13</td>
<td>Manu8</td>
<td>Flooring and surface material manufacturer</td>
<td>41 years</td>
<td>19</td>
<td>4 years after inception</td>
</tr>
<tr>
<td>14</td>
<td>Manu12</td>
<td>Door and multi-lock manufacturer</td>
<td>35 years</td>
<td>250</td>
<td>After one year from inception</td>
</tr>
<tr>
<td>15</td>
<td>Manu6</td>
<td>Bolt tightening and manufacturer</td>
<td>24 years</td>
<td>45</td>
<td>After one year from inception</td>
</tr>
<tr>
<td>16</td>
<td>Manu2</td>
<td>Management consultancy</td>
<td>18 years</td>
<td>16</td>
<td>5 years after inception</td>
</tr>
<tr>
<td>17</td>
<td>Manu1</td>
<td>Conveyors and materials handling</td>
<td>Over 100 years</td>
<td>130</td>
<td>59 years after inception</td>
</tr>
<tr>
<td>18</td>
<td>Manu9</td>
<td>Cement manufacturer</td>
<td>29 years</td>
<td>21</td>
<td>Less than one year after inception</td>
</tr>
<tr>
<td>19</td>
<td>OG1</td>
<td>Oil and gas</td>
<td>18 years</td>
<td>6</td>
<td>Less than one year from inception</td>
</tr>
<tr>
<td>20</td>
<td>LC</td>
<td>Shipment and management consultancy</td>
<td>10 years</td>
<td>6</td>
<td>Less than one year from inception</td>
</tr>
</tbody>
</table>

*At the time of data collection this company was hiring more staff and employment was expected to reach 300 at the end of the year.
An example of codification of SM case

C:\Users\rin648\Desktop\SM case analysis.xlsx

I have attached a copy of the spread sheet accompanying the word document please press on the hyperlink above to access the spreadsheet.
Appendix 1.2: SME interview guide

Company Background:

1. Could you tell me about yourself and your position in the company? Were you among the founder team?
2. What is the nature of your company’s business?
3. What are overseas markets that you operate in?
4. When did you start your operations in UK and in the various markets? (First year of operations in the foreign markets?)
5. How do you manage your operations? (Agencies, local suppliers, Joint ventures and wholly owned subsidiary?)

1. What is the story behind the establishment and entry to foreign markets, the sequence of events?
2. What were the key domestic relationships or personal relationships that your company had that is important to its internationalization?

3. Did you have any previous contact with local(s) in those foreign markets? if yes, who were the key contacts that influenced or facilitated your company’s entry to foreign market?

4. Has any of the company’s key personal or founder team have had any contacts in those foreign market(s)?

5. What were the foreign /overseas relationships that you company had that were significant to its internationalization? Are these relationships / relationships linked to other wider networks?

6. How were these relationships initiated? And whether this initiation came as a result of careful planning or did it occur accidentally ?

7. How would you describe your relationship with them?

8. What was the main reason behind the collaboration? if any

9. How do regard their views or opinions?

10. What is the role of supporting agencies (such as: export promotion agencies and chamber of commerce, embassies; government agencies) in helping you entering foreign market(s)?

11. If any, how did these agencies help you? (offered advice, facilitated introduction to other local partners)?
12. Did you receive any local support from supporting agencies in those markets (such as UK consulate in those markets)?

13. How were these network relationships maintained and developed with the passage of time?

14. How did these networks create new opportunities for your company in the new market? and reduced the perceived risk associated with operation in this particular foreign market?

15. What were the incidences through which some relationships have ceased to exist and what was the main reason behind that if any?

16. What were the incidences through which some of those relationships were put on hold until needed?

17. Where there any incidence(s) was your company reduced the number of relationships (with key suppliers or customers) as a response to a certain opportunity or threat?

18. What were the cases, if any where your company grouped some of its contacts or relationships together in order to cease an opportunity or respond to a threat? In other words, were there any case that relationships in a particular market were grouped together to respond to a threat or cease an opportunity or any relationships from various markets that brought together to do the same?

19. Did you depend on certain contacts to get access to those contacts that you couldn’t reach for in the first place?

20. How did those relationships help you better manage your overseas operations?

21. Did these relationships help your company to develop of new capabilities (technical, marketing, learning) that were not there before?

22. What is the role of informal relationships in entering foreign markets as opposed to formal ones?

23. What is the role of formal relationships in entering foreign markets as opposed to informal relationships?

24. How frequently do you meet and discuss things with each key relationship?

25. What were the potential risks did you expect and/or experience as a result of entering and operating in different business environment(s)?

   In terms of: support from local financial institutions, Economic instability in host country
Restrictions on business in terms of licences
Inadequate technical and managerial skills of workforce in the host country.

26. What were the opportunities and threats that emerged from the external environment that had a significant impact on your foreign market operations?

27. How did your contact(s) and network relationships help you to respond to such threats and or / opportunities?

28. What were the key factors from your own point of view that make some relationships more advantageous than other relationships? (Commitment, trust, value-added).

29. What were the different costs associated with the development and maintenance of these relationships? Were there any case where your partners didn’t do what is expected from them?

30. What is the value of these relationships for your own point of view? Has its costs been offset by its benefits?

31. Has the firm’s social capital been a crucial facilitator behind your firm’s establishment and survival in the foreign markets? If no, what were the main facilitators from your own point of view that helped your company to expand and sustain a competitive advantage in foreign markets?

32. Has the social capital or network relationships been a key reason behind your company’s expansion into other foreign markets?

33. If so, has this positive experience lead to further expansion in other markets?

34. Based on your own of view with the passage of time; did the interaction with different partners’ change the way through which you manage those relationships in the first place? If yes how?

35. Did the relationships that existed in the first 3 years of operations affect the choice of mode of operations in various markets or not?

36. Sales turnover (% of foreign sales to total sales) in different markets.

37. Who is responsible for managing your company’s operations in those markets?

38. Did any of the founder team or key personal of your company have any previous experience in those markets? How did this affect your operations there?

39. Current number of employees?
Appendix 1.3: Supporting agencies interview guide

1. Could you tell me about yourself and your role in the agency?
2. Did you have any previous experience with trade promotion and support?
3. What are the different governmental agencies that offer support to SMEs?
4. What is the role played by your agency?
5. What are the services that you offer to companies?
6. What are the main sectors do you focus on?
7. What are the countries or regions do you target?
8. Do you (agency) have any relationship with chamber of commerce in various markets around the world? If so how do you collaborate?
9. What is the difference in services that your agency offer to new exporters vs established exporters?
10. Could you please prioritise the categories of services you offer to SMEs?
11. How much do you charge for the different services?
12. What are the procedures/steps that SMEs need to follow in order to apply for assistance?
13. What are the areas of funding do you offer to SMEs? (Sponsoring trade fair participation, workshops, website development…)
14. What is your source of budget (self-finance, government support..etc) ?

Request for participation sent to companies:

Interviewee name
Company name
Address

Dear Sir/Madam,

I am leading a Birmingham University project investigating how key contacts and network relationships can assist small and medium-sized enterprises (SMEs) to achieve successful expansion in foreign markets.

For this purpose, I am seeking the participation of internationally experienced SMEs which would be interested in joining and benefiting from the project. To date, 25 companies have taken part in the project. Participation would involve my visiting your company to interview you and/or other senior managers who are responsible for the company’s international operations. An interview is expected to take approximately one hour. After a summary of your company’s history of internationalization, the interview would focus on the contacts and relationships that you have found to be crucial in helping your company to enter foreign markets and to achieve a competitive advantage in those markets.

A report of main findings and recommendations will be provided upon the completion of this
project. I hope you may find it a useful aspect of university-business cooperation. As this is an approved university-based project, adherence to strict ethical standards regarding confidentiality is guaranteed and the project is not being undertaken for any commercial gain.

Finally, I should explain that I am a member of the Centre for International Business and Organization Research [CIBOR] which is a recognized research centre of the University of Birmingham. CIBOR has undertaken various projects in the field of international business on issues such as internationalization policy, and corporate foresight in global business. The Centre’s research has covered large emerging economies such as Brazil, China, and South Africa, together with several European nations. Professor John Child, is the Founding director of CIBOR and He is also advising on this project.

May I take the liberty of calling your office in a few days’ time to see if we can arrange a mutually convenient time to meet?

Yours sincerely,
Appendix 2.1

Results of Mann Whitney U test for UK and Egyptian SMEs (variables used in clustering)

Please click on the two hyperlinks below to access the spread sheets with the different measures used for each case in the two samples

C:\Users\rin648\Desktop\aggregate measure Egyptian cases.xlsx
C:\Users\rin648\Desktop\aggregate measures uk cases.xlsx
Table 2.1.1: Mean ranks for two samples

<table>
<thead>
<tr>
<th>Ranks</th>
<th>group id</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>average net den over time</td>
<td>UK</td>
<td>20</td>
<td>20.63</td>
<td>412.50</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>20</td>
<td>20.38</td>
<td>407.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>average network size over time</td>
<td>UK</td>
<td>20</td>
<td>24.95</td>
<td>499.00</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>20</td>
<td>16.05</td>
<td>321.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>average net constraint over time</td>
<td>UK</td>
<td>20</td>
<td>23.65</td>
<td>473.00</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
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<td>17.35</td>
<td>347.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
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<tr>
<td>percentage foreign sales Tn</td>
<td>UK</td>
<td>20</td>
<td>21.33</td>
<td>426.50</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>20</td>
<td>19.68</td>
<td>393.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of regions Tn</td>
<td>UK</td>
<td>20</td>
<td>22.88</td>
<td>457.50</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>20</td>
<td>18.13</td>
<td>362.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of markets Tn</td>
<td>UK</td>
<td>20</td>
<td>26.53</td>
<td>530.50</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>20</td>
<td>14.48</td>
<td>289.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.1.2: Mann-Whitney U test results

<table>
<thead>
<tr>
<th>Test Statisticsa</th>
<th>average net den over time</th>
<th>average network size over time</th>
<th>average net constraint over time</th>
<th>percentage foreign sales Tn</th>
<th>number of regions Tn</th>
<th>Number of markets Tn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>197.500</td>
<td>111.000</td>
<td>137.000</td>
<td>183.500</td>
<td>152.500</td>
<td>79.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>407.500</td>
<td>321.000</td>
<td>347.000</td>
<td>393.500</td>
<td>362.500</td>
<td>289.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.068</td>
<td>-2.409</td>
<td>-1.704</td>
<td>-.448</td>
<td>-1.309</td>
<td>-3.270</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.946</td>
<td>.016</td>
<td>.088</td>
<td>.654</td>
<td>.191</td>
<td>.001</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
<td>.947b</td>
<td>.015b</td>
<td>.091b</td>
<td>.659b</td>
<td>.201b</td>
<td>.001b</td>
</tr>
<tr>
<td>Exact Sig. (2-tailed)</td>
<td>.952</td>
<td>.015</td>
<td>.091</td>
<td>.663</td>
<td>.197</td>
<td>.001</td>
</tr>
<tr>
<td>Exact Sig. (1-tailed)</td>
<td>.476</td>
<td>.008</td>
<td>.046</td>
<td>.331</td>
<td>.098</td>
<td>.000</td>
</tr>
<tr>
<td>Point Probability</td>
<td>.005</td>
<td>.000</td>
<td>.003</td>
<td>.005</td>
<td>.003</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Grouping Variable: group id

b. Not corrected for ties.
Appendix 2.2: Tests for normality

Table 2.2.1: Tests for normality

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>group id</th>
<th>Kolmogorov-Smirnov&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>average net den over time</td>
<td>UK</td>
<td>.166</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.287</td>
<td>20</td>
</tr>
<tr>
<td>average network size over time</td>
<td>UK</td>
<td>.195</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.201</td>
<td>20</td>
</tr>
<tr>
<td>average net constraint overtime</td>
<td>UK</td>
<td>.143</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.138</td>
<td>20</td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>UK</td>
<td>.131</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.132</td>
<td>20</td>
</tr>
<tr>
<td>number of regions Tn</td>
<td>UK</td>
<td>.175</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.178</td>
<td>20</td>
</tr>
<tr>
<td>Number of markets Tn</td>
<td>UK</td>
<td>.324</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>.142</td>
<td>20</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 2.2.2: Homogeneity of Variance test

<table>
<thead>
<tr>
<th>Test of Homogeneity of Variance&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Levene Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>average net den over time</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>average network size over time</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>average net constraint overtime</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>number of regions Tn</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>Number of markets Tn</td>
<td>Based on Mean</td>
</tr>
</tbody>
</table>

a. group id = uk

b. There are not enough unique spread/level pairs to compute the Levene statistic.
Test of Homogeneity of Variance

<table>
<thead>
<tr>
<th></th>
<th>Levene Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>average net den over time</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>average network size over time</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>average net constraint over time</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>number of regions tn</td>
<td>Based on Mean</td>
</tr>
<tr>
<td>Number of markets tn</td>
<td>Based on Mean</td>
</tr>
</tbody>
</table>

- a. group id = Egypt
- b. There are not enough unique spread/level pairs to compute the Levene statistic.

Appendix 2.3
Correlation between clustering variables to test for multi-collinearity problem

Table 2.3.1: Correlation matrices between clustering variables used for clustering the UK sample

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Correlation Coefficient</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>average network size over time</td>
<td>1.000</td>
<td>.490*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.028</td>
<td>.028</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Number of markets tn</td>
<td>.490*</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.028</td>
<td>.028</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
Table: 2.3.2: Correlation matrices between clustering variables used for clustering the Egyptian sample

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Correlation Coefficient</th>
<th>average net den over time</th>
<th>Correlation Coefficient</th>
<th>percentage foreign sales Tn</th>
</tr>
</thead>
<tbody>
<tr>
<td>average net den over time</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.770**</td>
<td></td>
</tr>
<tr>
<td>average net den over time</td>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>average net den over time</td>
<td>N</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>Correlation Coefficient</td>
<td>.770**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>percentage foreign sales Tn</td>
<td>N</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
### Appendix 2.4: Agglomeration Matrix for UK SMEs Hierarchical Clustering

#### Agglomeration Schedule

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cluster Combined</th>
<th>Stage Cluster First Appears</th>
<th>Next Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster 1</td>
<td>Cluster 2</td>
<td>Coefficients</td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>15</td>
<td>.002</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>20</td>
<td>.002</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>12</td>
<td>.010</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>8</td>
<td>.042</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>.059</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>14</td>
<td>.081</td>
</tr>
<tr>
<td>7</td>
<td>16</td>
<td>19</td>
<td>.088</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>13</td>
<td>.089</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>6</td>
<td>.089</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>11</td>
<td>.118</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>16</td>
<td>.378</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>18</td>
<td>.415</td>
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<td>13</td>
<td>7</td>
<td>9</td>
<td>.437</td>
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<td>14</td>
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<td>15</td>
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<td>1.521</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>2</td>
<td>2.678</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>4</td>
<td>6.512</td>
</tr>
<tr>
<td>18</td>
<td>3</td>
<td>17</td>
<td>13.538</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>3</td>
<td>37.871</td>
</tr>
</tbody>
</table>
Appendix 2.5: Agglomeration matrix of Egyptian SMEs

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cluster Combined</th>
<th>Coefficients</th>
<th>Stage Cluster First Appears</th>
<th>Next Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster 1</td>
<td>Cluster 2</td>
<td></td>
<td>Cluster 1</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>14</td>
<td>.000</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>15</td>
<td>.003</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>11</td>
<td>.011</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>19</td>
<td>.069</td>
<td>2</td>
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<td>5</td>
<td>8</td>
<td>20</td>
<td>.136</td>
<td>0</td>
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<tr>
<td>6</td>
<td>1</td>
<td>17</td>
<td>.169</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>10</td>
<td>.259</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>13</td>
<td>.300</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>16</td>
<td>.332</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>12</td>
<td>.347</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>8</td>
<td>18</td>
<td>.399</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>5</td>
<td>1.518</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>4</td>
<td>1.704</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>8</td>
<td>9</td>
<td>1.704</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>2</td>
<td>2.968</td>
<td>12</td>
</tr>
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<td>16</td>
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</tr>
<tr>
<td>17</td>
<td>3</td>
<td>6</td>
<td>7.828</td>
<td>13</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>7</td>
<td>10.287</td>
<td>15</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>3</td>
<td>30.477</td>
<td>18</td>
</tr>
</tbody>
</table>
Appendix 2.6: Exemplary case from UK limited internationaliser/networker

Con1 is an engineering consultancy company that offers training and management support for companies as well as it produces software that supports different management and engineering functions. Figures 2.6.1-2.6 show how the Con1’s network evolved over time and below each figure the size of ego’s network; constraint and density are presented. Moreover, the overall network size (including all actors) is provided\(^{78}\).

These figures illustrate the network evolution of Con1 across the three stages.

---

\(^{78}\) It’s important to note that for each individual case the UCINET 6 allows the researcher to extract data that focuses on one ego net which are those ties that are within company’s network and the overall network which includes all the network ties and nodes (Coviello, 2005; Borgatti, Everett, and Freeman, 2002.) Since the objective is to access also how many times ego depended on bridging relationships using network constraint measure which measures \(^{7}\) extent to which all of the SME’s ties directly or indirectly involve only a single actor \((\text{Borgatti et al., 2002; Coviello, 2006:720})\). The entire ego’s alters and their contacts had to be taken into account when formulating the matrices used to represent network characteristics of each stage.
Ego’s network Size: 5 contacts

Ego’s Network Density: 25%

Ego’s network constraint: 40% or 0.40.

Figure 2.6.2: Con1’s network during early internationalisation stage
Mr J’s mother is the founder of Con1, who is from Portugal, started the company primarily as an engineering software producer as there were a few companies that manufacture this type of specialized software. Mr J. was primarily working in financial sector in USA and he has developed good relationships with some of the clients in the USA. The J’s mother thought that there is a gap in European market where this kind of software was only produced by large companies mainly in Germany and Spain and it was expensive. So she thought it is a good idea to sell to other European markets that has less competition and capitalised on her background and family links in Portugal and Spain. The first internationalisation activity was through the founder’s cousin whom the mother consulted to understand more about the Portuguese market and this relationship developed into a joint venture where the founder’s cousin acted as a partner for Con1 in Portugal. The J’s cousin began contacting the Portuguese central bank and they were satisfied with product and asked for some training to use this software, the founder thought this is a good opportunity to expand and include training and support for their clients. The central bank then referred the company to other governmental departments. Furthermore, the Portuguese partner contacted leading Portuguese universities and managed to sell the products to them. Also through the friend of the founder’s sister the company managed to understand and enter Spanish market and this friend became the company’s partner in Spain (again this took the form of a joint venture). The J’s mother met up with an Italian lady at a conference in Italy and she began selling through her to the Spanish central bank and leading universities. This relationship evolved into a 50-50 joint venture. After three years of the company’s establishment, Mr J’s mother approached
her son and asked him to take over the managing and running the company. They also used the J’s residence address to register the company in US and it served as a branch there. However, this branch only generated small orders. Moving into the SIS, Mr J approached a former US client—who he knew through his previous employer—to introduce him to key leading universities that this client knew because he worked as a professor in one of leading NY universities.

This has led to further penetration of US market, whereby the professor then introduced Mr J to one of his students who became the US branch manager. Moreover, one of UK clients travelled to Brazil and became the company’s partner there. The Brazilian partner approached the Brazilian central bank and sold the company’s products to them and they were satisfied with the product and referred the company to other governmental departments. The Brazilian partner approached leading universities and got to know one of academics called Dr V who helped the company to contact other universities in different regions in Brazil.

Finally, UKTI approached Con1 and sponsored the company to participate in a conference in Brazil but this did not generate any potential leads. There were few incidences whereby an European client and an Italian company approached the company to buy from them (these are examples of coincidental ties).

Recently, Mr J decided to increase the firm’s exports and thought of reactivating relationships he has with former colleagues and friends working in different leading UK and European Universities and out of 30 relationships three were selected because they have good contacts and could help the company sell and offer support to the clients who bought the product. From the above figures, we could see that Con1’s network increased over time and the number of structural holes or bridging relationships that company depended on increased as the company moved from EIS to SIS (indicated by decrease in network constraint level over time). Also the overall network size increased over time and the number of bridging relationships that company depended on increased as shown in the above figures. However, the structural aspect of networks does not provide details about the underlying mechanisms of tie formation, creation, type of ties and/or perpetuation of ties. As suggested by Coviello (2005; 2006) understanding the qualitative aspect of networks offers a richer understanding to the evolution of SMEs. Tables 2.6.1 describes in detail the individual tie characteristics per stage and the overall network characteristics per stage.
Table 2.6.1: Individual tie characteristics per stage

<table>
<thead>
<tr>
<th>Total number of ties in each stage (n-1; i.e. excluding ego)</th>
<th>1.00</th>
<th>14.00</th>
<th>23.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tie initiation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMTs</td>
<td>100.00%</td>
<td>13.00%</td>
<td>18.00%</td>
</tr>
<tr>
<td>CTs</td>
<td>0.00%</td>
<td>0.00%</td>
<td>26.00%</td>
</tr>
<tr>
<td>SCTs</td>
<td>0.00%</td>
<td>87.00%</td>
<td>57.00%</td>
</tr>
<tr>
<td>Tie strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strong</td>
<td>100.00%</td>
<td>43.00%</td>
<td>18.00%</td>
</tr>
<tr>
<td>Medium</td>
<td>0.00%</td>
<td>21.00%</td>
<td>61.00%</td>
</tr>
<tr>
<td>Weak</td>
<td>0.00%</td>
<td>36.00%</td>
<td>21.00%</td>
</tr>
<tr>
<td>Tie type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>100.00%</td>
<td>71.00%</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>0.00%</td>
<td>29.00%</td>
<td>100%</td>
</tr>
<tr>
<td>mixed</td>
<td>0.00%</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Tie perpetuation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one-off</td>
<td></td>
<td>7.00%</td>
<td>13.00%</td>
</tr>
<tr>
<td>medium term</td>
<td>100.00%</td>
<td>43.00%</td>
<td>26.00%</td>
</tr>
<tr>
<td>Long term/continuous</td>
<td>50.00%</td>
<td>61.00%</td>
<td></td>
</tr>
</tbody>
</table>

From the above Table, it is clear that the network increased over time and Con1’s network depended mainly on Semi-coincidental ties (SCTs) in its EIS and SIS. And during the early internationalisation stage the company had no coincidental ties (CTs) as it was depended primarily on referrals from close family members and friends/colleagues and or former clients. As the company moved into the SIS, its legitimacy and reputation increased with the result that several local and overseas clients approached the company. Moreover, to some extent the company began to actively reactivate old relationships such as former client from US and other colleagues and friends who work in European and UK universities.

Also, the company depended mainly on strong social relationships all during its PIS and EIS stages. However, during its SIS it relied on medium strength business relationships (mainly with previous colleagues and clients) to further internationalise and penetrate existing markets. The company focused mainly on very few markets (just seven markets) during its life cycle. It operated in only 3 markets during its EIS and five markets during its SIS. These are the new markets they entered and the rest of the foreign sales revenue is coming from further penetration of existing markets. This shows a tendency of the company to focus on using more advanced modes of entry such as JV based on strong social/business strategic entry nodes (family member(s), friends, colleagues) and to rely heavily on them to have
access to market knowledge, referrals and further penetration of their respective markets as shown in Table 2.6.2.

**Table 2.6.2: Overall network characteristics**

<table>
<thead>
<tr>
<th>Overall network characteristics/ quality</th>
<th>t1</th>
<th>t2</th>
<th>t3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key group of relationships per stage</strong></td>
<td>Family members</td>
<td>Family members (located in UK and outside), family friends, clients, governments, overseas central banks and universities; UKTI</td>
<td>Former clients from previous employment; former colleagues in European and UK universities; conferences; overseas MNCs and local clients; researchers.</td>
</tr>
<tr>
<td><strong>Key benefits generated by ties per stage</strong></td>
<td>Market information; helped with entry to new markets; helped in further penetration into existing markets; sponsorship to participate in overseas conferences</td>
<td>Referrals; distant overseas market entry; further overseas market penetration; links to overseas clients.</td>
<td></td>
</tr>
<tr>
<td><strong>Key costs of relationships</strong></td>
<td>Lack of commitment and clash of personalities led to the failure of Italian partnership and this tie was created because Mr J’s mother met this Italian agent in one of the conferences and this shows that trust, strong relationship and previous positive international are crucial when companies decided to use more advanced modes of entry</td>
<td>Chinese partner found a better more secure fulltime job so he decided to terminate relationship with Con1</td>
<td></td>
</tr>
<tr>
<td><strong>Individual tie patterns</strong></td>
<td>Terminated relationship</td>
<td>Termination or retirement of tie</td>
<td></td>
</tr>
<tr>
<td><strong>Illustrative Quotes Con1’s managing Director</strong></td>
<td>There was an experiment in Italy in about year 3, which came from somebody my mother met in a conference. [...]...Because he has been a massive personality clash, and I suppose one shouldn’t just go just rushing into things and it wasn’t set up very well. It was a 50-50 JV and our Italian partner had her lawyer to write the agreement (contract), which meant basically that she has control, .....but it was apparent that Italy wasn’t going to work. Since it was really based on a personal contact, my mother had a real difficulty in letting it go. Sometimes when it’s a personal contact (I won’t say a friend) it’s difficult to let go and it took about a year to convince my mother to close the business there. It became unpleasant and went to court so we couldn’t go any further &quot;</td>
<td>The Chinese partner found himself a better and secure job in China as he was only reimbursed on commission basis&quot;.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.6.2, highlights the dark side of relationships and provides two examples where relationship were either intentionally terminated by the company and or ceased to exist because of personal reasons of the overseas partner.

**Appendix 2.7: Exemplary case from UK Extensive internationaliser/networker**

SM is a company that manufactures surgical and medical equipment. The company started off with the three founders (SW, Val and MT) during the Second World War. The first two worked for the same US company in the USA and left it to start their own business. Through a common friend they were introduced to the third co-founder MT. SM manufactured surgical and medical equipment that were used by doctors, hospitals and medical centres in the UK. Within less than a year of its establishment the company began its first international operation in the USA through SW and Val’s connection with their former employer US clients. Since then it began to serve the members of former British colony (later commonwealth) and few Middle Eastern countries.

However, over time and by the end of the war years the MT thought that the company is losing business and decided to leave the company. SW had another view and bought his shares. Both Val and SW worked hard to keep the company floating and depended on securing orders for the next twelve months selling mainly to the commonwealth countries and some UK clients. Few clients directly approached SM and former clients continued to buy from it. Over time, the medical field changed product range of the company had to change as well. Soon afterwards, both Val and SW passed away and the company was managed by new generation– the daughters and sons of former employees. Among them was, Mr M, the sales and export director who made considerable effort and travelled to different markets such as Australia, New Zealand and Far East markets in order to secure business and find distributors there. Business grew to the extent that SM became during the 60’s the sole producer of products in India. However, due to intense domestic competition it lost the market. Mr T (who later became the company’s sales and export manager) joined the company through grandparents who worked in SM. The demand for the company’s products increased forcing the company to focus on few markets and UK. The competition and industry changes had made it impossible for SM to continue the way it used to, they had to undertake a complete restructuring to its production processes and change of strategy in 1985. They decided to focus actively on overseas markets in order to secure enough capacity.

This has brought the company into a new era, they actively engaged in finding suppliers, distributors in overseas markets. Interestingly is the eastern European markets especially Poland, it was the trend during the 80’s and 90’s for giant pharmaceutical companies to sell and manufacture in Poland due to cheap labour and demand conditions. Over the years SM created a network of distributors in Poland, lost the some of the distributors, because of mergers and acquisitions, the company had to rebuild and secure new relationships and later established a branch there to manage operations and network of distributors.

SM during the third phase also became a member of several local supporting agencies (such as chamber of commerce, industry organisations). However, due to its reputation and legitimacy some British consulates contacted SM and offered to help them and they had financed some trade fairs that helped the company to find potential distributors and clients in Middle Eastern markets. Moreover, several overseas clients approached the company to buy from them from different parts of the world.
This company is a global Company. It has few wholly owned subsidiaries (distributors and agents in EIS; agents and distributors in SIS and 3 branches in more than 100 markets; the company had about 40-60% of their sales revenues coming from foreign sales during the EIS and 73% foreign sales in the SIS. Figures 2.7.1-2.7.3, illustrate how SM network had grown dramatically over time.

![Network Diagram](image)

**Figure 2.7.1: SM’s network during Pre-internationalisation stage.**

Network size: 7  
Ego’s network density: 33%  
Ego’s network constraint: 73%
Figure 2.7.2: SM’s network in early internationalisation stage

Network size: 36

Ego’s network density: 5%

Ego’s network constraint: 65%
Table 2.7.1: Individual tie characteristics per stage

<table>
<thead>
<tr>
<th>Phase</th>
<th>Coincidental ties</th>
<th>Semi-coincident</th>
<th>Intentionally managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up stage*</td>
<td>0</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Early internationalisation</td>
<td>17%</td>
<td>6%</td>
<td>77%</td>
</tr>
<tr>
<td>Subsequent internationalisation</td>
<td>16%</td>
<td>20%</td>
<td>64%</td>
</tr>
</tbody>
</table>

*The number of ties within whole network during first stage is 5 (excluding ego)\(^{79}\).
Table 2.7.1: (Cont’d)

<table>
<thead>
<tr>
<th>Cases</th>
<th>Measure</th>
<th>stage (1)</th>
<th>stage (2)</th>
<th>stage (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Network size</td>
<td>7</td>
<td>36</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Density of ego’s network</td>
<td>3</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Constraint</td>
<td>73%</td>
<td>65%</td>
<td>27%</td>
</tr>
</tbody>
</table>

| Type of tie | Business | 47% | 87% | 92% |
|            | Both     | 43% | 13% | 5%  |
|            | Social   | 10% | 0%  | 3%  |

| Tie duration | Short | 0% | 2% | 32% |
|              | Medium | 100% | 61% | 17% |
|              | Long   | 0% | 37% | 51% |

| Tie strength | Strong | 43% | 26% | 28% |
|              | Weak   | 57% | 50% | 44% |
|              | Medium | 0%  | 24% | 28% |

During PIS, SM mainly relied on SCT’s (60%), these were ties generated through a third party introduction or a bridging relationship such as: the tie between Val and SW that came through their former employer and their relationship with US clients (again through the former employer). However, the company had IMTs of 40% and that was the case when the founders decided to establish SM. Most of these ties were a mixture of weak and strong business ties. While it had a larger number of weak ties, which were mainly the relationship it has with third parties.

However, during EIS, the IMTs had increased significantly to 77%. The CTs accounted for 17% and only 6% were SCTs, the reason is that the company’s main focus was to increase sales in home market and explore the markets that were members of the former British colony such as Australia and New Zealand and few Asian markets. Most of these ties in EIS were weak business relationships.
During SIS, SM has restructured and started to proactively seek overseas markets. Although the IMTs dropped from 77% to 64%, the overall network size increased. As the company established legitimacy and became well known within medical and pharmaceutical industry several companies from overseas markets approached SM and wanted to become their distributor in their respective markets. This represents 16% of ties created during this phase. Finally, 20% were SCTs, which were through the company’s employees, distributors or supporting agencies that introduced the company to overseas markets and lead to further penetration into these markets. Most of ties in the SIS were weak business relationships.

Table 2.7.2: Overall network characteristics

<table>
<thead>
<tr>
<th>Cases</th>
<th>Measure</th>
<th>stage (1)</th>
<th>stage (2)</th>
<th>stage (3)</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Network size</td>
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<td>36</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Density of ego’s network</td>
<td>3</td>
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<td>6%</td>
</tr>
<tr>
<td></td>
<td>Constraint</td>
<td>73%</td>
<td>65%</td>
<td>27%</td>
</tr>
<tr>
<td>Type of tie</td>
<td>Business</td>
<td>43%</td>
<td>87%</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>43%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>14%</td>
<td>0</td>
<td>3%</td>
</tr>
<tr>
<td>Tie duration</td>
<td>Short</td>
<td>0%</td>
<td>2%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>100%</td>
<td>61%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Long</td>
<td>0</td>
<td>37%</td>
<td>51%</td>
</tr>
<tr>
<td>Tie strength</td>
<td>Strong</td>
<td>43%</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td>Weak</td>
<td>57%</td>
<td>50%</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>0%</td>
<td>24%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Appendix 2.8: Lek as an example of UK moderate internationaliser/networker

LEK is an industrial automation solution company. It was founded by Stewards and Jones in 1992 under a different name (ATS). Due to start-up challenges and difficulties the founders agreed to sell the company to another UK firm (VER). In 1996 VER co. acquired LEK (ATS at that time) and kept about 65% of its working force. However, the new management did not allow Jones and Stewards to participate in critical decision making and they felt useless and isolated. They came together with Andrew (later export and business development manager) and decided to give LEK another go. In 2002, LEK was established and both co-founders asked Andrew and some engineers from VER to join the company, their main focus -within the first few months -were on UK and Wales. Later in 2003, they began their first international operation in eastern European markets (such as Hungary and Czech). The founders have built up a good portfolio of clients especially with major players in the field such as Ford, GM and BMW through their connection with VER since its first international activity the company has been growing ever since. The company’s network grew into a large and sparse network and became difficult to manage. The founder decided to focus only on the largest overseas clients and created a fewer number of relationships in the SIS. LEK’s network is presented in Figure 2.8.1-2.8.3.

![Figure 2.8.1: Lek’s network in pre-internationalisation stage](image)

Ego network size: 11
Ego’s network density: 30%
Ego’s network constraint: 52%
Figure 2.8.2: Lek’s network during early internationalisation stage

Ego’s network size: 33
Ego’s network density: 8%
Ego’s network constraint: 15%
Figure 2.8.3: Lek’s network during the subsequent internationalisation stage.

Lek relied mainly on strong business intentionally managed ties (67%) throughout the three stages of its life cycle, with a considerable increase in the number of SCTs and CTs. This is an example of a moderate internationaliser/networker and it’s a knowledge intensive company that operates in a moderate number of markets and is proactive in terms of its internationalisation and networking behaviours.
**Appendix 2.9: Con2-eg as an example of an Egyptian extensive internationaliser/networker**

Table 2.9.1, offers a brief description of the company. Also, Figures 2.9.1-2.9.3 represents Con2-eg’s network development over time.

**Table 2.9.1: Con2-eg brief description.**

<table>
<thead>
<tr>
<th>Company</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is an engineering consultancy company</td>
<td>This company has three main co-founders. The first one is Mr H who graduated from faculty of engineering (chemical engineering department) and his PhD supervisor who later became the co-founder of the company) nominated him to go for a joint PhD programme between Cairo University and Nottingham University. Mr H came to England to attend his Viva and his external examiner was impressed with a new recycling technology he proposed in his dissertation and offered to sponsor him if Mr H is going to use this technology in a pilot project. He went and told his Egyptian supervisor, who had an engineering consultancy company, who offered to give space to Mr H to use the company’s facilities and run the pilot project. When this project succeeded, they decided to open a separate company with a third co-founder and named it Con2-eg. While Mr H was working on the pilot project in Alexandria, beside their location there was a huge project organised by the ministry of scientific research (SR) in collaboration with ministry of military production (MP) and the project had several bottlenecks and they were using outdated technology. He approached them and suggested a better technology that might solve their problem. They refused but he said try my technology since the foreign experts you brought in did not solve the problem. SR and MP agreed and since then they used his technology in 50 different factories around Egypt and even nominated him to the Libyan government as a solution provider. This was when Mr H travelled to Libya and he convinced the government that he has a good solution and better technology that could be used in recycling plants owned by the government. The Libyan government normally did not approve of someone they did not know and who is not well-connected to a top rank official in the Libyan government. Moreover, they doubted that he will know better than the German experts they brought in to upgrade their technologies. However, he was very persistent and managed to convince them. Since then they used him a lot and he thought that the best way to cope with demand is to have branch in Libya. Also through Mr H’s links with Ministry of scientific research, they sponsored him every six month to pay visits to US factories and technology providers. During one of those visits he met up with Mr M who did not like Egyptians in the first place but after close interaction they developed strong friendship and this guy referred the founder to other key technology providers from USA and Europe. Through the Egyptian supervisor (co-founder) the company managed to get to know about bids for projects sponsored by Danish aid and USAID and the company then prepared technical and financial proposals and won several bids. Over time the company began to have MNCs approaching them to work on projects in Egypt and the Middle East. Moreover, through the close link with Con2-eg they managed to do some work with Con1-eg’s Saudi partner. With time the donors’ money decreased and they had to find other ways to do business. They began scanning newspapers and apply for bids (sometimes spooned by foreign aids or MNCs) in the Arab-Middle Eastern countries. And that is how they further expanded. The company has relied on relationships its co-founders had and in the EIS they actively engaged in finding bids for developmental projects sponsored by foreign aid or international organisations they can apply for. These bids were sometimes referred to them by local ministries and governmental agencies, through the link they had with Con1-eg and/or donors. This is evident in the large network of semi-coincidental strong business ties the company has. As the company moved to the</td>
</tr>
</tbody>
</table>
SIS they relied mainly on IMTs to access overseas markets especially Middle Eastern countries. Figures 2.9.1-2.9.3 illustrate Con2-eg’s network over time.

Figure 2.9.1: Con2-eg’s network in the PIS

Ego’s network size: 3
Ego’s network density: 100%
Ego’s network constraint: 92%

Ego’s network size: 11
Ego’s network density: 23%
Ego’s network constraint: 33%
Figure 2.9.2: Con2-eg’s network during early internationalisation stage

Ego’s network size: 36
Ego’s network density: 2%
Ego’s network constraint: 7%

Figure 2.9.3: Con2-eg’s network during Subsequent internationalisation stage

This company’s density and constraint levels decreased dramatically over time and the network grow extensively from the PIS to the SIS. This suggests that the company has a large sparse network—with a large number of bridging relationships as could be seen from the above figure. However, it’s worth mentioning that the company had more mixed strong dense relationship in the PIS and as it moved to the EIS it has more strong business relationships that were mainly semi-coincidental ties [SCTs]. Finally, in SIS, the company had a large network composed of both strong IMTs and strong SCTs.
Appendix 2.10: DF company as an exemplary case of an Egyptian moderate internationaliser/networker

Table 2.10.1, provides a brief description of the company. Figures 2.10.1-2.10.3, illustrate DF’s network development over time.

Table 2.10.1: DF’s brief description

<table>
<thead>
<tr>
<th>Case details</th>
<th>Description</th>
</tr>
</thead>
</table>
Ego’s network size: 3
Ego’s network density: 100%
Ego’s network constraint: 92%

Figure 2.10.1: DF’s network during Pre-internationalisation stage
Ego’s network size: 12
Ego’s network density: 3%
Ego’s network constraint: 15%

Figure 2.10.2: DF’s network during early internationalisation stage
Figure 2.10.3: DF’s network during subsequent internationalisation stage.

As shown in the Figures 2.10.1-2.10.3, DF started off with a highly cohesive network composed of mainly social semi-coincidental ties [SCTs]. Over time the company’s network ties were mainly strong mixed relationships, composed mainly of IMTs and few SMTs.
Appendix 2.11: manu5-eg as an exemplary case of an Egyptian Hybrid

internationaliser/networker

Table 2.11.1 below provides a brief description of the Manu5-eg case and figures (2.11.1-2.11.3) provide an illustration of manu5’s network development over time.

Table 2.11.1: Manu5-eg’s brief description

<table>
<thead>
<tr>
<th>Case details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a clothing manufacturer; the company manufactures sportswear and computer covers, surgical towels and so forth.</td>
<td>The founder was one among many different Egyptian youth who wanted freedom and wanted to be his own boss. The only way to do that is to start a business. He had an offer from an Egyptian friend who lives in USA and they agreed to start a company together and the founder will manage the company and the friend will provide the capital. He relied on friends and family to help him get an office to rent and get others to support him to start his business. He also managed to build strong relationship with technology providers in Egypt, large department stores owned by the government and he also formed a small clusters of workers in one of poorest areas in Cairo and got women and single mother to sew and nit for him the products he needed. The domestic sales grew and the company became in the mid 80’s one of the largest surgical towels and garment producer in Egypt. Moreover, he was supplying the US market through his friend the other owner of the company. However, over time the Egyptian economy was facing problems and the clothing industry declined more over he had exclusivity agreement with US clients which made it very difficult for the company to keep lowering the prices given the high cost of raw materials in Egypt. The American friend withdrew from the business and the owner decided to close the company and reopen it under a different name. He then reactivated his old relationships (strong ones) with public stores and managed to sell for some time. However, he wanted to export but was very worried that the overseas clients will not like his products. He moved to Port Said city where there was a free trade zone. This place was a tariff free zone near Suez canal, which made overseas clients and domestic clients to regularly visit the free zone and buy from local producers and ship to their home countries through Suez canal. The company managed to get the interest of several overseas clients who continued to order from the company ever since. The manager spends a lot of time nurturing and maintaining these relationships. He also gained more confidence and learned how to meet the standards of overseas clients (especially those from the Arab-middle east region) and began to export to overseas clients through searching for local representatives of overseas clothing manufacturers and sell through his products through his agents he ended up with few overseas clients through whom he generates most of his foreign sales revenues. Moreover, he relied on former colleagues/friends to gain access to overseas clients for example, he relied on his school friend to enter Saudi Arabian market and sell to Saudi clients.</td>
</tr>
</tbody>
</table>
Figure 2.11.1: Manu5-eg’s network in pre-internationalisation stage.
Ego’s network size: 6
Ego’s network density: 7%
Ego’s network constraint: 27%

Figure 2.11.2: Manu5-eg’s network during early internationalisation stage
Manu5-eg has relied on strong social relationships during PIS to start up the company. And the founder became actively engaged in building strong relationships with domestic clients (although there were few attempts to sell to American clients but these attempts did not yield any business except in EIS). Over time he relied extensively on indirect exporting through the clients coming into the free zone area and through the representatives of overseas clothing manufacturers in Egypt and/or through family/friends referrals. The company had nearly equal number of IMTs and SCTs during its PIS. These were relationships the founder reactivated with extended family members and or friends to seek their help to start his business and/or to seek referrals to people who could offer him help or support. Moreover, he built strong relationships with domestic clients all over Egypt. However, as the company moved to EIS, it de-internationalised and went only to south African trade fair sponsored by SFD and it focused mainly on domestic market because the American partner withdraw from the company. The founder moved to Port Said city and managed to internationalise further through the free zone area and managed to sell to representatives of overseas clothing manufacturers and to finally get the attention of IMC and they sponsored the company to one or two fairs which lead to some potential business (mainly one-off transactions). Manu5-eg’s network during SIS is mainly dominated with SCTs composed of a mixture of medium-strong mixed relationships with overseas clients and less number of IMTs.
Bibliography


Servais, P. and Rasmussen, E. S. (2000). Different types of international new ventures Paper presented at the academy of international business (AIB) annual meeting (November), Phoenix, AZ, USA, pp. 1–27.


