

**Making Internationalisation Decisions:
How Heuristics and Biases affect the Reasoning
Processes of Leaders of Small and Medium-Sized
Firms**

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Abstract

This thesis presents an exploration of how biases stemming from the use of heuristic-based reasoning processes influence the internationalisation decisions made by the leaders of Small and Medium-Sized Enterprises (SMEs). Three types of internationalisation decisions are specifically addressed in this thesis, namely foreign market selection, entry mode and foreign market exit. The empirical context is that of Scottish SMEs from three main industries, namely Environmental and Recycling, Oil and Gas, and Textiles. Each of the case firms is involved in value-adding activities across national borders. The theoretical context is that of internationalising SMEs. The thesis draws on three main strands of the internationalisation literature: the Transaction Cost Approach, the Process Theory of Internationalisation and the International New Venture (INV) approaches. In investigating the decisional processes involved in internationalisation, the thesis takes a Bounded Rationality stance and assumes the use of Heuristics-based reasoning (Tversky and Kahneman, 1974) in internationalisation decisions. The level of analysis is the individual decision maker within the internationalising firm. The unit of analysis is the internationalisation decision, which is explored from a reasoning process perspective.

A case study strategy is used. Data collection tools are semi-structured interviews and repertory grid elicitation. The data is analysed inductively through the construction of causal-cognitive maps.

Findings show that heuristics are a useful tool to explain the reasoning processes employed in internationalisation decisions. The contribution that this thesis makes to extant literature on the internationalisation of smaller firms is threefold. Firstly, the thesis outlines the *processes* involved in an array of internationalisation decisions (country selection, entry mode, exit decisions) underpinning the cross-national border behaviour of firms. Secondly, by observing the processes of decision-making through a cognitive lens, the thesis contributes to the emerging cognitive approach in internationalisation. Thirdly, the thesis contributes to the literature on international entrepreneurial experience by explaining *how* experiential and vicarious knowledge are leveraged and used in the process of internationalisation decision-making.

Propositions are advanced and further research is invited to progress current understanding of the making of internationalisation decisions in SMEs.

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Preface

Scottish Development International (SDI) is always seeking to improve its performance. Over many years we have worked successfully with companies seeking to internationalise and invest in Scotland. A recent evaluation of SDI's activities showed a double-digit return for each pound spent for both types of support. This impact grows over time and has other spillover effects on the economy from higher spending, increased R&D, higher wages and enhanced productivity levels. Other independent studies have also confirmed the strong performance of SDI in relative terms - for example, the World Bank recently placed SDI sixth in a survey of over two hundred investment promotion agencies.

However, competition in international markets and for inward investment is increasing constantly. Therefore, in order to deliver continuous performance improvement we need to search for new insights that can shape our products and services and more generally the way we conduct our business.

With this in mind I have been impressed by Lucrezia's work. The companies researched were supported under a SDI/Scottish Enterprise scheme. The objective of this programme is to develop the management team in small internationalising companies through developing a full international strategy and three year action plan. In this type of high potential company success, and in some cases survival, is often dependent on decision-making processes and how the outcomes are through the business.

By exploring the heuristics and biases this may induce Lucrezia has made, I believe, an important contribution to our understanding of why support provided to companies may, on occasion, be less effective than expected. Crucially, the findings can be generalised to all internationalising companies. They offer an additional prism through which to consider internationalisation and importantly the way in which our existing products and services are delivered. We are currently considering how best to incorporate these findings into our company growth activities.

The findings can also be applied to inward investment.

In understanding her primary research findings and the knowledge Lucrezia has built-up through her study we have been stimulated to look again at our interventions and how we apply them. It is difficult to produce novel work and generate practical policy implications; too often they are, I believe, a little 'forced'. Fortunately, this is not the case with Lucrezia's work; the policy conclusions are practical and current.

I am happy to commend her work and hope she is able to continue to develop this area of work. At SDI we will be watching the outcomes of future work with interest.

Jonathan Slow
Senior Strategy Manager
Scottish Development International

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Writing these acknowledgements has been a task I looked forward to throughout the write-up of the thesis. This is because I was constantly very aware of my being so very blessed to have some marvellous minds and souls accompanying me in this journey. So here it is, my chance of thanking them all, one by one. Thus, the reader will excuse me if this section is slightly longer than convention requires.

First and foremost, I pour my heart out to thank the person that on paper was meant to be “just” a supervisor, but that in reality has also been my professional mentor, my counsellor, my academic inspiration and, if I may, my friend. I refer, of course, to Professor Marian V. Jones. From the long afternoons discussing ideas to the endless phone calls to refine them, passing through the euphoria of the breakthroughs and the frustration, even tears, of the setbacks, “Marian” was always there for me, going above and beyond any call of duty.

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This thesis wouldn’t have been possible without Scottish Enterprise, who provided additional project funding as well as access to a number of firms in Scotland. In particular I wish to thank Ros Forrest and Barclay Low for their professionalism and support throughout this research. Also, many thanks go to Jonathan Slow of Scottish Development International for his enthusiasm for this research and for taking my research findings out the “ivory tower” and into the real world of practitioners.

I am also indebted to the leaders of the Scottish firms that participated to this research. Not only did they take precious time out of their busy schedules to see me but they made my research all the more rewarding by virtue of being interesting and exciting.

If there ever was a gold medal for patience, love and support, this would undoubtedly go to Gennaro, my soulmate. It defeats my own cognitive ability how he could put up with my continuous anxieties, mood swings, and frustrations throughout the thesis write-up. When even I had had enough of me, he was still there, believing in me and pushing me to keep going, following me

wherever possible, giving me the strength that I wouldn't have found anywhere else. Am I not the luckiest person around?!

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*To mum,
Gennaro,
and in loving memory of my dad*

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature _____

Printed name _____

Chapter 1

Introduction

This introductory chapter is intended to set the scene for the research presented in the rest of the thesis. It starts with an introduction to the research problem that drives the research presented in the thesis, namely the decision making processes of leaders of smaller firms. The next section is a background to the research, explaining the reason why internationalisation decision-making in Small and Medium-Sized Enterprises (SMEs) is a subject that deserves further exploration. Then the chapter briefly outlines the gaps identified in the three strands of literature deemed relevant, namely the Transaction Cost Approach (TCA), the Uppsala Model of Internationalisation (also referred to as Process Theory of Internationalisation - PTI) and the International New Venture Theory (INV). Having identified the areas where a contribution can be made, the chapter then moves on to a description of the research rationale adopted in order to take this area of enquiry forward. It is argued that a cognitive approach at the level of the individual decision maker is appropriate for the problem at hand. In line with this approach, the initial research questions are formulated. The latter revolve around an enquiry into the cognitive reasoning processes that firms' leaders use in making internationalisation decisions. The chapter then moves on to outline the relevance of the research with respect to theory and practice. Following this is a more detailed account of the research approach taken, namely the cognitive approach to boundedly rational reasoning developed by Tversky and Kahneman (1974). Tversky and Kahneman's theory of Heuristics and associated Biases guides the reformulation of the original research questions. The latter questions revolve around the way biases stemming from the use of heuristics in the reasoning process of the entrepreneur influence internationalisation decisions (i.e. foreign market selection, entry mode and foreign market exit decisions).

To follow is a description of the empirical context within which the research presented in this thesis was conducted, that of Internationalising Scottish SMEs

which participated in the Global Companies Development Programme (GCDP). The chapter then presents an outline of the structure of the thesis and the content of each chapter. It concludes with a brief description of the methods used for searching the literature relevant to the thesis.

1.1. Introduction

One question drives this research, and it can be summed up as:

“How do leaders of smaller firms *really* make internationalisation decisions?”

This question first came to my mind six years ago, when I became involved with Scottish firms that were engaging in value-adding activities across national borders (see “Empirical Context” section below). It soon became clear that the way firm owners and managers were reasoning was not quite as strategic as one would have expected (Buckley et al., 2007).

In the very inductive process that this doctoral research followed, interviews with a sample of case study firms started in the first year of the doctoral research, running alongside the literature review in an iterative process whereby empirical observations were cross-compared with theoretical understanding of the phenomenon over a three-year period.

It soon became clear that theoretical approaches to date did not offer a comprehensive and substantive understanding of the process of decision making in the context of internationalising Small and Medium-Sized Enterprises (SMEs). Rational, economic-based models of internationalisation decisions (e.g. Buckley and Casson, 1976) do not take into account the human motivations and reasoning limitations that affect the decisions (Buckley et al., 2007; Cyert and March, 1963). The chain of establishment’s assumption that with increased knowledge of the market, more commitment will follow (Johanson and Vahlne, 1977, 1990) proved inadequate to explain the internationalisation patterns I was observing. In fact, firms in this study sometimes reduced their involvement in the foreign market following their experience in them. I also found that the International New Venture theory (Oviatt and McDougall, 1994) and the International Entrepreneurship approach (McDougall and Oviatt, 2000; Oviatt and MacDougall, 2005) did not stretch as far as to reveal how the entrepreneur’s subjective

interpretation of circumstances (Oviatt and MacDougall, 2005; Bell et al., 2003) results in certain internationalisation decisions.

At the same time, the *Journal of International Business Studies* published a paper by Buckley et al. (2007) which identifies that managerial decision making is indeed not as strategic as previously suggested and that it needs further investigation. In particular, Buckley et al. (2007) encourage further scholarly enquiry into the cognitive reasoning of managers. This proposed new direction mirrors that advocated by internationalisation (Zahra et al., 2005) and entrepreneurship scholars (Grégoire et al., 2010). It was following these lines of reasoning that the focus of this research emerged and I decided to investigate the decision-making processes of leaders of internationalising SMEs from a cognitive perspective (see “Research Approach and Questions” section below).

The remaining part of this introductory chapter explains in more detail the background to this study, including its value to both academics and practitioners.

1.2. Research Background

“Driving Blind: Strategic Decision-making in Small Companies”

(Brouthers et al., 1998)

Brouthers et al. (1998) investigate the extent to which decision making is rational and strategic in smaller firms. The title of the paper - “Driving Blind” - summarises the main findings. The study does not find decision making in smaller Dutch firms to comply with principles of rationality and strategic planning.

Similarly, the strategic approach prescribed by transaction cost theorists has been found inadequate to explain foreign market entry decisions in SMEs (Brouthers and Nakos, 2004).

More recently, Buckley, Devinney and Louviere (2007) looked more closely at managerial decision making in the internationalisation of firms. They found that managers of multinational enterprises do not behave according to the principles of rational decision making that theory suggests (Buckley et al, 2007).

The call made by the latter authors (Buckley et al., 2007) for further research on decision making in international business inspired the research presented in this thesis, specifically to investigate *how leaders of Small and Medium-Sized Enterprises make their internationalisation decisions*.

The theoretical context is that of the internationalisation of firms (see Jones and Coviello, 2005).

In the contemporary world, characterised by the deregulation of markets and technology-enabled shrinking of distances, the internationalisation of small and medium-sized enterprises (SMEs) is becoming increasingly desirable, if not unavoidable (e.g. Rennie, 1993). Some firms internationalise gradually, through processes of increasing foreign market knowledge and commitment (Johanson and Vahlne, 1977, 1990, 2006, 2009), while others are highly involved in foreign markets from their inception (Oviatt and McDougall, 1994).

Before moving into a clearer outline of the research questions that this thesis aims to provide an answer to, I shall briefly point out the gaps found in the theoretical strands of the literature on the internationalisation of smaller firms and the value of this research to both theory and practice. In addition, the personal motivation for conducting the study is briefly outlined.

1.2.1. Gaps in the Internationalisation Literature and Intended Contribution of the Research

Three approaches to internationalisation are deemed relevant to the research problem investigated in this thesis. These include the Transaction Cost Approach, the Uppsala Model of Internationalisation and the International New Venture Approach. Each of these approaches is reviewed in a dedicated literature review chapter (Chapter 2). Here, the main gaps identified in each

approach are briefly pointed out, followed by the contributions that this thesis intends to make to each approach.

Transaction Cost Approach

The *Transaction Cost Approach* (Buckley and Casson, 1976) has been predominant in determining the Foreign Direct Investment Decisions (FDI) of internationalising businesses (Buckley and Casson, 1985). The latter approach implies that FDI decisions are based on rational decisional processes aimed at maximising rents and reducing production costs.

The work of Buckley, Devinney and Louviere (2007) challenges the rational approach to internationalisation decision making that economic approaches such as the Transaction Cost (TC) have advocated. The latter, in fact, advocates that FDI decisions are driven by boundedly rational decision makers (Buckley et al., 2007).

The Buckley et al.' (2007) research opens up new questions. In fact, if decision making in internationalising firms does not follow a strategic, rational approach such as that advocated by the Transaction Cost Theory, but rather, follows the personal motives of boundedly rational managers, this raises the question as to what reasoning processes boundedly rational individuals employ in their decisions.

This question is directly addressed in this thesis, which explores the decision processes used by leaders of internationalising firms from a boundedly rational, cognitive perspective.

In addition, in line with the TC approach, the work of Buckley and colleagues focuses on Foreign Direct Investment (FDI) decisions. Consequently, we are left wondering how boundedly rational decision making may affect an array of other entry mode decisions, including exporting, licensing, joint ventures etc. (see Young et al., 1989). Indeed, the authors themselves point future research in this direction (Buckley et al., 2007). This thesis responds to this call by exploring a number of internationalisation decisions, including foreign market selection, entry modes, and foreign market exit decisions.

Furthermore, the boundedly rational view of decision making emerging from Buckley et al. (2007) calls for a shift in the level of analysis. In fact, if it is understood that it is the bounded rationality of the decision maker that determines the content of the decision, then the level of analysis would be the individual decision maker, rather than the firm (with the exception of firms adopting highly participative and collective decision processes - see Autio, 2005). In line with this reasoning, the level of analysis adopted in this thesis is the individual, the leader of the internationalising firm who has the power to make internationalisation decisions.

In summary, this thesis intends to further stretch recent developments in the transaction cost approach to internationalisation decisions by taking a boundedly rational, cognitive reasoning approach at the level of the individual decision maker and by exploring more than one type of internationalisation decision. The latter include foreign market selection, entry mode and foreign market exit decisions.

Uppsala Model of Internationalisation

The *Uppsala Model of Internationalisation* (Johanson and Vahlne, 1977, 1990, 2003, 2006, 2009) is based on the logic that increased experiential knowledge of the market leads to increasing commitment in that market. However, how exactly experiential knowledge is leveraged and used in internationalisation decisions is not specified. Scholarly work on experiential knowledge acquired through internationalisation has identified the impact that different types of experience and experiential knowledge have on perceptions of foreign markets (Eriksson et al., 1997; Eriksson and Chetty, 2003; Chetty et al., 2006). However, this work still has not addressed the processes by which experiential knowledge and the resulting perceptions affect internationalisation decisions. This thesis adds to this literature by exploring how experiential knowledge is leveraged through the reasoning processes involved in internationalisation decisions.

Another key feature of the Uppsala Model of Internationalisation is the concept of *psychic distance* (a term originally used by Beckerman, 1956, see Child et al.,

2009) and its impact on foreign market selection decisions. The model, however, does not specify the mechanisms by which psychic distance is leveraged and used on foreign market selection decisions. Furthermore, up until recently, the concept of psychic distance has been viewed as an objective, index-based measure (Dow and Karunaratna, 2006; Brewer, 2007). This is at odds with its “psychic” dimension, which suggests a link with the cognition of the person using it (following Child et al., 2009) to make internationalisation decisions. In line with this latter approach, this thesis explores the concept of psychic distance from the idiosyncratic viewpoint of the decision maker. By doing so, the thesis contributes to developing the current understanding of the concept of psychic distance. Furthermore, it explores the role of psychic distance in the reasoning processes leading to internationalisation decisions.

Finally, mirroring the gap identified earlier in the discussion on the TC approach, the Uppsala Internationalisation Model generally takes the firm as the level of analysis. It has been pointed out that this is due to the participative decision making style that characterises Swedish firms (Autio, 2005). However, experience and experiential knowledge are individual level constructs to begin with, and would require a complex system of experiential knowledge sharing to be considered at groups (i.e. firm) level (Felin and Hesterly, 2007). Johanson and Vahlne (1977, 1990) do not describe the knowledge sharing and decision making procedures that lead to the internationalisation process. Furthermore, firms in other countries may not necessarily adopt the participative decision making style of the Swedes. Consequently, internationalisation decisions based on experience acquired through incremental internationalisation may be usefully studied at the level of the decision maker in the first instance. As already stated above, this thesis adopts the individual decision maker as its level of analysis.

In essence, the contribution that this thesis makes to the internationalisation process model consists of exploring the missing link between experiential knowledge and internationalisation decisions through the application of a cognitive reasoning approach. In addition, the concept of psychic distance is further investigated from an idiosyncratic and path-dependent viewpoint at the level of the decision maker.

International New Venture Approach

More recently, the *International New Venture (INV) approach* has advocated that firms may internationalise soon after inception, entering psychically distant markets with high commitment entry modes from the start (Oviatt and McDougall, 1994; McDougall et al., 1994). A chief enabler in the rapid internationalisation theory (as the INV is often referred to) is the founder of the firm, who brings his previous experience to the early internationalisation process (Madsen and Servais, 1997; Blodgood et al., 1997; Kuemmerle, 2000; Weerawardena et al., 2007). Internationally experienced entrepreneurs behave in such a way as to reduce the time to internationalisation (Reuber and Fischer, 1997). Consequently, their experience enhances the probability of growth of the INV (Sapienza et al., 2006). However, the literature has not yet explained how entrepreneurial experience is leveraged and used in the early internationalisation decisions of entrepreneurs leading INVs. This gap in the literature is considered worth filling for the following reason: although the experience of the entrepreneur is generally regarded as having a positive impact on the growth of the INV, it has also been posited that it could have a negative impact on the long term survival of the internationalising firm (Sapienza et al., 2006).

In this thesis, pre-firm foundation experience is also investigated, in the same manner as post-firm foundation experience (as outlined above in the intended contributions to the Uppsala Model of Internationalisation). That is, the individual level of experience and experiential knowledge are linked directly to early internationalisation decisions through the exploration of cognitive reasoning processes leveraging the former into the latter.

No distinction is made between pre-firm foundation experience (a focal point in the INV approach) and the post-firm foundation, foreign market experiential knowledge (a focal point in the Uppsala Model of Internationalisation). Rather, as the individual is the level of analysis, his experience pre and post firm foundation is regarded as a continuum evolving over time.

Finally, of note is the fact that the International Entrepreneurship literature views the entrepreneur as a *mediator* between the external environment and the internationalisation behaviour of the firm (Oviatt and McDougall, 2005; Bell et al., 2003). This consideration points in the direction of a cognitive approach. A cognitive approach has been advocated in the international entrepreneurship literature (Zahra et al., 2005; Acedo and Florin, 2006). However, thus far the literature on internationalisation cognition has mainly taken a static, *cognitive characteristics* approach, addressing entrepreneurial cognitive orientations, perceptions (Acedo and Florin, 2006; Acedo and Jones, 2007) and mindset (e.g. Nummela et al., 2004). With the exception of a recent study by Autio, George and Alexy (2011), a *process approach* to internationalisation cognition is still largely lacking. In particular, a cognitive approach aimed at explaining the reasoning involved in decision making processes on internationalisation decisions is still missing. As mentioned already, this thesis takes a cognitive approach, thus contributing to the emerging body of literature on international entrepreneurial cognition. In particular, the contribution of this study lies in the cognitive *process* approach to reasoning in decision making. A process approach, explaining *how* cognition impacts on decisions may be more valuable than a static one.

To conclude, the adoption of a cognitive processes approach to internationalisation decisions at the level of the individual decision maker allows this thesis to make a number of contributions to each of the three strands of internationalisation considered.

1.2.2. Value of the Research to Theory

Managerial decisions are at the core of the internationalisation behaviour of the firm. In fact, the underlying aim of economic approaches to internationalisation is both to describe and prescribe how foreign markets and entry modes are selected (e.g. Aharoni, 1966; Buckley and Casson, 1976; Brouthers et al., 2003). In their recent empirical study, Buckley and colleagues (Buckley et al., 2007), highlight the need to study decision making in internationalising firms from a boundedly rational, managerial perspective. The authors call for more empirical

work in this direction, following their findings that the classical rationality on which economic approaches to internationalisation are based does not reflect the reality of managerial decision making.

As outlined above, the study presented in this thesis answers this call by investigating decision making at the level of the individual leading the internationalising firm and by applying a boundedly rational, cognitive perspective. In so doing, the study aims to add value to scholars engaged in an understanding of internationalisation decision making from a substantive point of view.

1.2.3. Value of the Research to Practice

Small and Medium-Sized Enterprises (SMEs) form the bulk of enterprising activities across the globe, with Europe and the UK being no exceptions. In Europe, over 99% of all businesses are SMEs, generating two-thirds of private sector jobs and contributing over 50% of the total value added (European Commission, 2010). As of 2008, SMEs in UK accounted for 99.9% of all enterprises, providing 59.4% of private sector employment and generating 50.1% of private sector turnover (UK Department for Business, Innovation and Skills, 2009). In essence, the growth and success of SMEs is paramount to the growth and success of national and international economies.

Since the decisions taken by the leaders of internationalising firms have the potential to make the difference between success and failure (Brouthers et al., 1998), it follows that understanding leaders' cognitive decision making processes is a step forward in understanding how to support both the growth and the long-term survival of the firms that they lead. By investigating the reasoning processes underpinning internationalisation decisions, this study aims to identify areas where those processes may be improved upon, ultimately leading to higher quality in decision making. In this respect, this study intends to add value not only to the leaders of internationalising firms, but also to those managing and delivering programmes aimed at supporting the international growth of firms. To the former, the study intends to offer a more realistic account of their decision making processes and the associated shortcomings. To the latter, the study aims

to point out that the decisional processes of leaders of small firms need to be directly addressed by any programme fostering internationalisation.

1.2.4. Personal Motivation for the Research

My personal motivation in this research stems from the combination of a passion for enterprise and enterprise leadership and an interest in cognitive psychology.

The passion for enterprises and their leaders dates back to my undergraduate years in the United Kingdom. During that time I first started studying entrepreneurship. Also during that time, I started attending dedicated events, which regularly featured leading British and international leaders of innovative and successful firms. Since then I have been fascinated with the ways firm leaders think and act. In my own very personal opinion, I always found firm leaders rather independent-minded and full of personality. This spurred an interest in investigating how they may think and make decisions.

The interest in cognitive psychology is a consequence of my natural inclination to understand people's thinking, the way they understand their reality and the way they behave based on their interpretation of the world they inhabit. This interest was strengthened further during a number of psychology modules that formed part of my undergraduate curriculum. During those courses I studied a number of established theories, including that by Tversky and Kahneman (1974), which I apply in this thesis.

1.3. Research Approach and Questions

This research is driven by the following general objective:

To investigate how internationalisation decisions are made in Small and Medium-sized Enterprises, using a cognitive approach at the level of the individual decision-maker.

In pursuing this objective, the research takes a *cognitive approach* to understanding decision making at the level of the *individual decision maker* within the firm.

The application of a *cognitive approach* to the current study is based on the view that firm behaviour is determined by boundedly rational human beings (Buckley et al., 2007; Simon, 1991; Cyert and March, 1963) and that in order to understand the internationalisation behaviours of internationalising firms, we must understand how firm leaders interpret the environment they operate in (Oviatt and McDougall, 2005; Bell et al., 2003) and rationalise it to make internationalisation decisions. Human reasoning and decision making fall into the realm of cognitive psychology (e.g. Braisby and Gellatly, 2005). Thus, a cognitive approach seems suited to the research objective at hand.

The level of analysis in this study is the *individual decision maker* within the internationalising firm. This level of analysis is at odds with the level of analysis generally used in studies based on either on the Transaction Cost Approach or on the Uppsala Internationalisation model, namely, the firm (e.g. Autio, 2005). Nevertheless, this level of analysis is necessary in order to study cognitive processes. In fact, cognitive processes take place in the mind of the individual in the first instance. It is acknowledged that firms may not necessarily be managed by a single decision maker. For instance, some firms are managed by a team (e.g. Loane et al., 2007). Others, as mentioned earlier, operate on the basis of a democratic, participative decision-making protocol (see Autio, 2005). Nevertheless, the complexity and multitude of theories relevant to the study of cognitive processes in decision making involving multiple agents would be too broad for a single doctoral thesis. Consequently, in this thesis I choose to focus on firms where a single individual has the power and authority to make all the internationalisation decisions.

In light of the cognitive approach and the individual level of analysis adopted, the initial research questions are formulated as follows:

- *How do the cognitive reasoning processes used by firm leaders affect their internationalisation decisions?*

- *How do those processes change over time?*

In order to answer those questions, a specific theoretical framework is selected. The choice of theoretical framework is guided by a number of criteria. Firstly, the theoretical framework has to stem from the domain of cognitive psychology. Secondly, it has to be built upon the principles of bounded rationality that have been identified earlier as guiding internationalisation decisions (based on Buckley et al., 2007). The boundedly rational individual does not have access to perfect information of all alternative courses of action. More importantly, he does not have the ability to compute all the possible outcomes of each plausible course of action (Simon, 1961 - see Chapter 3 for a full literature review). Consequently, decision making under bounded rationality is characterised by the uncertain outcome of the decision (Alvarez and Barney, 2005). Therefore, the third criterion for the selection of a theoretical framework is that such framework has to be based on conditions of uncertainty.

Based on those criteria, the theoretical framework selected for this research is the theory of Heuristics and Biases originally developed by Tversky and Kahneman (1974). I use the term heuristics to refer to *reasoning processes used as shortcuts in situations of choice under uncertainty* (Tversky and Kahneman, 1974). This theoretical approach is build upon Simon's bounded rationality, within the domain of cognitive psychology.

Having selected a theoretical framework for the research, the research questions driving this thesis can now be refined as follows:

- I. *How do heuristics (and associated biases) drive the reasoning processes leading to internationalisation decisions?*

- II. *Do the heuristic based reasoning processes of internationalising firm leaders change over time? If so, how do they change?*

1.4. Empirical Context: The Global Companies Development Programme

The empirical context within which the research presented here was conducted is that of internationalising Scottish Small and Medium-Sized Enterprises. Firms participating to the study were purposefully selected from a larger group of firms participating in the Global Companies Development Programme (GCDP, currently known as the International Strategy Development Programme). The CGDP has been designed, funded and managed by Scottish Enterprise, the agency for the economic development of Scotland. The programme supports Scottish Small and Medium-Sized Enterprises with high growth potential in their international development.

The study presented in this thesis is part of a wider research and evaluation project of the Global Companies Development Programme. The research and evaluation project was conducted in partnership with Scottish Enterprise. This study is based on the group of firms that participated in the programme between 2004 and 2005. The research and evaluation project of the GCDP consists of a longitudinal study conducted between 2006 and 2008.

Participating firms belong to three different industries (textiles, oil and gas, and environmental and recycling) and are scattered across different regions of Scotland. They include both International New Ventures (INVs - Oviatt and McDougall, 1994) as well as firms that started the internationalisation process after years of domestic growth (Johanson and Vahlne, 1977, 1990).

1.5. Defining Core Concepts

Concepts that are core to this thesis are briefly defined below. This is intended to benefit the reader by clarifying early on the meaning with which terms are used in the thesis.

Small and Medium-Sized Enterprises (SMEs)

In defining Small and Medium-Sized Enterprises (SMEs), this thesis follows the recommendations of the European Commission (2003). This implies that employee headcount should be equal to or below two hundred and fifty, and that the firm's annual turnover should not exceed fifty million Euros.

Firm leader / Entrepreneur / Decision maker

For the purpose of this study, the terms “firm leader”, “entrepreneur” and “decision maker” are used interchangeably to refer to the individual who has the sole authority to make all decisions within the firm, including internationalisation decisions.

International New Ventures / Rapid Internationalisers

Oviatt and McDougall define the International New Venture as “*a business organisation that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries*” (Oviatt and McDougall, 1994: 49, Oviatt and McDougall, 2005: 31).

In this thesis, the term International New Venture (INV) is used to refer to firms internationalising rapidly after inception. The latter firms have also been termed *Committed Internationalists* (Bonaccorsi, 1992), *Born Globals* (Rennie, 1993; Knight and Cavusgil, 1996) and *Instant Exporters* (McAuley, 1999). Rapid internationalisation implies that the firm has international involvement either from its very creation (Oviatt and McDougall, 2005) or within two years of its establishment (Rennie, 1993). However, following a generally accepted convention in the field, this thesis defines rapid internationalisers as those firms that have started their international involvement *within* the first five to six years of inception (Coviello and Jones, 2004).

Traditional Internationalisers

The term traditional internationalisers is used to refer to firms that start their internationalisation process at a later stage in comparison to INVs. For those

firms, early steps into international markets take place once they are established in their domestic markets. This typology of firms follows the rationale portrayed by the Internationalisation Process Theory (Johanson and Vahlne, 1977, 1990), also referred to as the Uppsala Internationalisation Model in this thesis.

However, it may be useful to specify at this stage that the term “traditional internationalisers” does not indicate that the firm follows the stages of international development as they are outlined in the Uppsala Internationalisation Model (Johanson and Wiedersheim-Paul, 1975). Rather, it is used to differentiate firms in terms of time to first international involvement following inception.

Bounded rationality

The concept of bounded rationality is used following Simon’s conceptualisation. Simon (1972) identifies three main boundaries to rationality in human decision making, namely, *uncertainty and risk* in the decision outcome, *incomplete information* about alternative courses of action, and decision *complexity*. Complexity implies that the high number of environmental factors does not allow for a full computation of all factors in order to arrive at the best course of action (Simon, 1972).

Boundedly Rational Decision Maker

The concept of the boundedly rational decision maker follows on from the concept of bounded rationality, thus following Simon (1972). According to Simon, the boundedly rational decision maker is not someone who makes “irrational” decisions. Rather, his application of rationality is limited by the three boundaries outlined above (bounded rationality). Simon’s decision maker is “*intendedly* rational, but only *limitedly* so” (Simon, 1961: xxiv).

Cognition

A single, all encompassing definition of cognition and cognitive psychology was difficult to find. In my search for one I came across many, all worded quite differently. However, despite the differences, the key nature of this mature

field of scholarly enquiry was clear. Cognition is linked to the task of “cognising”, of thinking, reasoning, elaborating information in the human brain (e.g. Braisby and Gellatly, 2005).

For the purpose of this thesis, I choose to define cognition as a science concerned with how individuals “gain knowledge about their world, and how they use that knowledge to guide decisions and perform effective actions” (Bower and Hilgard, 1981: 421).

Heuristics (and associated Biases)

Clarifying the meaning with which the term “heuristics” is used in this thesis is particularly central. In fact, this thesis uses the term heuristics (and their associated biases) to refer to a specific theoretical approach, namely, that of Tversky and Kahneman (1974). Hence, in this thesis heuristics refer to *reasoning processes used as shortcuts in situations of choice under uncertainty* (Tversky and Kahneman, 1974). The presence of heuristics and biases in the reasoning of the decision maker is one of the assumptions on which this thesis builds.

Internationalisation Decisions

The terms “internationalisation decisions” or simply “decisions” in this thesis are used to refer to the outcome of the decision-making processed of firm leaders, as influenced by the used of heuristics and the associated biases in reasoning. Three types of internationalisation decisions are investigated in this thesis. Those are *foreign market selection decisions* (e.g. Johanson and Vahlne, 1990), *entry mode decisions* (based on Young et al., 1989) and *foreign market exit decisions* (e.g. Crick, 2003, 2004).

1.6. Structure of the Thesis

This thesis is composed of seven chapters. This introductory chapter (*Chapter 1*) has outlined the research problem, questions, the context of the research and the structure of the thesis.

Chapter 2 presents a purposeful review of literature in internationalisation. It begins with an overview of the main strands of the internationalisation literature deemed relevant to this study, namely the transaction cost approach, the Uppsala Internationalisation Model (or Process Theory of Internationalisation) and the International New Ventures approach. It then identifies and critically evaluates how each of the aforementioned strands of the literature views the focus of this thesis, namely, internationalisation decision making. Finally, in line with the cognitive approach taken in the thesis, the chapter outlines the scope of a cognitive approach in the main strands of the literature.

Chapter 3 outlines the theoretical approach adopted in this thesis, namely, that of heuristics in decision making. The chapter starts with an explanation of the concept of bounded rationality, followed by an outline of how this forms the basis for heuristics theory. The seminal work of Tversky and Kahneman (1974) on heuristics is then reviewed, along with more recent developments on the theory. The chapter also reviews the application of heuristic theory to the fields of entrepreneurship and internationalisation. Then the main criticisms to heuristic theory are reviewed. The chapter concludes with an account of the dynamicity of heuristic reasoning and how those reasoning processes change in time.

Chapter 4 explains the methodological procedures used during the research presented in the thesis. The chapter starts with the theoretical considerations and with the design adopted for the study, namely the case study approach. The criteria used for the sampling of the cases are then explained. The chapter then moves on to detail the sources of evidence used, the purpose of each and the

techniques used for data collection. A detailed account of the data analysis procedure follows. The chapter then addresses issues of rigour, clarifying the measures taken to ensure robustness in the study. The chapter concludes with an acknowledgement of the limitations of the methodological procedures chosen, and gives recommendations on how to overcome these limitations in the future.

Chapter 5 reports on the analysis of data by case study (within case analysis), conducted through a pattern-matching technique. That is, it establishes the fit of each internationalisation decision to the theory of heuristics adopted in the thesis. Each case study analysis starts with a description of the firm whose leader's cognitive processes are being investigated. Then the pattern-matching analysis is outlined, for each decision made by the firm leader. The sequence of decisions within each case study mirrors the chronological order in which those decisions were made. Each case study concludes with a triangulation of data elicited through different techniques.

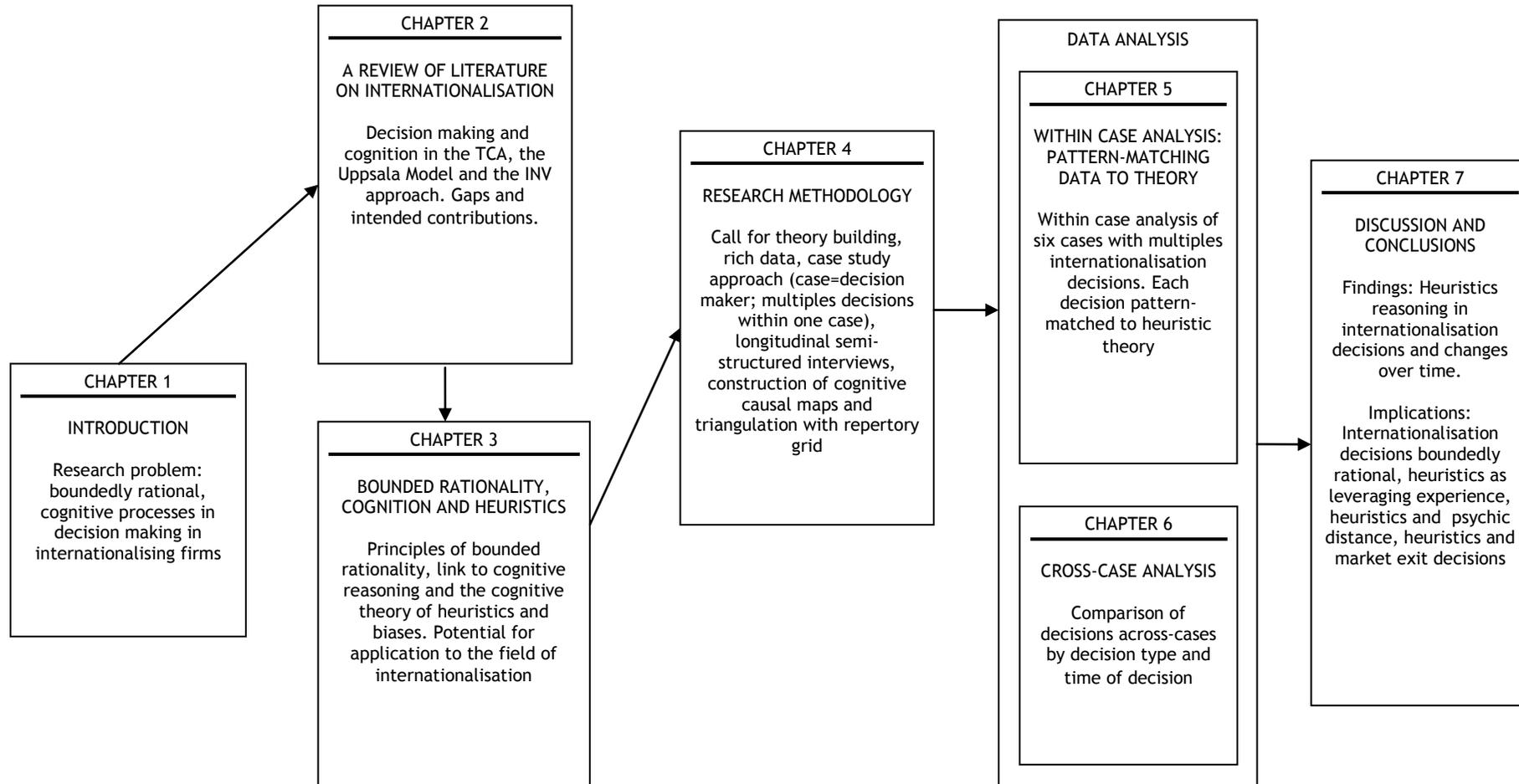
Chapter 6 presents a cross-case analysis of the data. The cross-case analysis is structured around a typology of internationalisation decisions. First, the chapter addresses the issues of time in internationalisation decisions. It compares early internationalisation decisions across comparable cases with a view to analysing how the use of heuristics in decisions changes over time. Next, the chapter analyses the role of heuristics in entry mode decisions. Three categories of entry mode decision are analysed, including *export decisions* (either direct or indirect, of products or services), *contractual arrangement* (including licensing) and *foreign direct investment* modes (equity joint ventures and wholly-owned subsidiaries, including acquisitions and Greenfield investments - based on Young et al., 1989).

Next, the chapter cross-compares the use of heuristics in foreign market selection decisions across-case studies. The categorisation used for analytical purposes comprises *English speaking country* selection, *non-English speaking European country* selection and *non-European, non-English speaking country*

selection. Finally, the chapter presents a cross-case analysis of heuristics in foreign market exit decisions.

Chapter 7 concludes the thesis by presenting the main findings of the study and discussing how they compare with and add to extant knowledge on internationalisation. The chapter is structured as follows. First, the chapter returns to the original research questions and articulates answers to them on the basis of findings from the study. On the basis of these findings, the research articulates initial propositions. Then, the chapter moves on to a discussion of findings in relation to extant literature, outlining how the study advances current understanding of the field. The relevance of the findings to policymakers and practitioners is also discussed. The chapter concludes with an account of the limitations that unavoidably affect the research presented here. In addition, future avenues for related research are discussed.

Figure 1.1: Structure of the Thesis



Chapter 2

A Review of Literature on Internationalisation

As stated in the introductory chapter, this thesis is concerned with the investigation of the way biases stemming from heuristic-based reasoning processes drive the internationalisation decisions (foreign market selection, entry mode and foreign market exit) of leaders of smaller firms. The thesis argues that a new contribution to theory can be made through the application of a cognitive lens, focussing on reasoning processes used in decision making.

In order to make a meaningful contribution to knowledge in the field, a comprehensive review of relevant literature to date is first undertaken (Hart, 1998).

Before embarking on a review of scholarly work in internationalisation deemed relevant, I shall clarify the criteria used for searching the literature (section 2.1) and for setting the boundaries of the literature considered in this review (section 2.2).

Then, the three approaches to internationalisation considered in this literature review are briefly reviewed (section 2.3). These are the Transaction Cost Approach (Buckley and Casson, 1976; Buckley et al., 2007), the Uppsala Model of Internationalisation (Johanson and Vahlne, 1977, 1990, 2006, 2009) and the International New Venture theory (Oviatt and McDougall, 1994; McDougall et al., 1994).

Following this is a more focused review of current understanding of decision making in each of the three strands of the internationalisation literature considered. Gaps and implications for the current study are discussed (section 2.4).

In a similar fashion, the three strands of the literature are then reviewed with respect to cognition. The scope for a cognitive approach, the gaps and the implications for this study are discussed (section 2.5).

2.1 Criteria for Literature Search

The search for the literature relevant to this thesis was an iterative task. I returned to the drawing board of the literature search each time a potential new focus was identified for the thesis. Consequently, a number of searches were carried out in order to ensure that all relevant literature was identified.

Those searches mainly followed the strategies outlined below:

Keyword Searches (EBSCO): Searches by keyword were carried out mainly during the early stages of the literature search task. Examples of keywords used for the searches include “international”, “internationalisation”, “cross border business”, etc. The latter were used in conjunction with “small firms”, “SMEs”, “firm”, “enterprise”, etc. Keyword searches were carried out using mainly the field specific academic database EBSCO.

Key Scholars Searches: Identifying the key authors on the discipline of internationalisation of firms was accomplished by noticing the names most frequently cited, indicating those scholars that had driven the thinking in the discipline. In addition, key scholars were identified during the numerous supervisory meetings as well as during my attendance at relevant international conferences and seminars. Once key scholars investigating the topic of interest had been identified, I would search for their list of publications either through their web-pages or through dedicated academic search engines (e.g. EBSCO, Google Scholar). In some instances, and when a scholar was identified as having done work particularly relevant to the focus of the thesis (i.e. on cognition or decision making in the context of internationalising firms or entrepreneurship), I would contact the scholar directly in order to enquire whether more work in progress was available on the topic.

Published Literature Reviews Searches: When coming across recent published literature reviews on the field of internationalisation, I would scan their

bibliographic lists for items that could be relevant to the focus of the thesis. Examples of literature reviews include Keupp and Gassmann (2009) and Zahra (2005). Also scanned were the bibliographic lists from sources deemed highly relevant to the focus of the thesis.

Top Ranking Publication Searches: In the later stages of the literature search exercise, and once the research focus was fully established, I would scan the latest editions of major journals. Following Gamboa and Brouters (2008), I defined top journals on the basis of the Financial Times (FT) 40 list. According to this list, the top ranking journals in entrepreneurship, international business and management are *Entrepreneurship Theory and Practice* and *Journal of Small Business Management*, *Management International Review* and the *Journal of International Business Studies*, and *Strategic Management Journal*, *Academy of Management Journal*, *Academy of Management Review* and *Administrative Science Quarterly*. These publications were scanned for relevant literature up to the very last stages of the doctoral thesis write-up.

Other Sources and Search Strategies: Other sources of relevant literature for the thesis have included referrals from colleagues and from supervisors. The latter, aware of the focus of my doctoral dissertation, were often forthcoming with academic literature items that they had come across and that they perceived to be relevant to my thesis. Conference proceedings were also scanned but for recent academic work deemed very central to the research at hand (e.g. Kyvic, 2005; Grégoire et al., 2008).

In summary, the iterative literature search task involved a combination of searches repeated cyclically. Those searches can be classified into *Keyword Searches*, *Key Scholars Searches*, *Published Literature Reviews Searches*, *Top Ranking Publication Searches* and *Other Searches (including colleagues and supervisors' referrals and conference proceeding searches)*.

2.2 Boundaries of the Literature Reviewed

Establishing the boundaries of the literature to be reviewed for this thesis has been a challenging task. It has been challenging because research on small firm internationalisation is itself at the intersection of other more established fields of research such as International Business and Entrepreneurship (Dimitratos and Jones, 2005). In turn, each of those “parent” fields is in itself quite multidisciplinary in nature (Dimitratos and Jones, 2005).

Following an initial review of the broader literature, including International Business, Entrepreneurship, Strategy and Organisational Theory, each of these bodies of research was found to have potential to contribute to the research being conducted.

Furthermore, the International Business, Firm Strategy, Organisational Studies and Entrepreneurship literatures have all tackled the issue of cognitive factors, respectively through the idea of geocentric mindsets (e.g. Perlmutter, 1969; see Levy et al. 2007 for a recent literature review), managerial selective attention and interpretation of reality (Hambrick and Mason, 1984; Hambrick, 2007), organisational Sensemaking (Weick, 1995; Maitlis and Lawrence, 2007) and entrepreneurial traits and cognitive processes leading to opportunity recognition.

Whilst all of these perspectives are relevant to the internationalisation of the firm (Jones and Nummela, 2008; Young et al., 2003), including them all in a single thesis would have taken the focus away from the main theme of the thesis, namely the internationalisation of SMEs.

More importantly, each perspective belongs to a different epistemological tradition, which may not necessarily be compatible with small firm internationalisation. This is the case of international business theory of multinational enterprises (as pointed out by Coviello and McAuley, 1999, among others), which has been dominated by economic theories of perfect information (Andersson, 2000) and by strategic approaches to decision making.

Small firm internationalisation theory, on the other hand, recognises the resource constraints that SMEs face. These limitations in resources, in turn, lead

to different internationalisation choices than those made by large multinational firms (Zacharakis, 1997; Erramilli and D'Souza, 1993).

Importantly, small firm internationalisation theory recognises that decisions are made by the “behavioural man” with access to imperfect information, making decisions on the bases of bounded rationality (Andersson, 2000).

Consequently, this literature review focuses on the internationalisation of small and medium-sized enterprises (Andersen, 1993). This comprises both empirical and conceptual scholarly work that fits the criteria of small to medium firm size (European Commission, 2003), limited resource availability and bounded rationality outlined above.

Notwithstanding the criteria specified above, the literature review includes one of the economic approaches to internationalisation, namely the Transaction Cost Approach (TCA). This is taken as the starting point from which a case can be made for the limitations of the strategic, rational approach to internationalisation decisions, which characterises the TCA. Moreover, an overview of the TCA is considered relevant in that it provides the backdrop against which Buckley, Devinney and Louviere (2007) argued for a boundedly rational approach to internationalisation decisions.

2.3 Relevant Approaches to Internationalisation

Three approaches to internationalisation are reviewed in this chapter, with a view to drawing from and making a contribution to each.

Firstly, I review the Transaction Cost Approach to internationalisation, an approach relevant due to its addressing the issue of internationalisation decisions, although traditionally from a rather rational perspective. Secondly, I review the stage models of internationalisation, and chiefly the Uppsala Model of Internationalisation, since the process-based nature of the model is of relevance to this thesis. In fact, part of the thesis is concerned with changes in decision-making rationale over time, impacting in the patterns of internationalisation of the firm. Finally, rapid internationalisation approaches, and particularly the International New Ventures approach, are reviewed. The relevance of the latter stems not only from the fact that the approach may be

considered the state of the art at the time of writing of this thesis, but also as it addresses the role of the decision maker in the early internationalisation of the firm.

2.3.1 Transaction Cost Approaches

One of the economic approaches to internationalisation, the Transaction Cost Approach (TCA) is nonetheless relevant to a discussion on internationalisation decisions in that it directly addresses the decision to engage in market transactions that take place across the domestic borders of the country hosting the firm.

The TCA finds its roots in the early work of Coase (1937), later further elaborated on by Williamson (1975).

Coase (1937) first recognised that the concept of perfect competition in the market was flawed, in that market transactions do not happen by default but come at a cost. The costs involved in market transactions include negotiation of costs, knowledge-seeking, contracting and administration.

In Williamson's (1975) development of the transaction cost idea, he posits that there are behavioural limits to the efficient functioning of markets. These limits consist of the *bounded rationality* and *opportunism* of market players. Drawing on Simon (1961), Williamson observes that fully rational decision making is not possible, especially on complex problems that have uncertain outcomes, such as those present in trading markets. This is because human rationality is bounded by a number of limitations. These limitations include the lack of all necessary information about possible paths, limited computational abilities and limited appreciation of choice outcomes.

In addition, each actor, in Williamson's view, is motivated by his own self-interest. Thus, he will only act upon situations that yield a return that he values. Taken together, bounded rationality and opportunism are, in Williamson's transaction cost approach, the main reasons for hierarchies (firms) to exist. In fact, by incorporating these markets into the hierarchy of the firm, transaction

costs are reduced. In fact, there is a reduction in the complexity and the uncertainty of the decisions faced by the boundedly rational individual. Moreover, opportunism of firm members is easier to control within the hierarchy of the firm than it would be in the external market.

The application of the TCA to internationalisation, however, is attributed to the work of Buckley and Casson (1976) and Hennart (1977, 1982).

Buckley and Casson (1976) argue that in order to overcome the costs associated with transactions in the imperfect market, the firm may decide to internalise the market. When the internalisation of the market takes place across national borders, the internalisation of markets creates the Multi-National Enterprise. Of course, internalisation has to be cost effective, since the internalisation view of the MNE operates on the principle of profit maximisation. Thus, the costs associated with internalisation of markets must be inferior to the costs associated with carrying out the transaction in conditions of imperfect competition. Buckley and Casson (1976) give a clear outline of both the factors creating transaction costs and those generating internalisation costs. As long as transaction costs are inferior to internalisation costs, trading decisions (sales) are to be preferred. However, once the transaction costs exceed the costs of internalising the market, the choice must fall on market internalisation (foreign direct investment). Foreign market location choice will depend on three criteria: availability of raw materials (giving rise to vertical FDI), low-cost labour (leading to the choice of offshore production) and protected or fragmented markets (leading to a choice of FDI for market servicing - Buckley and Casson, 1985). However, the location choice is recognised as not having received a great deal of attention in the TCA to internationalisation.

Hennart's (2001) main critique of the TCA in internationalisation revolves around the idea that it does not explain contractual arrangements (e.g. licensing). He points out that by shifting the focus from the internalisation of markets to the internalisation of advantages, it is possible to explain asset-seeking FDI (such as knowledge-seeking FDI). Thus, entry modes such as patenting can be explained in terms of internalisation of the advantage for both the licensor (who can still

retain the advantage of making profits from its knowledge) and licensee (who can internalise the knowledge seeking advantage).

Moreover, Hennart (2001) argues that market failures alone are not a good enough reason for the MNE to exist, in that the costs of organising cross-country internalisation may be higher than the gains. He argues that MNEs' existence can be explained in terms of increased efficiency by comparison with international markets. Thus, any advances in technology that make cross-national interdependencies more efficient are likely to support the decision to form MNEs rather than pursue international markets. Hennart also replaces the concept of transaction (which implies that only existing forms of transaction can be considered by TCA) with that of interdependencies, which implies that any form of collaboration that can generate rents can be considered within the approach. As part of this reconceptualisation, Hennart (1988) discusses how transaction cost approach can explain the choice of joint ventures (as opposed to export, licensing and FDI).

From the brief discussion above, the TCA to internationalisation decision making appears rather prescriptive. It details the thresholds above which market internalisation (across national borders) should take place. As pointed out by Jones (1998), although this approach may not necessarily reflect the substantive rationality of internationalisation, particularly in smaller firms, the approach still provides a benchmark for optimal internationalisation decisions in order to internationalise successfully. This note is reflected in more recent work by Brouthers and Nakos (2004), who conclude that the strategic approach prescribed by transaction cost theorists does a poor job of explaining foreign market entry mode decisions in Small and Medium-sized Enterprises (SMEs). However, those firms that do follow TCA principles in their entry mode decisions enjoy better performance than those selecting entry modes according to other principles (Brouthers and Nakos, 2004).

In another study, Brouthers et al. (2003) argue that factors other than transaction cost factors can also affect the mode of foreign market entry. They call this approach the "enhanced transaction cost approach", as it includes TCA and non-TCA factors. The investigation is carried out on a sample of firms from

the UK, Germany and Holland and two mode choices are investigated: joint ventures (JVs) and wholly-owned subsidiaries (WOS). The non-TC factors found to impact on choices of entry mode are *firm size*, *firm experience*, *legal restrictions*. The TC factors affecting choice are *asset specificity* and *economic uncertainty*.

Originally based on the assumption of classical rationality¹, the application of the TCA to the internationalisation theory has recently recognised that decision making may not follow rational rules, particularly in SMEs. This point is further developed in a dedicated section on the TCA's view of internationalisation decisions (section 2.4.1 below).

2.3.2 Stage Models of Internationalisation

In order to describe the process of internationalisation of the firm, a number of stage models of internationalisation emerged in the late seventies and early eighties (e.g. Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 1990; Bilkey and Tesar, 1977; Cavusgil, 1980; Czinkota, 1982; Reid, 1981 - see Andersen, 1993 for a review). What these models have in common is that each of them prescribes a series of incremental internationalisation steps that firms follow, although the number of stages varies from model to model (see Figure 2.1 below).

¹ This assumption holds true for the application of the TCA to internationalisation, based on Buckley and Casson (1976), whereas the original conceptualisation of the TCA by Williamson (1975) recognises the bounded rationality of the individual agent.

Figure 2.1: Stage Models of Internationalisation (from Andersen, 1993: 213)

Bilkey and Tesar [1977]	Cavusgil [1980]	Czinkota [1982]	Reid [1981]
<p>Stage 1 Management is not interested in exporting</p> <p>Stage 2 Management is willing to fill unsolicited orders, but makes no effort to explore the feasibility of active exporting</p> <p>Stage 3 Management actively explores the feasibility of active exporting</p> <p>Stage 4 The firm exports on an experimental basis to some psychologically close country</p> <p>Stage 5 The firm is an experienced exporter</p> <p>Stage 6 Management explores the feasibility of exporting to other more psychologically distant countries</p>	<p>Stage 1 Domestic marketing: The firm sells only to the home market</p> <p>Stage 2 Pre-export stage: The firm searches for information and evaluates the feasibility of undertaking exporting</p> <p>Stage 3 Experimental involvement: The firm starts exporting on a limited basis to some psychologically close country</p> <p>Stage 4 Active involvement: Exporting to more new countries—direct exporting—Increase in sales volume</p> <p>Stage 5 Committed involvement: Management constantly makes choices in allocating limited resources between domestic and foreign markets</p>	<p>Stage 1 The completely uninterested firm</p> <p>Stage 2 The partially interested firm</p> <p>Stage 3 The exploring firm</p> <p>Stage 4 The experimental firm</p> <p>Stage 5 The experienced small exporter</p> <p>Stage 6 The experienced large exporter</p>	<p>Stage 1 Export awareness: Problem of opportunity recognition, arousal of need</p> <p>Stage 2 Export intention: Motivation, attitude, beliefs, and expectancy about export</p> <p>Stage 3 Export trial: Personal experience from limited exporting</p> <p>Stage 4 Export evaluation: Results from engaging in exporting</p> <p>Stage 5 Export acceptance: Adoption of exporting/rejection of exporting</p>

Of all stage models, the one with which that internationalisation process of the firm is mainly associated is the work of Johanson and Wiedersheim-Paul and Johanson and Vahlne (Andersen, 1993). The *Uppsala Stage Model of Internationalisation* (or *U-Model*, as the model is generally known), has been heavily criticised from a number of perspectives (see Jones, 1999 for an overview of critiques). However, perhaps due to its being more general and less restricted by time and firm size boundaries (Andersen, 1993), the U-Model has also been the most widely investigated of all stage models.

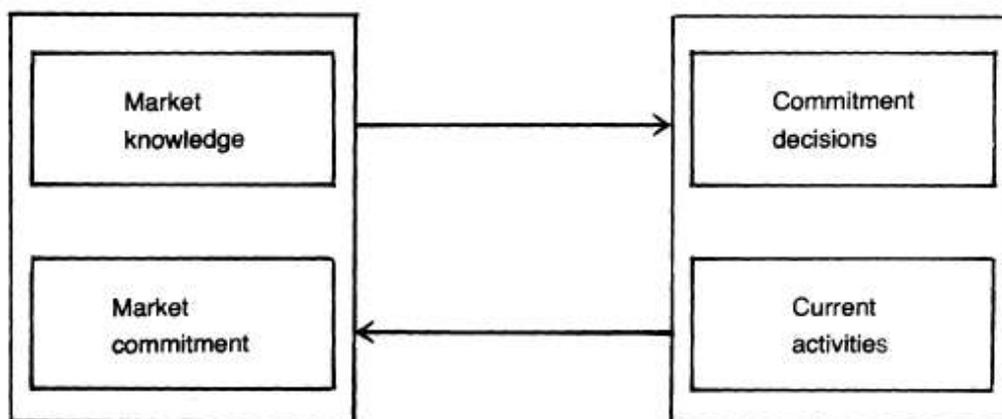
Thus, it is no surprise that most of the literature on incremental internationalisation processes reviewed in this chapter builds on the Uppsala Model (model based on Johanson and Vahlne, 1977, 1990).

The rationale of the Uppsala Model is very much based on the idea that experience impacts on the foreign market knowledge of the firm, in turn impacting on its internationalisation behaviour (based on Johanson and Vahlne, 1977, 1990).

The firm learns about the market through direct experience of it. Experiential learning results in both increased knowledge of the market and increased confidence in operating in it, through the reduction of psychic distance. In turn, the combination of the increased knowledge of and confidence in the market

results in increased commitment to it (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 1990 - see Figure 2.2 below)

Figure 2.2: The Basic Mechanism of Internationalisation (from Johanson and Vahlne, 1977:26)



This incremental market learning and commitment cycle explains the four stages that the U-Model consists of. Starting off domestically, *stage 1* consists of occasional, irregular exports. *Stage 2* consists of regular exports via an independent representative. As the firm learns and gains more experience of the foreign market, it may move on to *stage 3*, consisting of setting up a sale subsidiary. The firm eventually arrives at the final stage, *stage 4*, when it decides to set up production in the foreign market (Johanson and Wiedersheim-Paul, 1975).

2.3.3 Rapid Internationalisation Approaches

Rapid internationalisation approaches stem from a wave of critiques of traditional internationalisation theory, including incremental internationalisation models (McDougall et al., 1994).

The central idea of rapid internationalisation theories is that, differently from what stage models claim, smaller firms may internationalise their operations at inception stage or soon after (McDougall et al., 1994), with high involvement entry modes across multiple, often culturally distant foreign countries (Oviatt

and McDougall, 2005) without any pre-existing domestic experience (Rennie, 1993).

Rapid internationalisation approaches have been termed in a number of ways by different scholars. Bonaccorsi (1992) use the terms *committed internationalists*. Rennie (1993), along with Knight and Cavusgil (1996) termed those firms *Born Globals*. McDougall, Shane and Oviatt (1994) refer to the phenomenon as *International New Ventures*. To date, the most influential seminal works remain that of Rennie (1993) and that of McDougall and colleagues (McDougall et al., 1994).

Oviatt and McDougall define International New Ventures as “*a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries*” (Oviatt and McDougall, 1994: 49, 2005: 31).

Embedded in this definition is the chief enabler of International New Venturing: the bundle of resources it disposes of, which may be combined in such ways as to create value-adding strategies (Barney, 1991) that allow firms’ growth (Penrose, 1959) and grant resource position barriers (Wernerfelt, 1984), so that the competitive advantage of the firm over competitors is sustainable (Barney, 1991).

Of these resources, the key is the Entrepreneur in the Internationalising Firm (Holmlund and Kock, 1998; Westhead et al., 2001; Dhanaraj and Beamish, 2003). With his idiosyncratic experience and his abilities and competencies, the international entrepreneur is able to identify international opportunities and assemble the necessary resources to take advantage of them (Oviatt and McDougall, 2005).

The central role of the entrepreneur and of entrepreneurial behaviour in rapid firm internationalisation is reflected in the creation of an *International Entrepreneurship* field of enquiry (McDougall and Oviatt, 2000). Initially defined as “*a combination of innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organizations*” (McDougall and Oviatt, 2000: 903), International Entrepreneurship was later redefined as “*the discovery, enactment, evaluation, and exploitation of*

opportunities - across national borders - to create future goods and services” (Oviatt and McDougall, 2005: 540).

2.4 Theoretical Perspectives in Internationalisation Decisions

The ultimate purpose of the research presented in this thesis is to explain internationalisation decisions. The word *decision* implies a choice by the actor, which in this instance is the decision maker within the firm. Once a course of action is decided upon by the actor, some of the outcomes will be within his control but others will not be. Firm international performance and survival, for instance, may be influenced by the firm leader (Sapienza et al., 2006; Mudambi and Zahra, 2007; Kundu and Katz, 2003), but they are not deliberate choices he makes. In fact, performance and the ultimate survival of the firm are influenced by external environmental factors that the entrepreneur cannot control. Consequently, this thesis focuses solely on the decision-making process as opposed to outcomes of the decisions made by the firm leader.

The literature review below discusses how the concept of decision making is viewed in the Transaction Cost approach, in the Uppsala Internationalisation Model and in the International New Venture approach.

The incremental internationalisation model by Johanson and Vahlne considers two main internationalisation decisions, namely foreign country to enter and mode of entry (based on Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 1990, 2006, 2009). The INVs model, on the other hand, emphasises time of entry in the foreign market, as well as the very foundation of an INV firm.

2.4.1 Internationalisation Decisions in the Transaction Cost Approach

The TCA was originally developed in the context of multinational enterprises (MNEs). These are larger and have significantly more resources than small and medium-sized firms (SMEs). Since SMEs, as opposed to MNEs, are the focus of this thesis, it is worth noting that there is emerging evidence that the assumption of

rational decision making in the internationalisation decisions of SMEs is starting to disintegrate. The study by Brouthers and Nakos (2004) provides an example. A few more are given below.

Buckley (1989:94), discussing the foreign direct investment (FDI) decision in SMEs, admits that “decision making is much more likely to be personalised, involving *ad hoc*, short term reckoning based on individual perceptions and prejudice. Shortage of management time leads to the firm taking shortcuts without proper evaluation of alternatives”.

Brouthers et al. (1998), in the study whose title opened the introductory chapter of this thesis (“Driving Blind”), also investigate how strategic decision making works in smaller firms. In SMEs, in line with what was pointed out earlier, managerial time is limited, resources are scarce and the decision making tends to be done by one individual as opposed to a managerial board (Brouthers et al. 1998). In this study, managers of Dutch firms were asked to evaluate their information search, information analysis and selection processes (based on Mintzberg et al.’s 1976 classic study on rational decision making). The study finds that managers do collect relevant information for their strategic decisions. However, the information collected is largely disregarded at the analytical stage, which is not based on quantitative information. When it comes to selecting a course of action, the data collection and analysis is largely disregarded. Instead, managers tend to make decisions based on their intuition, personal background and preferences as opposed to best fit strategies based on rational processes (Brouthers et al., 1998).

Findings from the study by Buckley and colleagues (Buckley et al., 2007) carry some of the same features of those by Brouthers et al. (1998) in that they highlight the importance of distinguishing between the stages of the decision-making process (based on the idea of the foreign direct investment decision as a process, based on Aharoni, 1966) when considering whether decision making follows principles of rationality. The study distinguishes between two stages attributed to the decision making process in the foreign direct investment (FDI) choice. In the first stage, all alternative foreign direct investment options are compiled. During the second stage, an actual choice is made on the course of action to be taken, as selected out of all the possible alternatives listed during

the first stage. Following a study conducted using an experimental design and involving managing directors of selected firms, the authors conclude that different rules are used at different stages of the decision-making process. During the first stage, list of possible investment to consider are compiled following more rational rules. However, when it comes to making a decision on the FDI location, the rules followed are no longer as rational.

The discussion thus far opens up avenues for research that are intended to be addressed in this research. First, the recent scholarly work reviewed above has pointed out that decision making in internationalising firms does not follow rational rules such as those advocated by the Transaction Cost Approach. Rather, more subjective rules seem to be followed by those making the decision, particularly when it comes to choosing a course of action out of the information collected and the alternatives listed (Buckley et al., 2007). This thesis adopts this subjective, managerial level view of decision making.

With respect to the literature reviewed in this section, the intended contribution of this thesis lies in the exploration of a wider set of internationalisation decisions than the sole entry mode decisions or FDI location decisions. An array of other entry mode decisions, including exporting, licensing, joint ventures etc (see Young et al., 1989) will be explored in this thesis (thus answering the specific call by Buckley et al., 2007 for more research in this direction), along with foreign market selection decisions and foreign market exit decisions.

Another contribution of this thesis in relation to what is discussed above lies in the level of analysis. In fact, the subjective nature of decision making emerging from Buckley et al. (2007) calls for a shift in level of analysis. Since it is the decision maker that decides upon the course of action to follow according to his own subjective rules, the level of analysis in this thesis is the individual, the leader of the firm ultimately responsible for the internationalisation decisions to be made.

2.4.2 Internationalisation Decisions in the Uppsala Internationalisation Model

The Uppsala Internationalisation Model addresses two issues related to internationalisation decisions, namely the foreign market selection decisions and

the sequence of entry modes that the firm goes through in the chain of establishment (Johanson and Vahlne, 1977, 1990). The foreign market selection decision is explained through the concept of psychic distance. The sequence of increasing involvement in and commitment to the foreign market is explained through the accumulation of experience in the internationalising firm. Ongoing experience in the foreign market leads to continuous learning and accumulation of knowledge, which in turn impact on the changes in commitment to the foreign market, as observable through the sequence of modes selected to operate in the market. These start with low-control mode types (e.g. indirect sales) and progress towards more to high-control modes (e.g. wholly-owned subsidiaries).

Each of the aforementioned concepts forming part of the Uppsala Internationalisation Model, namely psychic distance, experience, experiential learning and knowledge is reviewed below.

Psychic Distance and the Foreign Market Selection Decisions

In the Uppsala Internationalisation Model, the fundamental criterion for foreign market selection is psychic distance (Johanson and Wiedersheim-Paul, 1975). That is, the firm chooses a country that is psychically close for its first foreign engagement.

Psychic distance is defined as “factors preventing or disturbing the flow of information between firm and market” (Johanson and Wiedersheim-Paul, 1975: 308). Those factors may include language, culture, political system, levels of country education and industrial development (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975).

The idea of psychic distance outlined in the incremental model of Johanson and colleagues encompasses both geographical distance and cultural distance. In fact, geographically distant markets may still be culturally similar, as in the case of the UK, US and Australia (Johanson and Wiedersheim-Paul, 1975).

There seem to be a tension in the literature between advocates of psychic distance as an objective, measurable, index based dimension (Dow and Karunaratna, 2006; Brewer, 2007) and those that take the view that psychic distance can only be understood in relation to managerial subjectivity, as

appraised by their cognition (Child et al., 2009). Striking a balance between the two views is an account of psychic distance that argues that the construct is composed of two factors: geographic/cultural distance and psychological distance (Dow, 2000). Geographic/cultural distance (based on Hofstede, 1980) is stable and more objectively defined, whereas psychological distance consists of a perception of the cultural distance which is dynamic and changes with experiential learning in the country (Dow, 2000).

In this respect, this study aims to investigate how foreign markets are selected by also including an exploration of the concept of psychic distance at the level of the decision maker (Child et al., 2009).

Incremental Foreign Market Commitment

The Uppsala Model of Internationalisation is centred on the idea of increasing foreign market commitment as the firm learns more and more experiential market knowledge is acquired (based on Johanson and Vahlne, 1977, 1999, see also Autio, 2005). Thus, experience and knowledge acquisitions are seen as antecedents to the decision to increase foreign market commitment.

In order to acquire knowledge from their experience in the foreign market, firms need to learn. Consequently, the concept of learning has been addressed in the literature on the internationalisation process theory. This concept is further discussed in the next section. Here, I shall focus more on the process aspect of firm growth in the foreign market, rather than the antecedent to this growth (i.e. experiential knowledge).

The main characteristic of the chain of establishment is that entry modes move from low involvement and low commitment to high involvement and high commitment. This has been challenged² both on a theoretical ground (Andersen, 1993) and by a number of empirical studies (Jones, 1999, 2001; McDougall et al., 1994; Crick, 2004; Sharma and Erramilli, 2004).

² This is not the only ground on which the Uppsala model has been challenged. Please see Andersen (1993), Jones (1999, 2001), Crick and Jones (2000), Sharma and Erramilli (2004), Vissak (2007), Welch and Luostarinen (1988) for other critiques of the model.

From a theoretical viewpoint, Andersen (1993) argues that, once started, the cycle of increased market knowledge leading to increased market commitment is assumed to unfold in an unchallenged manner. This inherently ignores any factors that may influence the process, including any managerial decision on future entry modes. This may not always be the case. Following initial exporting experience, firm managers may actually decide to decrease commitment abroad or de-internationalise altogether (e.g. Crick, 2003, 2004), rather than moving on to a higher involvement mode.

The decision to decrease commitment to the foreign market, and specifically that of exiting the market following direct experience of it, is a gap in the process theory of internationalisation that this thesis addresses directly by exploring the reasoning processes behind foreign market exit decisions (see Chapters 6 and 7).

Experience, Knowledge and Learning in the Uppsala Internationalisation Model

The Uppsala Internationalisation Model is based on the experience the firm accumulates through doing business in a foreign country (Johanson and Vahlne, 1977, 1999). Experience is seen as a firm level construct. Since the unit of analysis is the firm, it follows that when the firm has been operating in the domestic market only, it has no experience to draw upon when moving into foreign markets (DeClercq et al., 2005). Furthermore, the domestic experience the firm accumulates hinders its ability to learn and adapt to international markets (Autio et al., 2000; Sapienza et al., 2006; Blomsterno et al., 2004; DeClercq et al., 2005).

As the firm enters the foreign market and acquires more and more experience of it, it will increase its commitment to it through higher involvement modes. As commitment increases, so does the depth of the experience and of the experiential knowledge there (Johanson and Vahlne, 1977, 1990; Eriksson et al., 1997). The kind of experience the firm gains in this way is named *foreign country experience*.

Studies based on incremental firm internationalisation underline both the *depth of experience* within a foreign country and the *breath of international*

experience across multiple countries (Eriksson and Chetty, 2003; Chetty et al., 2006).

Within the same foreign country, firms may have experience of a single customer or of different customers (Eriksson and Chetty, 2003), thus acquiring *ongoing business experience* or *country experience* (Chetty et al., 2006). Ongoing business experience is defined as “those experiences that are gained in one specific resource commitment to a customer or other kind of business partner” (Chetty et al., 2006: 701). Country experience is defined as “the diverse set of experiences acquired from multiple business deals in one country” Chetty et al. (2006: 701). The breadth of *international experience* of firms is defined as “experiences from past businesses into diverse foreign markets” (Chetty et al., 2006:701).

The Uppsala Model of Internationalisation views experience as a source of *learning* for the firm. By increasing its commitment to the foreign country, the firm increases its involvement in the country. More involvement allows for the development of more experiential learning (Johanson and Vahlne, 1977, 1990, 2006, 2009).

But what do firms learn from increasing commitment abroad?

According to the incremental internationalisation literature, *knowledge* is the main outcome of experience (Johanson and Vahlne, 1977, 1990, 2006, 2009; Eriksson et al., 2000; Eriksson et al., 1997).

The original U-model focuses on experiential market knowledge, which encompasses knowledge about the business partners, clients and competitors abroad and knowledge of foreign institutional frameworks, norms and values (Eriksson et al., 1997: 343). However, Eriksson et al. (1997) argue that the firm also needs to develop general internationalisation knowledge. The latter is described as knowledge “neither specific to a country nor to a mode of entry. It is firm-specific and constitutes a particular firm’s way of going international” (Eriksson et al., 1997: 345).

Another aspect of the knowledge developed through firm’s direct experience abroad is that it is *tacit* (Eriksson et al., 2000, based on Polanyi, 1966). Tacit knowledge, unlike explicit knowledge, is not codified and cannot be easily

transferred to others. Therefore, it rests within those possessing it and cannot be separated from them (Polanyi, 1966).

The incremental internationalisation model also outlines the learning mechanisms of internationalising firms (Eriksson et al., 2000; Fletcher, 2007). To this end, the literature applies the Absorptive Capacity (Eriksson and Chetty, 2003; Petersen et al., 2008; Fletcher, 2007) construct (based on seminal work by Cohen and Levinthal, 1990 and reconceptualisation by Zahra and George, 2002). Absorptive Capacity is defined as ability to “recognize the value of new, external information, assimilate it, and apply it to commercial ends” (Cohen & Levinthal, 1990: 128). In order for the firm to recognise the value of new external information, the latter must be related to the firms’ current stock of expertise. As it recognises the value of the new information, the firm acquires it in an incremental manner. In turn, the increased stock of expertise will determine future courses of action, leading to new knowledge acquisition by the firm, and so on (Autio et al., 2000; Cohen and Levinthal, 1990). Consequently, a firm’s international learning is incremental and path-dependent (Eriksson et al., 2000; Autio et al., 2000).

Because of the incremental and path-dependent nature of firms’ learning, first steps in internationalisation determine what firms learn or do not learn from early experiences abroad (Eriksson et al., 2000). Early experiences in culturally distant markets, for instance, may leave the firm with little knowledge of the market. This is because the cultural gap is too wide and the firm hasn’t yet developed the “frame of reference” to recognize and absorb knowledge from it (Eriksson et al., 2000). At the same time, length of domestic experience before entering the foreign market also undermines the development of the right frame of reference to accommodate internationalisation knowledge (Blomsterno et al., 2004). This phenomenon is known in the literature as “learning advantage of newness” (Autio et al., 2000).

Of relevance to the current study is the fact that, although it is implicitly assumed that experience and experientially acquired knowledge (through learning) affect internationalisation decisions, how the former is leveraged and used in the latter has not been explained to any significant degree. One of the

intended contributions of this thesis consists of outlining the processes by which experience is leveraged and used in internationalisation decisions through the reasoning processes of the firm leader.

2.4.3 Internationalisation Decisions in International New Ventures

International New Venture theory (INV - Oviatt and McDougall, 1994; McDougall et al., 1994) has challenged the Uppsala Model's assumption that the firm starts off domestically and slowly builds a chain of establishment in culturally close markets.

The main challenge of rapid internationalisation theories to the process theory of internationalisation is that firms may choose high involvement and high commitment entry modes at inception stage or very early on in the internationalisation process (McDougall et al., 1994). According to International New Venture theory, high involvement modes early on in the process are possible thanks to the competencies that the entrepreneurs leading the firm have developed through previous experience (McDougall et al., 1994).

Thus, the roles of the founder in general, and of his experience in particular, are assumed to be relevant in understanding decision making in rapid internationalisation theory. Indeed, it has been pointed out that one of the distinctive features of INV theory is the shift in locus of decision making from the firm to the entrepreneur (Autio, 2005). Thus locus of decision making is reflected in the level of analysis of this thesis.

Founder's Experience in International New Venture

The decision making in international new ventures is considered at the level of the individual entrepreneur (Oviatt and McDougall, 2005; Autio, 2005). The decision-making processes he follows have not been overtly investigated in the literature. However, the literature on INVs implicitly appears to assume that the decisions the entrepreneur makes in the foundation and the early growth of the INV are influenced by his pre-firm foundation experience.

In fact, scholarly work has focused on establishing a link between the experience of the founder of the internationalising firm and the creation of an international

new venture (INV - Bloodgood et al., 1996; Evangelista, 2005; Kuemmerle, 2002; Zucchella et al., 2007). Founders experience has also been linked to the early growth of the INV (Hallbäck and Larimo, 2007), in terms of the intensity (Kundu and Katz, 2003; Reuber and Fischer, 1997; Sapienza et al., 2006), the speed (Johnson, 2004) and the location (Madsen and Servais, 1997; Coeurderoy and Murray, 2008) of international growth efforts. Some have argued that the experience of the entrepreneur (in terms of his prior international experience) is one of the key factors that distinguish founders of INVs from founders of firms that decide to remain confined to the boundaries of their domestic market (Hansen and Witcowski, 1999).

INV theory holds that although the firm may be newly established and inexperienced both domestically and abroad, its founder - or founding team - is often experienced (McDougall et al., 1994). The set of experiences that the founders of INVs bring to the internationalisation process include *International Experience* and *Industry Experience* (McDougall et al., 2003). In the work of McDougall and colleagues, International Experience refers to the international work experience of INV founders, whereas Industry Experience refers to previous experience in the same industry as that of the INV (based on McDougall et al. 2003).

The role of industry experience has received less attention in the INVs literature (McDougall et al. 2003; Evangelista, 2005) in comparison to that of international experience.

Both types of experience, namely International Experience and Industry Experience are taken into consideration in this thesis in terms of their being leveraged and used during the reasoning processes leading to internationalisation decisions.

INV theory sees the entrepreneur and his experience as a key resource in the international growth of the firm (Oviatt and McDougall, 1994, based on Penrose, 1959). Generally, there is agreement in the literature with regards to the strong positive effect of international entrepreneurial experience in the rapid internationalisation of the firm (Belso-Martinez, 2006; Bloodgood et al., 1996; Crick and Jones, 2000; Evangelista, 2005; Johnson, 2004; Kuemmerle, 2002;

Madsen and Servais, 1997; Reuber and Fischer, 1997; Sapienza et al., 2006; Weerawardena et al., 2007; Zhang et al., 2009).

However, there are discrepancies in the definitions and operationalisation of international experience. In fact, international experience may consist of foreign work experience (McDougall et al., 2003; Blodgood et al., 2006; Evangelista; Ibeh, 2003), of living or studying abroad (Evangelista, 2005; Kuemmerle, 2002) or of international *exposure* (Blodgood et al., 2006; Kuemmerle, 2002). The latter in turn includes exposure to international environments through international studies (Kuemmerle, 2002), whereas international work experience may include international sales experience (Reuber and Fischer, 1997). There are also differences in the number of countries and the years of experience that are used to measure international experience.

In order to facilitate an understanding of how this study positions itself in relation to each type of experience, a description of the types of experiences considered in relation to each type of internationalisation decision is provided in the cross-case analysis chapter (Chapter 6).

Empirical studies based on rapid internationalisation theories have placed emphasis on the antecedents to time of international market entry (Reuber and Fischer, 1997) and speed of international growth (Johnson, 2004).

According to Jones and Coviello (2005), the time dimension is central in the internationalisation of the firm. The authors point out that international entrepreneurial behaviour consists of specific events at specific points in time (Jones and Coviello, 2005). In the longer time period, each internationalisation event at each point in time will form a pattern of internationalisation (Jones, 1999; Jones and Coviello, 2005), where the outcome of each event impacts on the time and content of later internationalisation decisions. This dynamic process has been explained through learning theory. In particular, Prashantham and Young (2009) outline how the learning following INV creation, as influenced by the absorptive capacity of the firm (Cohen and Levinthal, 1990; Zahra and George, 2002) as well as its social capital impacts on speed of internationalisation in terms of country scope and commitment.

This dimension of time as relevant to the *sequence* of events experienced by the firm leader during the internationalisation process is taken into account in the study. Specifically, it is relevant to understanding whether the reasoning processes entrepreneurs use change over time and as a result of experience. This is reflected in the second research question that drives this study, and is discussed in the chapters dedicated to the data analysis (particularly Chapter 6) and findings (Chapter 7).

Recent studies have focused on a number of factors underpinning entry mode decisions. Those have included studies on the influence of *firm age* (Stray et al., 2001), of the *foreign country* to enter (Ibeh et al., 2004), and of the *business model* of the firm (Ojala and Tyrväinen, 2006). In addition, some studies have looked at the preference of firms to use solo entry modes versus collaborative entry modes. Avoidance of market uncertainty (Terjesen et al., 2008), especially in violently dynamic markets (Li and Qian, 2008), and high promotional efforts (Li and Qian, 2008), have been found to be associated with collaborative entry modes. Innovative advantages, on the other hand, make the firm more inclined to go solo (Li and Qian, 2008).

Mode of entry has also been linked to firm size, in that smaller firms, with fewer assets and employees, have a preference for acquisition, whereas larger firms with more liquidity tend to prefer joined ventures (Gleason and Wiggernhorn, 2007).

In terms of the foreign market selected for entry, the limited literature that could be found within the rapid internationalisation perspective considers the role of the previous experience of the founders (Madsen and Servais, 1997), as well as the role of the legal environment (Coeurderoy and Murray, 2008) on the geographical location of the internationalising firm.

Madsen and Servais (1997) posit that high technology born global firms choose their geographical location for international growth in accordance with the previous experience of the founders. These may have created unique customer-relationships with firms they supply and that they intend to follow in foreign markets.

Following a different logic altogether, and in line with the basic principles of the transaction cost approach, Coeurderoy and Murray (2008) view the choice of foreign location as influenced by the new technology-based firm's intention to minimise transaction costs. This may be achieved through the selection of a country that offers better intellectual property regulations and protection.

In what may be considered a somewhat unique study in the literature on international entrepreneurship, Lévesque and Shepherd (2004) offer a normative model of optimal entry timing decision depending on the level of emergence, and associated mortality risk, of the country to enter.

2.4.4 Summary: Internationalisation Decision Making - Perspectives and Implications

This section has discussed how internationalisation decisions are viewed in the three theoretical perspectives considered, namely, the Transaction Cost Approach (TCA), the Uppsala Internationalisation Model (also referred to as Internationalisation Process Theory - IPT) and the International New Venture Theory (INV - also referred to as Rapid Internationalisation Approach). I shall pause at this point to take stock of the key points from this literature and point out how they inform the study presented in this thesis. To this end, a summary is presented in table 2.1 below. Each of the sections above has concluded with a brief outline of the contribution that this thesis intends to make to internationalisation decision making with respect to the theoretical perspective considered. Table 2.1 (overleaf) captures those key points in a more succinct manner.

Table 2.1: Internationalisation Decision Making - Perspectives and Link to Current Study

Theoretical Approach	View of Decision Making	Relevant Scholarly Work	Link to current study
TCA	<p>Early work: Maximisation of rents, minimisation of costs, firm level</p> <p>Recent work: Decision making based on both organisational and managerial rules, focus on FDI and other entry modes</p>	<p>Buckley and Casson, 1976</p> <p>Brouthers and Nakos, 2004; Buckley et al., 2007</p>	<p>Study Adopts: Consideration of managerial subjective rules</p> <p>Study Contributes: - Wider set of internationalisation decisions, including country selection, entry modes and market exits; - Individual as unit of analysis</p>
IPT	<p>Foreign market selection based on psychic distance</p> <p>Incremental commitment to foreign market not allowing for decreases in commitment;</p> <p>Foreign market experience and knowledge impact on decisions</p> <p>Firm level</p>	<p>Johanson and Wiedersheim-Paul, 1975; Dow, 2000; Child et al., 2009</p> <p>Johanson and Vahlne, 1977, 1990</p> <p>Eriksson et al., 1997; Eriksson and Chetty, 2003; Chetty et al., 2006</p> <p>Autio (2005)</p>	<p>Study Adopts: Psychic distance at subjective managerial level, view of decisions in a process sequence, impact of experience and knowledge on internationalisation decisions</p> <p>Study Contributes: - Exploration of psychic distance at managerial, subjective level; - Exploration of decisions to decrease commitment and exit markets; - Exploration of the mechanisms by which experience and knowledge impact on decisions; - Individual level</p>
INV	<p>Early internationalisation decisions influenced founders experience (e.g. international, industry), individual level</p>	<p>Bloodgood et al., 1997; Kuemmerle, 2002; Madsen and Servais, 1997; Reuber and Fischer, 1997; Sapienza et al., 2006</p>	<p>Study Adopts: Individual level, role of founders experience</p> <p>Study Contributes: - Exploration of the mechanisms by which the experience of founders impacts on decisions</p>

2.5 Theoretical Perspectives on Cognition in Internationalisation

The central tenet of this thesis is that the internationalisation decisions of firm leaders can be viewed as a cognitive process.

Therefore, there is value in reviewing how the various strands of the literature on internationalisation have approached the cognitive lens. Mirroring the approach adopted in the previous section, each of the three strands is reviewed with a view to understanding the scope for cognition and the way cognition has been addressed. The section concludes with a summary of the key themes from the literature and the implications for the current research.

2.5.1 Cognition in the Transaction Cost Approach

The transaction cost approach (Buckley and Casson, 1976) does not directly address cognition. In the approach, cognition in general and the boundaries of human reasoning and motives in particular have not been addressed until very recently (Buckley et al., 2007).

The transaction cost approach (TCA), as applied to multinational enterprises, is based on principles of profit maximisation and cost minimisation, all falling within a rather rationally oriented perspective (for a recent review of economic approaches from this angle see Buckley et al., 2007). Thus, the approach implicitly assumes that the decision maker has access to perfect information that will enable him to estimate the costs of all options and chose the one which will yield higher rents.

In making this assumption, the TCA, as applied to internationalisation, seems to sit uncomfortably with the bounded rationality principle that forms the basis of the original TCA developed by Williamson (1975). In Williamson's TCA, the decision maker does not have access to perfect information to predict all possible courses of action and the outcome of each (please see dedicated literature review on bounded rationality in Chapter 3). Furthermore, Williamson (1975) recognises that the choices of the human actor may stem from opportunistic self interest. The very existence of the firm, as a form of

internalisation, is explained in terms of aligning individuals' opportunistic behaviour into an entity that pursues the common good.

These considerations of limitations in human reasoning and actions dictated by personal motives are considerations that relate to human cognition. In Williamson's (1975) approach, the human actor is the centre of attention, the level of analysis, with the limitations and biases imposed by his reasoning. However, when the focus switches from the human agent to the firm, and in particular the internationalising firm (Buckley and Casson, 1976), this aspect related to cognition is no longer addressed directly, although it is implicitly assumed to be there at the individual level.

By taking the decision maker as the level of analysis, this thesis switches the focus back onto the individual, with his cognitive limitations and idiosyncratic motives.

The cognitive approach taken by this research follows the call by Buckley and colleagues (Buckley et al., 2007) for studies aimed at advancing managerial decision making processes from a cognitive viewpoint.

2.5.2 Cognition in the Uppsala Model of Internationalisation

I open this section by advancing an argument in favour of the relevance of a cognitive approach to internationalisation as seen through the literature on the Uppsala Model of Internationalisation. My understanding of the cognitive lens is that, although its value has been highlighted relatively recently and mainly within the rapid internationalisation approach (e.g. Acedo and Florin, 2006; Zahra et al., 2005), elements that may be considered of a cognitive nature, or having a cognitive implication, seem to be deeply rooted in the process approach to internationalisation.

The Uppsala Model of Internationalisation emphasises the role of experiential learning (Johanson and Vahlne, 1977, 1990, 2006). The learning framework that incremental internationalisation scholars have drawn on most frequently is the "absorptive capacity" framework (based on seminal work by Cohen and Levinthal, 1990; and adopted by Eriksson and Chetty, 2003; Fletcher, 2007;

Petersen et al., 2008). The latter is defined as the firm's "ability to value, assimilate, and apply new knowledge" (Cohen and Levinthal, 1990: 128).

This definition closely mirrors that of contemporary, knowledge processing paradigms of cognitive psychology, which define cognition as a science concerned with how individuals "gain knowledge about their world, and how they use that knowledge to guide decisions and perform effective actions" (Bower and Hilgard, 1981: 421). Thus, an argument can be made that the very adoption of a learning theory implies the adoption of a cognitive learning lens. This is made explicit in the seminal paper by Cohen and Levinthal (1990), who dedicate the first part of the paper to individual level learning and memory formation.

The internationalisation process literature is based on the behavioural theory of the firm by Cyert and March (1963, see Johanson and Vahlne, 1977). In turn, the behavioural theory of the firm builds on the concept of bounded rationality of Herbert Simon (see Chapter 3). The subjective motives of the firm leader, which may not necessarily revolve around maximisation of profit, and the imperfect information that the leader makes decisions on, are in fact one of the two arguments on which the behavioural theory of the firm builds (Johanson and Vahlne, 1977, based on Cyert and March, 1963).

From the discussion above, it is reasonable to conclude that a cognitive perspective is not only relevant to the study of internationalisation processes in smaller firms, but that it is deeply embedded in some of the key theories on which the approach has been built.

Furthermore, a link to cognitive elements appears to have been part of the Uppsala Model itself since its early emergence.

Seminal work by Johanson and Wiedersheim Paul (1975) and Wiedersheim Paul et al. (1978) highlighted the importance of entrepreneurial characteristics in the internationalisation of the firm. Johanson and Wiedersheim-Paul (1975) assert that *attitudes* are at the core of the decision to internationalise. Wiedersheim Paul et al. (1978) hold that the *value-profile* of the entrepreneur in general, and his *international outlook* in particular, influence firm leaders' decisions with

regards to internationalisations. Both seminal papers state clearly that these values and attitudes stem from previous experience and affect decision making. Despite being alluded to in the aforementioned influential studies, these decision maker's cognitive traits have not been researched to any meaningful extent in the literature on incremental internationalisation. Although cognitive traits as such are not investigated directly in this study, the discussion here is intended to add to my argument that a cognitive lens is somehow present in the early work of scholars from the Uppsala School.

Other factors that implicitly point towards the cognitive theme in the Uppsala Model of Internationalisation are *perceptions* and *psychic distance*.

Perceptions have been studied as of outcome of experience (Eriksson et al., 1997; Eriksson and Chetty, 2003; Chetty et al., 2006 - see earlier discussion on experience and experiential knowledge in the Uppsala Internationalisation Model).

The literature on experiential learning links knowledge - or the lack of it - to firm *perceptions* (e.g. Eriksson et al., 1997; Eriksson and Chetty, 2003; Chetty et al., 2006; Petersen et al., 2008). According to Petersen and colleagues, ongoing foreign market experience leads the firm to recognise what it does not yet know. Thus, the firm's *perception of knowledge gaps* increases (Petersen et al., 2008). The same is found to hold true for firms that become involved with the larger foreign customer network (Eriksson and Chetty, 2003), and are thus exposed to a large variety of knowledge sources. On the other hand, the in-depth experience of the relationship with the foreign customer itself is found to decrease the firm's perception of lack of knowledge (Eriksson and Chetty, 2003). Ongoing business experience and international experience have been linked to the firms' *perceptions of the importance of foreign countries' institutional knowledge* (Chetty et al., 2006).

An association has also been found between firm's lack of experiential knowledge and the *perceived cost of internationalisation* (Eriksson et al., 1997). That is, an inexperienced firm will perceive higher internationalisation costs (Eriksson et al., 1997).

Perceptions are arguably a subjective, and therefore inherently biased, outcome of experience (author's own deduction based on cognitive theory, e.g. Braisby and Gellatly, 2005, and on later development of cognitive theory in rapid internationalisation approaches - presented later in the chapter - which recognise the individual level locus of cognition). Therefore, they may be considered from a cognitive perspective. The literature on firm learning, however, treats perceptions as firm level constructs rather than as an individual level cognitive trait. Still, from a closer look at the methodological approaches of this literature, it emerges that the respondent is often a single individual within the firm, who may be either the president, the chief executive officer or any other managerial figure in charge of international operations (this is the case for Eriksson et al., 1997; Eriksson and Chetty, 2003; Chetty et al., 2006; Petersen et al., 2008). Therefore, it is reasonable to advance the claim that these are, in fact, decision makers' subjective perceptions rather than firm perceptions. This claim supports the relevance of the individual level, cognitive approach taken in this study.

Also in relation to the focus of this study, it must be pointed out that these studies of perceptions, as stemming from a number of experientially-acquired experiences, do not explore the processes by which such perceptions affect internationalisation decisions. Furthermore, the mechanics of leveraging the content of experience and experiential knowledge and using the latter in decision making situation have not been addressed in the aforementioned literature. This study aims to add to this strand of the literature by uncovering the cognitive processes that link experience to internationalisation decisions. Perceptions, although not addressed directly as a snapshot of decision makers' cognition, are present in the reasoning processes explored.

Psychic distance has been linked to the foreign market selection decision during the early stages of internationalisation (Johanson and Vahlne, 1977). Once the foreign market is entered and more knowledge of it is acquired, psychic distance is reduced (Dow, 2000). This latter study suggests an idiosyncratic, dynamic, and path-dependent nature for the concept of psychic distance. In turn, this points in the direction of a rather more subjective and relative construct that the

objective and absolute psychic distance indexes recognise (e.g. Dow and Karunaratna, 2006; Brewer, 2007).

Thus, further enquiry into the concept of psychic distance in internationalisation decisions seems appropriate. In particular, this study takes into account the idiosyncratic experience of the decision maker, which shapes the latter's idiosyncratic *perception of distance* and, in turn, impacts on internationalisation decisions. Such an approach would also be in line with recent developments in the concept of psychic distance which point towards the need to take decision makers' cognition into account (Child et al., 2009) when considering psychic distance. In keeping with such approach, psychic distance is viewed as an individual level construct (Child et al., 2009), as opposed to a firm level factor.

In summary, an argument can be made that the concept of "cognition", although new as a label, is not new within the Uppsala Model of Internationalisation and the literature that built on it. Of direct relevance to this thesis is the point that the very foundations of the approach rest on the behavioural theory of the firm (Cyert and March, 1963), in turn built on Simon's bounded rationality. This implies limitation in the cognitive abilities of the human decision maker. This thesis adopts this standpoint, along with an adoption of a bounded rationality stance.

In terms of contributions, the thesis goes beyond the concept of perceptions stemming from experience to link experience more directly to decision making through an exploration of cognitive processes. The thesis also makes a contribution to the notion of psychic distance by considering the distance perceived by the decision maker based on his idiosyncratic experience and knowledge.

2.5.3 Cognition in International Entrepreneurship

The concept of cognition becomes openly adopted in rapid internationalisation approaches in general and in the emerging literature on International Entrepreneurship (McDougall and Oviatt, 2000; Oviatt and McDougall, 2005) in particular. Here, I shall review this literature to identify how cognition (as

directly or indirectly referred to) is viewed. The fact that the entrepreneur is viewed as the key to the early internationalisation of the firm hints at the fact that his role as a cognising human being is considered in the approach.

The entrepreneur is, in fact, the key actor in the early internationalisation of firms (McDougall et al., 1994). He is key in the internationalisation process for two reasons. First, because his previous experience and his unique competencies leading to opportunity recognition are seen as resources (Oviatt and McDougall, 2005; Alvarez and Busenitz, 2001). Second, the entrepreneur is the *mediator* between the forces at play around the firm and the rapid internationalisation of the new venture (Oviatt and McDougall, 2005; Bell et al., 2003). As a mediator, the entrepreneur perceives and interprets both internal and external circumstances surrounding the firm (Oviatt and McDougall, 2005) according to his characteristics and mental models (Bell et al., 2003).

This very subjective interpretation of the reality surrounding the firm is also rooted in the work of Penrose, which is at the foundations of International New Venture and International Entrepreneurship theory.

In Penrose's own words (1959: 42):

“We shall be interested in the environment as an ‘image’ in the entrepreneur’s mind. [...] If we can discover what determines entrepreneurial ideas about what the firm can and cannot do, that is, what determines the nature and extend of the ‘subjective’ productive opportunity of the firm, we can at least know where to look if we want to explain or predict the actions of particular firms”.

Thus, the argument here is that a cognitive approach can answer the Penrosean call for uncovering managerial subjective mental processes, which is also of central importance in rapid internationalisation models (as by Oviatt and McDougall, 2005; Bell et al., 2003).

To date, International Entrepreneurship literature has yet not answered this call to investigate the mechanisms behind entrepreneurial subjective reasoning.

Rapid internationalisation literature has not provided answers to the questions as to how entrepreneurial subjective reasoning determines particular courses of actions in internationalising firms. In other words, the process by which entrepreneurial cognition leads to rapid internationalisation decisions has not been fully described. Rather, the literature has mainly established causal relationships between entrepreneurial characteristics and the rapid internationalisation of the firm (McDougall et al., 2003; Acedo and Casillas, 2007; Loane et al., 2007; Moen and Servais, 2002; Zucchella et al., 2007).

Recently, scholars have called for a cognitive view in IE enquiry (Zahra et al., 2005; Acedo and Florin, 2006). Nevertheless, studies adopting cognitive approaches remain very few and far between (e.g. Rasmussen et al., 2001; Acedo and Florin, 2006; Acedo and Jones, 2007; Gómez-Gras et al., 2009; Autio et al., 2011).

The rapid internationalisation literature features studies on orientations, attitudes, mindsets, intentions and perceptions. Some of those studies explicitly refer to those characteristics as *cognitive* (e.g. Acedo and Florin, 2006; Acedo and Jones, 2007), whilst others do not. This scholarly work is deemed relevant to a discussion on cognitive approaches to the rapid internationalisation of firms. Thus, this work is reviewed below.

Firstly, this section reviews studies on firm orientations, whereby orientations have been treated mainly as a firm level construct. Then the section reviews an emerging body of literature on cognitive characteristics impacting on the rapid internationalisation of the firm. This latter body of literature views cognitive characteristics as belonging to the owner or manager of the internationalising firm. In accordance, the level of analysis tends to be the individual managing the internationalising firms.

It must be pointed out that orientations are treated separately from other cognitive traits affecting International New Ventures not only for the general difference in level of analysis but also because they form a more consistent body

of literature in comparison with studies of cognitive characteristics at the individual level, which may be said to be more fragmented.

Orientations in Rapid Internationalisation Approaches

Scholarly work on the role of *Orientations* in the rapid and successful internationalisation of firms is mostly rooted in the concept of strategic orientations based on Lumpkin and Dess (1996). In line with the latter, strategic orientations generally refer to processes, practices and decision-making styles (Lumpkin and Dess, 1996) which enable the firm to internationalise rapidly (Jantunen et al., 2008) and achieve superior performance (Jantunen et al., 2005).

A number of different *types of orientations* have been investigated in relation to the rapid internationalization of firms.

Knight (2000) reports on the impact of *entrepreneurial orientation* on the performance of the born global firm, as mediated by tailored marketing strategies and tactics. Jantunen et al. (2005) also find that entrepreneurial orientation has a positive effect on the performance of the firm through the firm's reconfiguration capabilities. This refers to the building of new capabilities, the transformation of firm's asset base and the reconfiguration of firm's processes and structures in order to achieve new valuable resource combinations (Jantunen et al., 2005). More recently, another study by Jantunen et al. (2008) did not find support for the hypothesis that variations in entrepreneurial orientation, along with international growth orientation, affect internationalisation performance. Nevertheless, the latter study highlights the need of strategic orientations (including entrepreneurial orientation) as a prerequisite to becoming a born global firm (Jantunen et al., 2008). Entrepreneurial orientation is also found to increase the commitment to the Internet, in turn leading to increased performance in the new international venture (Mostafa et al., 2006). In contrast, Frishammar and Andersson (2009) find entrepreneurial orientation to carry a low explanatory power as far as the international performance of small firms is concerned. This could be due to the

fact that entrepreneurial orientation affects international firm performance indirectly, and that other mediating variables have to be considered. In this respect, of note is the study by Sapienza, De Clercq and Sandberg (2005) which finds that entrepreneurial orientation, along with early entry into foreign markets, positively affects the development of a culture of learning within the firm. That is, the firm deploys more effort in learning both in the domestic and in the international market (Sapienza et al., 2005). In line with the concept of *learning advantages of newness* (Autio et al., 2000), Sapienza et al. (2005) suggest that entrepreneurial orientation and early entry in the foreign market may enable successful internationalisation indirectly by stimulating learning in the foreign environment and, consequently, international growth (based on Autio et al., 2000 and Sapienza et al., 2005).

The concept of *International Entrepreneurial Orientation* has also been advanced by Knight (2001) as an antecedent to international performance of born global firms. Findings from Knight's (2001) study reveal that international entrepreneurial orientation is positively linked with parameters such as internationalisation preparation, strategic competence, and technology acquisition. In turn, these positively impact on the international performance of the born global firm (Knight, 2001). Knight and Cavusgil (2004) also found support for the idea that international entrepreneurial orientation positively affects the development of a number of firm level capabilities. The latter include global technological competence, unique product development, and quality focus. Those capabilities, in turn, impact positively on the international performance of the born global firm (Knight and Cavusgil, 2004).

In a more recent work, Knight and Kim (2009) further develop the concept of strategic orientations and the framing of the latter as firm competencies. They introduce the concept of international business competence, which incorporates two types of orientations, namely *International Orientation* and *International Market Orientation*, and find support for the hypotheses that international business competencies impact positively on a number of measures of a firm's international performance (Knight and Kim, 2009).

Other types of orientations include *export entrepreneurial orientation*, positively linked to export venturing (Ibeh, 2003), and a series of orientations found to impact on the development of an international entrepreneurial culture (Dimitratos and Plakoyiannaki, 2003). Those include *international market orientation*, *international learning orientation*, *international innovation propensity*, *international risk attitude*, *international networking orientation* and *international motivation* (Dimitratos and Plakoyiannaki, 2003).

Some studies have uncovered that orientations, both at firm and at individual level, depend on previous entrepreneurial experience (Blesa et al., 2008; Boehe, 2009; Filatotchev et al., 2009).

Boehe (2009) finds that previous international experience of a sample of Brazilian firm executives increases firm levels of *International Entrepreneurial Orientation*. In a similar vein, Filatotchev et al. (2009) found an association between entrepreneurs' international experience and the *export orientation* of their Chinese firms.

Firms' early international commitment was also found to generate *market orientation* in Spanish and Belgian International New Ventures (Blesa et al., 2009).

In all the studies on orientations discussed so far, the construct has been discussed at firm level, thus as a firm capability rather than an entrepreneurial trait. However, if orientations are an outcome of individual experience, it follows that they exist in the mind of the entrepreneur before they can be made into a firm level capability. Again, this supports the individual level view taken in this thesis.

In addition, and more to the point of this thesis, although orientations may be predictive of intentions and ultimately of behaviour (based on Fishbein and Ajzen, 1975), orientations alone do not explain decisions, unless the former are linked to the latter through an explanatory process. However, no studies offering this type of causal link between orientations and internationalisation decisions could be found.

The current study does not directly address the concept of orientations. Rather, as with perceptions, it moves beyond the static cognitive trait (which may only

be appraised at one point in time) to investigate the processes of cognition determining international decisions.

Cognitive Characteristics in Rapid Internationalisation Approaches

This section reviews studies within the rapid internationalisation literature which have addressed cognitive characteristics at the level of the individual decision maker.

It is fair to say that this emerging body of literature is still quite fragmented in terms of the cognitive characteristics considered. Cognitive characteristics may consist of *mindsets*, *attitudes*, *orientations*, *postures*, etc. In turn, the latter are linked either to *rapid internationalisation* patterns or *performance* of internationalising firms.

For instance, Nummela et al. (2004) investigate the concept of *global mindset* of the firm manager and its impact on the international *performance* of the firm, finding that the former is associated with the latter. In this study, global mindset is described as “a manager’s positive attitude towards international affairs, and also to his or her ability to adjust to different environments and cultures” Nummela et al., 2004: 53, based on van Bilck, 1979).

Kundu and Katz (2003) also study the performance of born international SMEs, focussing on exporting firms. They use the concept of *Glocalisation orientation* (that is, thinking global, acting local), finding that its impact on the export performance of the internationalising firm is weak.

Some studies refer to *attitudes* and *mindsets* of firm managers, linking the latter to *accelerated internationalisation*. In a qualitative study investigating the *strategic mindset* of senior managers, Freeman and Cavusgil (2007) define a typology of commitment states of managers. They explaining how highly adaptive managers that operate through a highly personal and direct interaction lead the firm to rapid internationalisation. Another study uses a similar concept, referring to the concept of *proactive managerial attitude in relation to international strategy* (Pla-Barber and Escriba-Esteve, 2006). The

aforementioned managerial attitude is also linked to the accelerated internationalisation process of the firm.

Other studies combine a number of cognitive traits of the manager of the international new venture firm. For instance, Acedo and Florin (2006) combine *proactive disposition, cognitive style, tolerance for ambiguity and international orientation* into the concept of *individual international posture*. The latter is found to be mediated by *risk perception* in its link to the degree of internationalization of the firm. Similarly, Acedo and Jones (2007) find that *risk perception* moderates the relationship between interrelated cognitive characteristics of the entrepreneur and the speed of internationalisation of the firm. The cognitive characteristics considered in this particular study are *International Orientation, Proactivity and Tolerance for Ambiguity* (Acedo and Jones, 2007). Weerawardena, Sullivan Mort, Liesch and Knight (2007) also posit that a number of individual level cognitive factors impact on the accelerated internationalization of the firm as mediated by the development of a series of dynamic capabilities. Factors include *international entrepreneurial orientation, learning orientation* and *geocentric mindset*, along with prior international experience of the owner/manager of the firm. The latter factors are proposed as antecedents to the development of *market-focused learning capabilities, internally focused learning capabilities* and *networking capabilities* (Weerawardena et al., 2007).

Finally, somewhat disjointed from other studies investigating individual level cognitive characteristics of the owner manager is a study by Kropp, Lindsay and Shoham (2008), who apply the concept of *entrepreneurial orientation* (as based on Lumpkin and Dess, 1996 - thus mirroring the firm level concept reviewed in the previous section) in a study aimed at explaining the international entrepreneurial business venture (IEBV) start-up decision. In the study, entrepreneurial orientation is composed of three cognitive characteristics of the decision maker, *namely proactiveness, risk seeking and innovativeness*. The study finds that proactiveness and risk seeking positively impact on the decision to start an international entrepreneurial business venture (Kropp et al., 2008).

The scholarly papers reviewed in this section of the chapter are mostly hypothesis testing. Yet, since the cognitive approach in the rapid internationalisation literature is in its infancy, studies should aim to build theory based on rich data before moving on to theory testing. This thesis takes a qualitative approach with a specific view to paving the way for theory building.

Moreover, whether explicitly or implicitly referred to as cognitive characteristics, the characteristics approach can be described as static. That is, the approach does not describe the processes which link the antecedent cognitive characteristics to the outcomes. To this end, a cognitive *process* such as the one taken in this study may add value in that it shows *how* cognition ultimately determines internationalisation through reasoning and decision making.

Finally, unlike the approaches discussed above, the current study aims to explain internationalisation decisions which, although ultimately impacting on performance, come before performance in the process of early decision making. By focussing on the reasoning processes preceding early internationalisation decisions, this thesis advances current understanding of the reasons behind the rapid internationalisation of new firms.

Dynamic Capabilities Development in Rapid Internationalisation Approaches

Only very recently, a study by Autio, George and Alexy (2011) has taken a rather more dynamic, process approach to the study of cognition in international entrepreneurship. This is in sharp contrast to the static approaches to internationalization cognition reviewed above.

In their article, Autio et al. (2011) develop a cognitive model of dynamic capability development by new firms faced with fundamental uncertainty in their internationalisation process.

In the study, capabilities refer to “a firm’s capacity to purposefully deploy a combination of resources and processes to achieve a desired goal” (Autio et al., 2011: 12, based on Amit and Schoemaker, 1993). The adoption of a dynamic

capabilities approach is in line with the idea that organisational capabilities impact on firm performance (e.g. Autio et al., 2000; Sapienza et al., 2006).

The study develops theory using rich, case study data. In this respect, it addresses another shortcoming identified in the literature on internationalisation cognition discussed above, namely the lack of theory building studies in the emerging area of cognition in internationalisation.

Findings from Autio et al. (2011) point in the direction of both the *intensity* of the uncertainty (that is, the cognitive distance to the level of ambiguity, variability and complexity presented by the new setting) and the *repeated* uncertainty (due to the continuous entry into yet new markets) triggering a variety of firm responses that offer the opportunity for learning from experience and from trial and error. Eventually, the firm³ develops an array of possible organising processes (*Diversity*), as well as an ability to execute each process (*Dexterity*). The cognitive map of the firm also becomes more *transparent* and *percipient*. That is, the causal links between certain organising processes and their outcomes become clear (*Transparency*), whilst the firm's higher order cognition allows for the recognition of complex relationships and for the selection of appropriate organising processes according to the environment at hand (*Percipience*).

The rationale of the scholarly work reviewed above is in line with the focus on process that is adopted in the present study. However, in contrast to Autio and colleagues (Autio et al., 2011), the study presented here focuses more on the deployment of the content of cognitive structures during decision making rather than the formation of such content through repeated experience. From this viewpoint, this study presented here offers insights that are complementary to those by Autio, George and Alexy (2011).

³ The study takes the firm as the level of analysis, as reflected in the methodological approach.

2.5.4 Summary: Cognition in Internationalisation - Perspectives and Implications

This section has reviewed the three strands of the internationalisation literature considered in this thesis to understand how the concept of cognition is addressed in each. The three theoretical perspectives considered are the Transaction Cost Approach (TCA), the Uppsala Internationalisation Model (also referred to as Internationalisation Process Theory - IPT) and the International Entrepreneurship approach (also referred to as Rapid Internationalisation Approach).

It has been pointed out that each of those approaches builds on seminal work that, to different degrees, recognises the role of the human agent, with the associated boundaries in human reasoning. Thus, they can be viewed from cognitive viewpoints.

The key themes from the review and the implications of these for the current study have been discussed at the end of each section above. Table 2.2 overleaf summarises them more concisely.

Table 2.2: Cognition in Internationalisation - Perspectives and Link to Current Study

Theoretical Approach	View of Cognition	Relevant Scholarly Work	Link to current study
TCA	<p>Early work: Classical rationality at firm level, builds on bounded rationality at individual level</p> <p>Recent Work: Bounded Rationality, link to cognition</p>	<p>Buckley and Casson (1976); Williamson (1975)</p> <p>Buckley et al. (2007)</p>	<p>Study adopts: Principle of bounded rationality at the core of Williamson's (1975) TCA</p> <p>Study Contributes: Exploration of managerial decision making processes from a cognitive prospective</p>
IPT	<p>Based on theory of the firm and bounded rationality</p> <p>Perceptions</p> <p>Psychic Distance</p>	<p>Cyert and March (1963), in Johanson and Vahlne (1977)</p> <p>Eriksson et al. (1997), Eriksson and Chetty(2003), Chetty et al. (2006)</p> <p>Johanson and Vahlne (1977), Dow (2000), Dow and Karunaratna, 2006), Brewer (2007), Child et al., 2009</p>	<p>Study Adopts: Bounded rationality principles, idiosyncratic view of psychic distance</p> <p>Study Contributes: Bypassing perceptions to link experience directly to decisions. Exploration of psychic distance at individual level from cognitive reasoning view.</p>
INV	<p>Role of the individual and his views and interpretations</p> <p>Orientations (at firm level)</p> <p>Entrepreneurial traits (mindsets, attitudes, orientations, postures)</p> <p>Dynamic capabilities building processes</p>	<p>Oviatt and McDougall (2005), based on Penrose (1959), Bell et al. (2003)</p> <p>Knight (2000, 2001), Knight and Cavusgil (2004); Knight and Kim (2009), Jantunen et al. (2005, 2008), Sapienza et al. (2005)</p> <p>Acedo and Florin (2006), Acedo and Jones (2007), Nummela (2004), Weerawardena et al. (2007)</p> <p>Autio et al. (2011)</p>	<p>Study adopts: Entrepreneur as level of analysis, entrepreneur's perception and interpretation of reality</p> <p>Study Contributes: Dynamic, process approach to cognition (as opposed to static traits) Focus on deployment of cognitive content in decision making (as opposed to construction of cognitive content)</p>

2.6 Conclusions and Implications

This chapter has provided the reader with a review of the literature on internationalisation with respect to two themes central to the research conducted in this thesis, namely, decision making and cognition. Three theoretical approaches to internationalisation have been considered, namely, the Transaction Cost Approach (TCA), the Uppsala Internationalisation Model (also referred to as Internationalisation Process Theory - IPT) and the International New Venture (INV) approach or International Entrepreneurship (also referred to as Rapid Internationalisation Approach).

More detailed accounts of the gaps identified in each strand of the literature in relation to both decision making and cognition have been given at earlier points in the chapter. Overall, the gaps identified in the literature may be summarised as follows:

- Classic rationality has been found inadequate to explain internationalisation decisions (e.g. Buckley et al., 2007), and;
- Bounded rationality is at the core of respectively transaction cost approaches (based on Williamson, 1975; recently outlined by Buckley et al, 2007), internationalisation process theory (Johanson and Vahlne, 1977, drawing on Cyert and March, 1963) and international entrepreneurship theory (Oviatt and McDougall, 2005, drawing on Penrose, 1959), and;
- An understanding of decision-making processes under conditions of bounded rationality is still lacking within the smaller firm internationalisation literature.
- In answer to recent calls by internationalisation scholars, this thesis endeavours to fill this gap by applying a cognitive reasoning perspective at the level of the individual decision maker that stretches across different types of internationalisation decisions (responding to Buckley et al., 2007).

Chapter 3

Bounded Rationality, Cognition and Heuristics

The previous chapter has ascertained that:

- Classic rationality has been found inadequate to explain internationalisation decisions (e.g. Buckley et al., 2007), and;
- Bounded rationality is at the core of respectively transaction cost approaches (based on Williamson, 1975), internationalisation process theory (Johanson and Vahlne, 1977, drawing on Cyert and March, 1963) and international entrepreneurship theory (Oviatt and McDougall, 2005, drawing on Penrose, 1959), and;
- An understanding of cognitive decision-making processes under conditions of bounded rationality is still lacking within the smaller firm internationalisation literature.

The aim of this chapter is to outline the theoretical framework that this thesis adopts in order to pave the way for the creation of a cognitive approach to decision making in SMEs.

The theoretical framework applied is that of Heuristics and Biases, developed by Tversky and Kahneman (1974, 2000; Kahneman et al., 2001). The reason behind the choice of this theory is straightforward. This thesis is based on the tenet that decision makers in SMEs are subject to bounded rationality (Brouthers et al., 1998; Buckley et al., 2007). Consequently, the theoretical framework adopted is a cognitive approach to decision making that builds on Herbert Simon's principles of bounded rationality (Simon, 1961, 1992). Two psychology scholars, namely Amos Tversky and Daniel Kahneman, are renowned for having built on Herbert Simon's bounded rationality (Simon, 1961, 1992) with their theory of reasoning and choice under uncertainty (Kahneman, 2003). Consequently, their theory of Heuristics and Bias (Tversky and Kahneman, 1974, 2000; Kahneman et al., 2001) is deemed fit for the purpose of this thesis.

The theory of Heuristics and Biases has been part of the entrepreneurial cognition literature since the early nineties (e.g. Manimala, 1992).

Recently, the potential of heuristics to explain internationalisation processes has also been recognised by internationalisation scholars (e.g. Bingham et al., 2007; Grégoire et al., 2008). It has been advanced that heuristics based cognitive mechanisms may be involved in entrepreneurs' early internationalisation decisions (Grégoire et al., 2008; D. Williams, e-mail to author, 28 June 2010).

This chapter unfolds in the following manner. Sections 1 to 4 introduce the main concepts of the chapter and their relevance to the entrepreneurship and internationalisation literatures.

Section 3.1 introduces the concept of bounded rationality and the conditions it poses on human decision making.

Section 3.2 outlines how bounded rationality theory has been advanced by heuristic studies of cognitive decision making.

Section 3.3 gives a detailed account of the three heuristics identified by Tversky and Kahneman (1974, Kahneman et al., 2001) and of the biases associated with each heuristic. This section includes a further bias that has been discussed in the entrepreneurship literature, namely the status quo bias (Burmeister and Schade, 2007).

Section 3.4 gives a general outline of the role of heuristics and biases in entrepreneurship research.

Section 3.5 discusses the very early adoption of heuristics in the internationalisation literature.

Section 3.6 offers an overview of the main criticisms to heuristics and biases and states why the theory is still relevant to this thesis, despite those criticisms.

Section 3.7 concludes the chapter with a discussion on the dynamicity of heuristics. It outlines the main arguments of the debate as to whether heuristics change over time or they stay relatively stable in human reasoning.

3.1 Bounded Rationality in Decision Making

To say that the decision maker is “boundedly rational” is not to say that he makes “irrational” decisions. Rather, he is limited in the rationality he is able to

apply. As Simon puts it, the decision maker is “*intendedly* rational, but only *limitedly* so” (Simon, 1961: xxiv).

Simon developed the concept of Bounded Rationality throughout the fifties and sixties (e.g. Simon, 1955, 1957, 1961) in order to address the limitations of rational approaches to decision making on which the classical and neoclassical economic theory of the firm was based (Simon, 1978). He argues that neoclassical economic theories of organisational decision making sacrifice the complexities of realism in the name of predictability and parsimony (Simon, 1978). In fact, by assuming perfectly rational agents, classical rationality theories can easily make predictions about decision making based on the sole observation of environmental constraints. Not only does this approach have limitations in its faithfulness to reality, Simon argues, but it can also be easily falsified by employing micro-level behavioural observations (Simon, 1978). Furthermore, the predictive nature of the approach puts a great deal of emphasis on *what* is decided rather than *how* the decision is made. This begs the question of *how* problems are represented and *how* decisions are made in organisations (Simon, 1961).

Rational approaches to internationalisation decision making are, by and large, characterised by three stages (Brouthers et al., 1998). First, a screening of all alternatives is undertaken. Then an evaluation of each alternative and of its projected outcomes is carried out. Finally, a decision is made on the course of action that is most suited to the desired outcomes. Examples of these three-stage approaches to rational decision making are Mintzberg et al.’s (1976) strategic decision making theory and Casson’s (2003) theory of entrepreneurial decision making .

These approaches are based on a number of assumptions. They assume perfect information of all alternative courses of action by the decision maker and an ability to compute all the possible outcomes of each course of action (Simon, 1961, 1978; Viale, 1992). These assumptions have been contested. Following Williamson (1975), a quotation from Feldman and Kanter (1965) is used here to illustrate the limitations of rational decision making approaches:

“For even moderately complex problems...the entire decision tree cannot be generated. There are several reasons why this is so: one is the size of the tree.

The number of alternative paths in complex decision problems is very large. ...A second reason is that in most decision situations, unlike chess, neither the alternative paths nor the rule for generating them is available. ...A Third reason is the problem of estimating consequences. ...For many problems, consequences of alternatives are difficult, if not impossible, to estimate. The comprehensive decision model is not feasible for most interesting decision problems”

(Feldman and Kanter, 1965: 615).

This quote is representative of the boundaries that Simon found to affect perfectly rational decision making. He identifies three main boundaries to rationality, namely, *uncertainty and risk* in the decision outcome, *incomplete information* about alternative courses of action, and decision *complexity*, where the number of environmental factors is so high that computing them all to arrive to the best course of action is not feasible (Simon, 1972).

According to Simon (1972), if the decision making *process* does not follow that prescribed by classical rationality, the decision *outcome* will also depart from that of classical and neoclassical economics (Simon, 1978). In fact, the goal of profit maximisation can only be achieved by knowing in advance all possible courses of action and the outcome of each in terms of rent generation. However, bounded rationality principles dictate that the information required in order to calculating the most profitable course of action is neither available nor computable. Thus, the ultimate goal of absolute profit maximisation cannot be achieved. In its place, Simon (1972, 1979) proposes a *satisficing* approach, whereby the decision maker has a set of aspirations guiding his search and, once those aspirations are satisfied, the search is terminated and a decision is made (Simon, 1978, 1979).

3.2 Bounded Rationality, Heuristics and Cognition

The principles of bounded rationality are related to limits in human *memory* and *computational* abilities. These are topics that fall within the domain of cognitive psychology (Simon, 1992). Studies investigating the rules of thumb used to select certain information from memory and disregard others - that is, studies of

heuristic reasoning - have been carried out by cognitive psychology scholars (Simon, 1992). Over the years, the bulk of the evidence on decision making processes under conditions of bounded rationality has come from information processing psychology (Simon, 1978).

These studies have looked at information storage and retrieval in human memory. Findings have shown that the representation of information in human agents is often biased and unreliable (Viale, 1992). Furthermore, when it comes to making predictions about event outcomes, not all relevant knowledge available is drawn upon, but rather, decision makers select certain evidence at their disposal and neglect other equally important pieces of information (Viale, 1992, drawing on Tversky and Kahneman, 1973).

Seminal work on heuristic reasoning under conditions of uncertainty was published in the early seventies by Tversky and Kahneman (Kahneman and Tversky, 1973; Tversky and Kahneman, 1974). Tversky and Kahneman built on Simon's bounded rationality and heuristics (Kahneman, 2003) by identifying which heuristics are employed in decision making under conditions of uncertainty. The scholars identify three main heuristics, each generating a series of biases in human reasoning. Heuristics and biases are discussed in the following section.

3.3 Heuristics and Associated Biases

This section draws on the seminal work of Tversky and Kahneman to discuss the three main heuristics those scholars identified and the biases associated with them. The examples provided to illustrate the theory come from the original work of Tversky and Kahneman as well as from their application to managerial decision making (Bazerman, 2002).

Some of the biases forming the original theory have been studied within the context of entrepreneurship. Wherever they are available, entrepreneurship studies are discussed in relation to each bias.

Although *heuristics and biases* are often mentioned together, it is important to point out that they are not the same thing.

Heuristics are rules of thumb, used in reasoning under conditions of uncertainty (Tversky and Kahneman, 1974). They are shortcuts that allow for making quick

and reasonably reliable judgements that substitute for the lengthy gathering and processing of all relevant information, which humans tend not to do (Braisby and Gellatly, 2005) and would not be able to do due to boundaries in their rationality (Simon, 1992; Kahneman, 2003).

Biases are the errors stemming from the use of heuristic reasoning. In fact, although heuristics are generally useful, sometimes they may lead to errors in judgement. Consequently, there are a number of biases associated with each of the three main heuristics, namely *Representativeness*, *Availability* and the *Anchoring and Adjusting* (Tversky and Kahneman, 1974; see also Bazerman, 2002 for an application of heuristics and biases to managerial decision making). Each of these heuristics and the biases associated with them are discussed in detail below.

3.3.1 The Representativeness Heuristic

The Representativeness Heuristic is used when making judgements on whether the situation, event or object at hand is a member of a certain category by reasoning on how similar or typical it is of that category (Kahneman and Tversky, 1973; Tversky and Kahneman, 1974, 2000; Kahneman et al., 2001; Grether, 1980, 1992; Braisby and Gellatly, 2005;). For instance, when people make judgements about a person on the basis of a few attributes of that person, they are using the representativeness heuristic (Kort and Vermeulen, 2008). Likewise, when the likelihood of an event is judged by few previous observations of similar events, the person is reasoning on representativeness logic (Kort and Vermeulen, 2008).

Kahneman and Tversky (1973) discuss a series of experiments aimed at investigating the use of the representativeness heuristic in judgement as opposed to the Bayesian logic of probability distribution.

One of these will be briefly outlined as an illustration of the use of the heuristic and of the biases it leads to. Experiment participants were given the personal profile of a man called Jack, without a specific mention of Jack's occupation, and were told that Jack belongs to a group of 100 people taking a personality test, of which 30 were engineers and 70 were lawyers. Although no occupation was specified, the profile presented carried some stereotypical features of an

engineer. Experiment participants ignored the fact that, from a probabilistic viewpoint, Jack would have been more likely to be a lawyer than an engineer (for the mere fact that lawyers were considerably more than engineers in the sample, at 70 versus 30) and focused solely on the representativeness of Jack's traits of the category of engineers. Thus, they used the representativeness heuristic to conclude that Jack was an engineer (summarised from Kahneman and Tversky, 1973).

The example above is indicative of a number of one of the *biases* associated with the use of the representativeness heuristic, namely the *Insensitivity to Base Rates* (also known as *Insensitivity to Prior Probabilistic Outcomes*, see Kahneman and Tversky, 1973). That is, "when assessing the likelihood of events, individuals tend to ignore the base rates if any other descriptive information is provided - even if it is irrelevant" (Bazerman, 2002: 38)

The other biases originating from the representativeness heuristic are also associated with the aforementioned idea of a consistent underestimation of the unreliability of small, non-random samples. Those include the *Insensitivity to Sample Size*, the *Misconception of Chance*, the *Insensitivity to Predictability*, the *Illusion of Validity* and the *Misconception of Regression* (for a detailed description see Tversky and Kahneman, 1974, also Bazerman, 2002).

The representativeness heuristic and some of the biases associated with it have been studied in entrepreneurial settings.

In Katz's (1992) theoretical cognitive model of employment status choice, the representativeness heuristic is used in the final selection of a course of action from the alternatives identified. The decision maker tries to recall stereotypical examples of each of the employment statuses that he has identified as possible alternatives. Depending on the representations he has of those, some will look more appealing than others and a decision is made on the grounds of the most appealing status representative.

The best-known study of heuristic reasoning in entrepreneurship is probably that by Busenitz and Barney (1997). They found that entrepreneurs make more extensive use of the representativeness heuristic in comparison to managers in large organisations. They conclude that entrepreneurs rely on the heuristic in order to make swift decisions on emerging opportunities. Those opportunities require fast action in order to take advantage of them before the window of

opportunity is closed (Busenitz and Barney, 1997). Thus, the entrepreneur reasons on the similarity of the situation at hand to other previously experienced situations. However, in doing so, he neglects the fact that the small sample of those previously experienced situations may not be representative of the objective reality (Busenitz and Barney, 1997).

The bias described above has become known in the entrepreneurship literature as the *belief in the law of small numbers* (Simon et al., 2000; Simon and Houghton, 2002; Keh et al., 2002).

Simon and colleagues (Simon et al., 2000) found support for their hypothesis that the *belief in the law of small numbers* reduces the perception of risk in the entrepreneurial decision to start a new venture. Entrepreneurs subject to this bias tend to rely on few examples of venture start-ups. Furthermore, since the success stories tend to be discussed more, the examples considered are likely to be positive, thus reducing the perception of risks associated with start-ups (Simon et al., 2000).

The findings from the study by Simon et al. (2002) are echoed by those of a study by Keh et al. (2002). They also find that the belief in the law of small numbers positively affects the decision to start a new venture. However, unlike Simon and colleagues, Keh et al. (2002) find that the relationship is not mediated by risk perception.

The belief in the law of small numbers has also been studied in entrepreneurial decision making after new venture start-up. Simon and Houghton (2002) find that entrepreneurs in smaller young firms also tend to be biased by the belief in the law of small numbers when deciding on courses of action. In fact, they tend to rely on few detailed accounts from personal acquaintances rather than on a higher number of less detailed accounts from more objective sources (Simon and Houghton, 2002). Furthermore, the stories told by personal contacts may be more emotionally charged, lively and interesting, making the entrepreneur all the more willing to rely on them (Simon and Houghton, 2002).

3.3.2 The Availability Heuristic

The availability heuristic is used when people estimate the likelihood or the frequency of an event according to instances of similar events that are readily

accessible in their mind (Tversky and Kahneman, 1973, 1974, 2000; Kahneman et al., 2001; Schwarz et al., 1991; MacLeod and Campbell, 1992; Braisby and Gellatly, 2005). When making judgements about outcomes which are uncertain, people search in their memories for examples of similar situations of which they are aware. Consequently, the memory search mechanisms, or “priming” mechanisms used will determine whether the search is more or less accurate.

Tversky and Kahneman (1974) established that memory search mechanisms related to the use of the availability heuristic generate four main biases. Those biases are due to the *retrievability of instances* (also known as *ease of recall* in the managerial context, see Bazerman, 2002), to the *effectiveness of the search*, the *imaginability* and the *illusory correlation* (also known as *presumed association*, see Bazerman, 2002).

The classical illustration of the *retrievability of instances bias* (or *ease of recall bias*) is the experiment conducted by Tversky and Kahneman (1974) on the estimate of gender representation in a list containing famous names. In the experiment, subjects heard lists of names of both genders which contained some well-known names. A group of subjects heard a list where the majority of names were male names but the female names were quite well known. Another group was presented with a list containing some well-known male names, although the list contained more female names overall. In both instances, people were asked to estimate which gender was the most numerous in the list they had heard. Both groups failed correctly to estimate the gender that was most numerous in the list, basing their estimates on their recollection of the famous names instead (Tversky and Kahneman, 1974). This happened because the famous names were more easily retrievable in subjects’ minds than the less well-known names.

The bias stemming from the *ease of recall bias* is based on *vividness* and *recency* of instances (Bazerman, 2002). Events that are fresh in people’s memory, or those that are very vivid, are those most readily available in mental searches. According to Bazerman (2002) this bias is likely to affect managerial decisions. For instance, when making performance appraisals, managers are influenced by vivid memories of employees’ behaviour. In addition, recent memories of employees’ behaviour count. Memories from the three months immediately prior to the appraisal influence managerial judgement more than memories dating back to the previous nine months (Bazerman, 2002).

Entrepreneurial learning from critical events (Cope and Watts, 2000; Cope, 2005) is likely to be linked to the role of vividness in the ease of recall bias. Cope and Watts (2000) find that strongly positive or negative events are charged with highly emotional content which triggers higher level learning. These events are long lasting in the memories of entrepreneurs (Cope and Watts, 2000). The vividness of those memories in the mind of entrepreneurs is likely to make them easily retrievable when making judgements (based on Cope and Watts, 2000 and Bazerman, 2002).

Retrievability of certain content from memory is also influenced by the emotions present at the moment of the search, a phenomenon called *mood-dependent memory* (Baron, 2008, based on Baddeley, 1990 and Eich, 1995).

Baron (2008) discusses the impact of the type of emotions experienced by entrepreneurs during decision making. He postulates that positive emotions allow for faster, more efficient decision making. On the contrary, negative emotions slow down decision making and call for an exhaustive examination of all possible alternatives. Based on mood-dependent memory theory, this may be explained by the fact that positive moods trigger the recollection of memories formed when the person was in a similarly positive mood. The same happens for negative moods (Baron, 2008, based on Baddeley, 1990 and Eich, 1995).

The *effectiveness of search bias* (Tversky and Kahneman, 1974) is based on *memory structures* (Bazerman, 2002).

The problem solving exercise originally used to assess this bias is one of word searching in memory. When asked to search for instances of words starting with “r” and instances of words with “r” in the third positions, individuals find it easier to access words belonging to the former category (Tversky and Kahneman, 1974). Generally, people judge that words starting with a certain consonant are more numerous than those with that same consonant in the third position (Tversky and Kahneman, 1974). That is because memories of words are structured according to first letters, not third letters.

Bazerman (2002) provides a suitable example of the relevance of memory structures from the organisational context. Organisations, like memory, are structured in such a way as to provide order and predictability. Whenever a manager is looking for an expert in computer applications, he is likely to contact

the information systems division. However, if the organisation is structured in such a way that the expert in computer application is not located within the information system department but elsewhere, the manager may not trace the location of the expert he needs (Bazerman, 2002).

3.3.3 The Anchoring and Adjustment Heuristic

The anchoring and adjustment heuristic is used when estimating the likelihood or value of something starting from an initial anchor and adjusting the estimate on the basis of the anchor (Tversky and Kahneman, 1974). The biases stemming from this specific heuristic are related to the fact that adjustments from the anchor are usually insufficient (Tversky and Kahneman, 1974; Epley and Gilovich, 2006).

Three main biases are associated with the anchoring and adjustment Heuristic (Slovic and Lichtenstein 1971; Neale and Bazerman, 1992), namely, the *Insufficient Adjustment Bias*, Bias in the *Evaluation of Conjunctive and Disjunctive Events* and the *Anchoring in the Assessment of Subjective Probability Distribution* (Tversky and Kahneman, 1974). This last bias has become known within the managerial and entrepreneurial literatures as the *overconfidence bias* (e.g. Bazerman, 2002; Busenitz, 1999). Each bias linked to the anchoring and adjustment heuristic is discussed below.

The *Insufficient Adjustment* bias has been demonstrated in a study where participants were asked to estimate different quantities in percentages. In one of the instances, they were asked to estimate the percentage of African countries in the United Nations (Tversky and Kahneman, 1974). Participants were asked to make those estimates by making adjustments from a value, ranging from 0 to 100, randomly determined by spinning a fortune wheel. Notably, the wheel was spun in front of the participants. Participants with anchoring values of 10 and 65 estimated that the percentage of African countries in the United Nations was 25 and 45 respectively. Thus, despite the participants knowing that the anchor was completely random and irrelevant to the estimate, they still failed to adjust sufficiently from the anchor (Tversky and Kahneman, 1974).

In the managerial context, an example of the insufficient adjustment bias is that of salary negotiations and pay rises (Bazerman, 2002). Employers ask new recruits for details of their previous salary so that they can adjust from it and decide on the salary that they should pay. Bazerman (2002) argues that, although this has become common practice to the point that it is no longer questioned, it may in fact not be a fair system. In fact, if the employee was underpaid in his previous job, the adjustment from the previous salary may mean he continues to be underpaid by comparison with the true value of his services. The same, Bazerman (2002) argues, holds true for employees that are consistently overpaid.

The bias in the *evaluation of conjunctive and disjunctive events* stems from the idea that the probability of disjunctive events, that is, events that occur independently, is consistently underestimated (Tversky and Kahneman, 1974). Conversely, the probability of conjunctive events, that is, of events that occur in conjunction with one another, is usually overestimated (Tversky and Kahneman, 1974). The reason behind these errors in estimates is that judgements are made on the basis of anchoring values prescribed for either conjunctive or disjunctive events. An example may illustrate this more clearly. Bar-Hiller (1973, in Tversky and Kahneman, 1974 and in Bazerman, 2002) gave participants a choice between two events to bet on. Three events were used in the study: a simple event, a conjunctive event and a disjunctive event. The simple event was the estimate of drawing a red marble from a bag containing 50% red and 50% white marbles; the conjunctive event consisted of drawing a red marble seven times in a row, with replacement, from a bag containing 90% red and 10% white marbles; the disjunctive event consisted of drawing a red marble at least once in seven consecutive attempts, with replacement, from a bag containing 10% red and 90% white marbles. The outcome of the study clearly showed that the anchoring figures provided by the percentages of marbles of a certain colour significantly and wrongly affected the choice of the participants. In fact, subjects asked to choose between the simple and the conjunctive event preferred betting on the latter, even though the probability of the simple event was statistically higher (.50 for the simple event versus .48 for the conjunctive event). When given the choice between the simple and the disjunctive, participants placed their bets on

the simple event (with probability .50) rather than on the disjunctive event (with probability .52; Bar-Hiller, 1973). Since disjunctive events have a low individual probability, this low value is used as an anchor to establish the likelihood of the event. However, the anchoring value distracts the judgement from considering that the low probability of each event rises when multiple disjointed events are considered, since only one event needs to happen over the range of possible events with low probability. This, according to Tversky and Kahneman (1974) is a typical bias in the evaluation of risk. In fact, a complex system stops functioning if any of its components stops working. Even though the chance of each component failing is low, the overall chance that any of these components may fail is quite high, as it is the case in nuclear reactors (Tversky and Kahneman, 1974). On the other hand, large undertakings, such as projects, suffer from overestimation of conjunctive events. That is because a number of events must happen together for the overall project to succeed. Although the likelihood of each event is high, if any of these events does not happen the overall project is likely to be delayed. However, this is seldom considered, as the anchoring value of the probability of each conjunctive event taking place is high (Tversky and Kahneman, 1974).

The *Overconfidence* bias, originally named *anchoring in the assessment of subjective probability distribution* (Kahneman and Tversky, 1974), stems from the fact that when individuals are asked to provide an anchoring estimate, their confidence in the value provided is unjustifiably high. Put differently, the confidence intervals individuals provide for their own estimates are quite narrow (Tversky and Kahneman, 1974).

The overconfidence bias features often in the entrepreneurship literature. Thus, the discussion of it outlined below draws on this literature rather than on examples from the original theory of heuristics and biases.

Busenitz and Barney (1997) found support for their hypothesis that entrepreneurs are subject to the overconfidence bias more than managers in large organisations. The overconfidence bias allows entrepreneurs to make swift decisions in front of uncertain outcomes (Busenitz and Barney, 1997). Therefore, the overconfidence bias is involved in decision making under conditions of bounded rationality (Cooper et al., 1995). In fact, overconfidence in

entrepreneurs has been found to be associated with a less extensive search for information during the new venture creation decisions (Cooper et al., 1995). In a survey conducted by Cooper et al. (1988) entrepreneurs were found to be highly *optimistic* about their chance of success. They were far more optimistic about the success of their own business start-up than they were about other business start-ups (Cooper et al., 1988). However, this excess of optimism may not be justified by their actual chances of achieving the desired outcomes (Cooper et al., 1988). It has been postulated that the overconfidence that entrepreneurs display may lead them to commit insufficient resources and liquidity to their venture, leading to increased chances of failure (Hayward et al., 2006). This proposition has recently been confirmed by a survey-based study conducted by Hmieleski and Baron (2009). They found that high levels of entrepreneurs' optimism were negatively related with the success of their new ventures (Hmieleski and Baron, 2009).

The overconfidence bias has also been used to explain *risk taking* (Kahneman and Lovallo, 1993; Busenitz, 1999). According to Kahneman and Lovallo (1993), risk taking depends on the fact that decision making is anchored to an inside view of the situation which uses personal projections of scenarios and expected outcomes. Since people tend to have rosy projections of future outcomes, they are likely to be overly positive about risky situations (Lovallo and Kahneman, 2003).

The heuristic view of risk taking has been observed in entrepreneurs. According to Busenitz (1999), entrepreneurs are risk takers because their *perception* of risk is hindered by the overconfidence bias, which stems from the use of heuristics in decision making. This finding is supported by Forlani and Mullins (2000), who found that the perception of risk influences entrepreneurial decision making, and that it is a very subjective factor, since it changes from entrepreneur to entrepreneur. In another study, the hypothesis that the overconfidence bias lowers the perception of risk in new ventures was not supported (Simon et al., 2000). However, this study, along with others, finds support for the role of the *illusion of control* bias in the entrepreneurial decision (Simon et al., 2000; Simon and Houghton, 2002; Keh et al., 2002). According to Lovallo and Kahneman

(2003), the belief that managers and entrepreneurs hold of being in control is a factor in the over-optimistic attitude leading to overconfidence.

The overconfidence bias has been found to be linked to individuals' own knowledge and experience (e.g. Fischhoff et al., 1977). According to findings of a study by Fischhoff and colleagues (Fischhoff et al., 1977), the overconfidence bias is particularly evident when individuals are asked questions with which they are not familiar. Conversely, their overconfidence tends to decrease when asked about questions they are familiar with (Fischhoff et al., 1977). This finding leads to questioning the role of knowledge and experience in the overconfidence bias, in that individuals with expertise in a certain domain seem to be more aware of the limitations of their knowledge in that domain (based on Fischhoff et al., 1977).

In the small firm internationalisation literature, findings by Eriksson and Chetty (2003) lend support to the role of experience in an individual's awareness of the limits of their knowledge. In fact, their study shows that as firms increase their depth of involvement with foreign customers abroad and their networks, their perception of their lack of foreign market knowledge increases (Eriksson and Chetty, 2003). In other words, they learn to know what they do not yet know.

In the entrepreneurship literature, Hmieleski and Baron (2009) found that the negative relationship between entrepreneurial optimism and firm performance was stronger for experienced entrepreneurs. This finding suggests that experience in business start-up enhances rather than decreases the overconfidence of entrepreneurs. The overconfidence displayed by experienced entrepreneurs may be particularly high when previous ventures were successful but their nature was different from the nature of the current venture (Hayward et al., 2006). In these cases entrepreneurs become more confident about their abilities to start new ventures without really improving on their skills to do so in the current venture (Hayward et al., 2006)

3.3.4 Another General Bias: The Status Quo

For the sake of completion, a further bias is discussed here, although it does not stem from any of the heuristics outlined above.

The *status quo bias* in decision making is used when there is a tendency to leave things as they are instead of choosing an alternative course of action (Samuelson and Zeckhauser, 1988). As with other biases, it applies under conditions of uncertainty and risk (Samuelson and Zeckhauser, 1988). In their experiment, Samuelson and Zeckhauser presented participants with decision making scenarios and four options, one of which was a status quo option. They observed a strong tendency to choose the status quo option (1988). That is, they tended to choose what they had chosen before, to maintain what was the current state of things or what had been chosen for them and was now the status quo.

This bias may depend on three different categories of reasons (Samuelson and Zeckhauser, 1988). Firstly, it may depend on the desire to avoid transaction costs identified through a lucid and rational analysis. Secondly, it may be caused by the effects of cognitive misperceptions such as those of loss aversion and anchoring. Finally, it may stem from the psychological commitments of the decision maker, such as the desire for coherence and for avoidance of regret (Samuelson and Zeckhauser, 1988).

Burmeister and Schade (2007) studied the status quo bias in entrepreneurs, as well as in two other control groups consisting of students and bankers. In their experimental study, they presented all the participants with decision-making scenarios, ranging from the purchase of an MP3 player to the entrance into a new market. Different groups of participants were presented with different status quo options in the same scenarios. The results showed that entrepreneurs were less subject to the status quo bias in comparison to bankers (Burmeister and Schade, 2007). This finding shows that, although entrepreneurs may be subject to biases (Busenitz and Barney, 1997), the status quo bias may not be one of them (Burmeister and Schade, 2007). The fact that the status quo bias does not particularly affect entrepreneurs is an intuitive finding, in that it lends support to the Schumpeterian (based on Schumpeter, 1934) view of entrepreneurs as innovators (Burmeister and Schade, 2007).

3.4 Heuristics and Biases in Entrepreneurial Cognition

Drawing on the seminal work of Tversky and Kahneman, entrepreneurial cognition scholars have turned their attention to heuristics theory, the better to understand entrepreneurial behaviour (Holcomb et al., 2009).

Starting with the early work of Manimala (1992) and Busenitz and Barney (1997), entrepreneurial heuristics and biases in reasoning have become a recognised strand of entrepreneurial cognition literature (Forbes, 1999; Baron, 2000; Krueger, 2003; see also the recent review of entrepreneurial cognition by Grégoire et al., 2010).

Entrepreneurial cognition is concerned with how entrepreneurs think, identify opportunities and make decisions (see Mitchell et al., 2002, 2004, and 2007). Within the larger entrepreneurial cognition literature, biases and heuristics are defined as “the thumb-rules guiding the management decisions involved in the start-up and management of a new venture” (Manimala, 1992: 477).

The focus, therefore, is on the dynamics of entrepreneurial *behaviour* and the cognitive mechanisms underpinning it, as opposed to static entrepreneurial *traits* (based on Gartner, 1988). In fact, the cognition approach emerged following disappointment with the previous psychological trait approach in entrepreneurship, which has been found to have limited explanatory power in advancing our understanding of entrepreneurial behaviour (Gartner, 1988; Manimala, 1992, see also Gustafsson, 2006 for a brief review of psychological and cognitive approaches in entrepreneurial decision making).

Recently, entrepreneurial cognition scholars have called for studies that focus on cognitive *processes* (Grégoire et al., 2010). Their argument is that cognitive theory has more potential for contributing to the field of entrepreneurship than scholars have so far unlocked. This potential for contribution lies in the ability of cognitive psychology to explain how mental representations and constructs are developed, transformed and used (Grégoire et al., 2010).

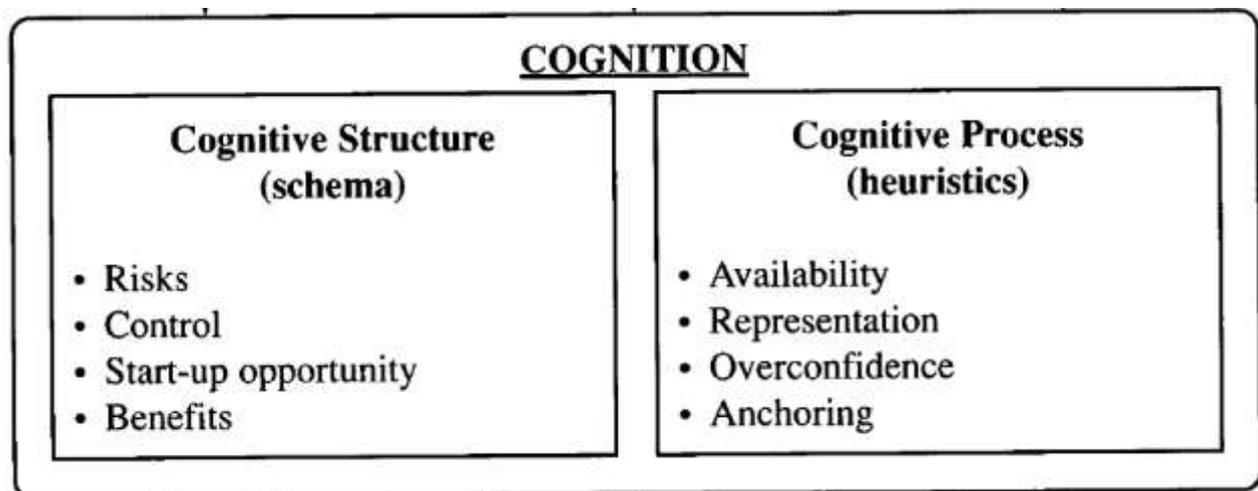
In light of this reasoning, heuristics theory in decision making becomes all the more relevant to the current entrepreneurial cognition research. In fact, as

outlined by Busenitz and Lau (1996) heuristics theory is concerned with the cognitive *processes* involved in entrepreneurial decision making.

The extract from the conceptual model by Busenitz and Lau (1996: 27) presented below illustrates the difference between cognitive schema *content* and cognitive *processes* that use the information stored in the cognitive schema. In the model, heuristics are shown to be the processes that retrieve and use the information stored in memory.

Figure 3.1: Cognitive Schemas and Heuristics

(extract from Busenitz and Lau, 2006: 27)



Alvarez and Busenitz (2001) hold that the heuristics-based cognitive abilities of the entrepreneur are a unique resource that allows them to make faster and more insightful decisions. They claim that the heuristics-based style of reasoning that entrepreneurs use allows them to make decisions that are *valuable, rare and difficult to imitate* (Alvarez and Busenitz, 2001).

The reason why heuristic reasoning is fast is that it relies on intuitive reasoning (Kahneman, 2003; Simon, 1992). Intuitive thinking systems have been found to promote entrepreneurial success (Jenkins and Johnson, 1997). Intuitive entrepreneurs have more confidence in their opportunity recognition process, although they have less confidence in their planning abilities (Kickul et al. 2009). This claim is based on the assumptions that entrepreneurs make more use of heuristics than organisational managers, the finding of a study by Busenitz and Barney (1997). Their study compares entrepreneurs and managers in their use of two heuristics mechanisms, the representativeness heuristic and the

overconfidence bias (a detailed outline of biases and heuristics is presented separately in this chapter). Study results confirm that entrepreneurs do make more extensive use of heuristics than their managerial counterparts, and that this allows them to make faster and intuitive decisions under conditions of environmental complexity and uncertainty (Busenitz and Barney, 1997).

In a similar vein, Baron (1998) argues that entrepreneurs are particularly subject to constraints that call for the use of biases in decision making. This is because entrepreneurs are often faced with situations that are new, complex and unpredictable and they have to make decisions under time pressures. Thus, they are subject to information overload and strong emotional reactions. Under these circumstances, their decision-making process is subject to a series of cognitive biases.

The cognitive biases that affect entrepreneurial decisions, as discussed above, stem from conditions of uncertainty and complexity. Thus, they stem from conditions of bounded rationality. Entrepreneurship scholars have found that Simon's principles of bounded rationality apply to the entrepreneurial information search in decision making (Cooper et al., 1995). A study found that novel entrepreneurs searched less extensively for information in novel domains, a finding that is counterintuitive by logic, which would dictate that an inexperienced entrepreneur should be required to search more, particularly in an unfamiliar domain (Cooper et al., 1995). This study also provides further support for the heuristics and biases approach to entrepreneurial decision making, in that entrepreneurs affected by overconfidence bias searched less for information.

To recapitulate, heuristic theory has been adopted by entrepreneurship scholars since the early nineties and it remains a suitable approach for the study of entrepreneurial reasoning processes. However, despite having welcomed the theory into the entrepreneurial domain and having recognised its potential, the development of heuristics theory in entrepreneurship does not appear to have been exhaustive, judging from the limited number of scholarly papers addressing it directly.

Moreover, as it is often the case with entrepreneurship research, the focus has been on distinguishing entrepreneurs from non-entrepreneurs through the use of a heuristic lens. Although this is in line with the focus of entrepreneurship theory - i.e. who is the entrepreneur and how does he differ from non-entrepreneurs (e.g. Kirzner, 1979; Venkataraman, 1997) - it is not adequate for the focus of the current research. In fact, here, I am interested in whether and how heuristics are used by decision makers in smaller firms, rather than whether decision makers in smaller firms are different from any other reasoning human being.

Thus, it can be concluded that the scholarly work on heuristics in the field of entrepreneurship reviewed here does not adequately inform the current study. Hence, in this thesis I apply the original theory of heuristics developed by Tversky and Kahneman (1974) rather than its applications to the field of entrepreneurship.

3.5 Heuristics and Biases in Internationalisation

Bingham et al., (2007) draw on the literature on organisational learning and on Simon's problem solving (Simon, 1973; Newell and Simon, 1972) to study the internationalisation process of entrepreneurial firms from Finland, US and Singapore. They conclude that heuristics are central to organisational process performance, and thus central to organisational capabilities. These heuristics are acquired through organisational processes experiential learning (Bingham et al., 2007).

Grégoire, Williams and Oviatt (2008) advance the idea that international new ventures decisions are made on a narrower set of criteria than previously theorised and that this narrow set of criteria follows a heuristic type reasoning (Grégoire et al., 2008).

Aside from these isolated pieces of work, studies based on heuristic reasoning could not be found in the literature on the internationalisation of smaller firms. Furthermore, the term "heuristic" is used loosely to indicate non-systematic techniques used for addressing various issues.

To the best of my knowledge at this time, no study of internationalisation has drawn on the seminal work on heuristics and biases by Tversky and Kahneman (1974). Therefore, there is considerable scope for the application of this theory to the field of internationalisation. This is indeed my endeavour in this thesis.

3.6 Critiques of Heuristics and Biases

The work of Tversky and Kahneman on heuristics and biases was originally intended as a means to studying one end - that of the cognitive processes underpinning decision making (Kahneman and Tversky, 1982). However, the content of their theory, which points to the striking departure of human decision making from principles of objectivity and rationality, has attracted increasing attention from researchers (Braisby and Gellatly, 2005). As with every influential theory, it has been challenged and critiqued (Braisby and Gellatly, 2005).

Some have questioned the contribution of “heuristics and biases” as a research area (Beach and Connolly, 2005, based on Cohen, 1993 and Jungermann, 1983). Others have claimed that the theory lacks substance and it is detached from the main concepts in psychology. A further criticism is that updates and developments on the theory have emerged without real reference to their implications for decision making (Beach and Connolly, 2005).

Furthermore, a number of empirical studies have sought to falsify the theory by demonstrating the limitations of the studies on which the theory was originally built.

Critics of the representativeness heuristic claim that neglect of the base rate is not a function of a specific mental strategy but rather a function of the way information is presented to the decision maker (Gigerenzer et al., 1988). Based on a replication of experimental studies such as the lawyer-engineer scenario (discussed above), critics have argued that respondents rely on the presentation of the problem to construct *internal representations* of it (Gigerenzer et al., 1988). Thus, since the presentation of the problem was manipulated in the original study by Tversky and Kahneman (1973), the internal representation of it

was flawed in the participants, giving biased support to the representativeness heuristic (Gigerenzer et al., 1988).

In addition, the conjunction fallacy (that is, wrongly judging the probability of two events taking place in conjunction being higher than the probability of either one taking place independently) has been critiqued on the grounds that individuals tend to reason in frequencies rather than on single events (Gigerenzer, 1994). Consequently, respondents neglect the basic rules of probability distribution only when asked about likelihood of a single conjunctive event. When asked about the likelihood of a class of conjunctive events, as opposed to a class of single events, however, the conjunction fallacy no longer holds (Gigerenzer, 1994).

Despite these criticisms, heuristics theory still stands as a framework for understanding cognitive decision making under conditions of uncertainty, as its applications in management (e.g. Bazerman, 2002) and entrepreneurship testify (e.g. Manimala, 1992; Palich and Bagby, 1995; Busenitz and Barney, 1997). It is a useful paradigm for categorising and giving order to an otherwise sporadic and incoherent array of anomalies in human decision making (Beach and Connolly, 2005).

In this thesis, the heuristics framework is intended as a tool for the exploratory investigation of decision making dynamics (Kahneman and Tversky, 1982) within the context of internationalising firms, which may deviate from rules of classic rationality (based on Simon, 1961). Although it is acknowledged that it may not allow for an exhaustive analysis of all decision making mechanisms in small firm internationalisations, it is deemed an appropriate starting point where, to the best of my knowledge, no previous theory of cognitive decision making under uncertainty exists.

3.7 Heuristics and Biases: do they change over time?

In order to establish whether heuristics can be expected to change over time, a reconsideration of their main features is required.

As explained earlier in this chapter, heuristics are the rules of thumb that establish which information will be retrieved from memory and how it will be

computed when reasoning on uncertain events (e.g. Viale, 1992; Simon, 1992). The information that is primed in human memory is that which is most easily accessible (Kahneman, 2003). The concept of accessibility is linked to the concept of intuition. That is, intuitive reasoning is easily accessible, effortless and fast (Kahneman, 2003).

In the managerial literature, Dane and Pratt define intuition as “affectively charged judgments that arise through rapid, non-conscious, and holistic associations” (Dane and Pratt, 2007: 33). If the intuition is unconscious, it follows that the decision maker is not aware of using certain reasoning processes. This lack of awareness, it has been argued, would leave heuristics immune to modifications (Busenitz and Barney, 1997 based on Tversky and Kahneman, 1981).

However, Kahneman (2003) points out that accessibility is determined by a number of factors, including experience. As more experience is gained and the skill is improved upon, the more effective solutions become accessible in the problem-solver’s mind (Kahneman, 2003). Positive decisional outcomes are reinforced and negative decisional outcomes are avoided (Levitt and March, 1988).

The implication of Kahneman’s view of experience on accessibility is that it must be domain-specific, since it has to be the same skill that must be practised over and over again in order for it to be mastered, such as chess. Dane and Pratt (2007) state it very clearly. They argue that domain specific experience enhances the quality of intuitive decision making even in the face of the complex problems which often face managers (Dane and Pratt, 2007). Their argument mirrors the absorptive capacity framework of Cohen and Levinthal (1990), which holds that cognitive schemas are idiosyncratic and path-dependent, and that they become more and more complex as more learning takes place (see also Gavetti and Levinthal, 2000).

From the discussion so far, it would appear that experiential learning impacts on heuristics. In the internationalisation literature, scholars have found that through experience, organisations develop a set of heuristics that enable them to successfully perform internationally (Bingham et al., 2007). However,

Bingham and colleagues use the concept of heuristics loosely to describe rules of thumb that allow for opportunity recognition abroad. This is quite a departure from the concept as it is defined and developed in this thesis, which follows Tversky and Kahneman's original theory (Kahneman et al., 2001).

Some scholars have argued that the impact of experiential learning on heuristics follows an iterative cycle, whereby not only heuristics change following experience but experiential learning itself is filtered through heuristics reasoning (Gavetti and Levinthal, 2000). Holcomb et al. (2009) hold that all three heuristics originally developed by Tversky and Kahneman - namely the Availability Heuristic, the Representativeness Heuristic and the Anchoring Heuristic - are found to be involved in the reasoning process taking place during entrepreneurial *experiential* and *vicarious* learning.

Although the discussion so far would lead to conclude that heuristics change in time through accumulation of experience, I would argue that this may not necessarily be the case. In fact, the evidence above points to changes in cognitive *schema content*, not necessarily in the cognitive processes that draw on these schema (for a distinction between schema content and process see Busenitz and Lau, 1996). In other words, what changes is the amount and sophistication of information stored in the schema (see Walsh, 1995) that is accessed through intuitive heuristics processes. However, the intuitive process of information retrieval, according to what discussed above, does not necessarily change over time.

What has been found to impact on the actual retrieval process in judgement is training (Agnoli, 1991). After conducting a series of experimental studies on children of different ages, it was found that the representativeness heuristic, which was naturally used, could be counteracted by using training in logical reasoning (Agnoli, 1991).

More recently, it has been suggested that entrepreneurial cognitive processes and heuristics evolve as motivations and environments change and the entrepreneur adapts its cognition through a meta-cognitive mechanism (Haynie et al., 2010). Metacognition is described as a psychological mechanism that

reconciles the biases embedded in individuals' cognitive mechanisms to the requirement for functioning in a dynamic environment through a state of cognitive adaptability (Haynie and Shepherd, 2009; Haynie et al., 2010).

To summarise, the discussion above has highlighted that decision making does change following experiential learning, but that an argument can be made that those changes affect cognitive schema content more than heuristic processes. On the other hand, dedicated training on logical reasoning is likely to affect heuristics (Agnoli, 1991). Heuristics may also change due to meta-cognitive adaptability (Haynie et al., 2010).

3.8 Conclusions and Implications

In this chapter I have reviewed the theory of heuristics and biases originally developed by Tversky and Kahneman (1974), from the roots in the theory of bounded rationality to the more recent applications to the fields of entrepreneurship and, to a lesser degree, internationalisation. With reference to these fields, it has been observed that neither entrepreneurship nor internationalisation have applied the theory exhaustively within their respective research domains. In fact, to the best of my present knowledge following an extensive review, the theory as developed by Tversky and colleagues has not yet been applied to internationalisation. However, following recent calls from scholars to focus on processes from a cognitive perspective (Grégoire et al., 2010), I believe that there is value in applying the theory of heuristics and biases to the investigation of cognitive decision making within the context of internationalising firms. The theory offers the process approach needed to further our current understanding of how decisions are made. Moreover, being rooted in the concept of bounded rationality, the heuristics theory sits comfortably with the three theoretical approaches to internationalisation considered in this thesis. Finally, the heuristics theory has the potential to offer a degree of theoretical structure to a phenomenon - that of reasoning and decision making - that would otherwise appear completely unstructured (based on Beach and Connolly, 2005).

Chapter 4

Research Methodology

This chapter explains the methodological approach taken in the research. It outlines the theoretical underpinnings of the methodology adopted, the procedures followed during both data collection and data analysis and the measures taken to ensure robustness in the research.

4.1. Philosophical Underpinnings and Research Design

The cognitive approach taken to the study of decision making in the context of internationalising firms called for an interpretivist philosophical standpoint. The exploratory nature of the study called for the richness of data that a case study strategy is able to provide, using semi-structured interviews as the main data collection method. For the purpose of ensuring validity, a data triangulation method was used, namely repertory grid technique (based on Kelly, 1955).

All of the above are described in greater detail in the sections below.

4.1.1. Philosophical Underpinnings

As stated throughout this thesis so far, the aim of this research is to understand the cognitive processes of decision makers and cognition is concerned with the way people interpret, learn from and make decisions on the world around them (e.g. Braisby and Gellatly, 2005). The subjective interpretation of the context within which firm leaders have to make decisions calls for an *interpretivist approach* and a *phenomenological* stance (Patton, 1990).

This philosophical stance is deemed particularly appropriate in light of the fact that entrepreneurs in smaller firms act on the grounds of their own image and interpretation of the external world (Penrose, 1959). This idea has also been echoed by internationalisation scholars, who advance that the decision maker in

internationalising firms acts as a mediator, interpreting the environment (Oviatt and McDougall, 2005; Bell et al., 2003) and making decisions accordingly.

Consequently, the case study research being carried out here is based on the ontological assumption that “‘reality’ is determined by people rather than by objective and external factors” (Easterby-Smith et al., 2002: 30). Therefore, I shall be concerned with “what people experience and how it is that they experience what they experience” (Patton, 1990: 71).

The phenomenological stance taken in this research also addresses a gap identified in the internationalisation literature by Coviello and Jones (2004). Following a systematic review of the literature, the scholars identify that the bulk of studies in international entrepreneurship adopts a positivistic stance, as evidenced by the use of predetermined variables and constructs in the largely survey-dominated methodological approaches (Coviello and Jones, 2004). They point out that interpretivist, phenomenological approaches investigating behavioural processes are rare in the field. This is considered a shortcoming in a field that should be concerned with understanding behaviour as much as with value-creation (Coviello and Jones, 2004).

4.1.2. Research Design: the Case Study Strategy

Following Hartley (2004), in this thesis I refer to case studies as a research *strategy*, not a research *method*. As part of this strategy, multiple methods may be employed, which may be qualitative, quantitative or both. Because of this, these case studies are not to be defined in terms of the method they employ. Rather, they should be defined by their theoretical orientation. That is, understanding *process* within its *context* (Hartley, 2004).

Yin (2003), one of the names most closely associated with case studies across all disciplinary fields in social sciences, reports his frustration with the fact that most definitions of case studies tend to be no more than an account of the topics to which case study research has been applied. In order to rectify this shortcoming, he offers a definition of case study which emphasises the ultimate role of case studies; namely, to study phenomena in their context.

“A case study is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.”

(Yin, 2003: 13)

This thesis follows Yin’s definition as it seems particularly appropriate to the research being conducted here. In fact, this research aimed to capture the complexities of the cognitive processes of decision makers within the context of internationalising firms. Indeed, the boundaries between the decisional processes taking place in the mind of the firm leader and the context in which they were being made were particularly blurred. The richness of data obtainable through the adoption of a case study strategy offered the possibility to make sense of the complex phenomenon being observed.

4.1.3. The Appropriateness of Case Studies to this Research

Case studies are recommended when the researcher is exploring a new phenomenon, with the perspective of building theory (Eisenhardt, 1989; Hartley, 2004). This is indeed the case of the research being undertaken here. In fact, this research attempts to uncover the cognitive processes used by firm leaders in internationalisation decision making. To the best of the researcher’s knowledge, a cognitive approach to the study of decision making can be considered a novelty within the context of the internationalisation of smaller firms (see literature review for a clearer identification of the research gap). Consequently, a theory of cognitive internationalisation decisions is still to be built and case studies are particularly appropriate in new topic areas that require theory building (Eisenhardt, 1989).

An in-depth study of a phenomenon within its context is an undertaking that case study research is particularly suited to, particularly when the boundaries between the research focus and the real-life context within which it is placed are blurred (Yin, 2003). When complex phenomena take place within a certain context they are likely to include many more variables than could be appraised through a data collection strategy involving less or no contact with the research

subjects, such as surveys (Yin, 2003; Hartley, 2004). Case study research with the multiple sources of evidence it proposes is able to capture a large number of variables and make sense of their impact in the real-life context.

In the research conducted, the use of a case study strategy allowed the building of a complex and longitudinal picture of the decision making processes in the internationalising firms studied.

4.1.4. Alternative Methodologies Considered

As it is the case with every study in social sciences, selecting a methodological approach for this research required a careful consideration of alternatives and ultimately a judgement call from the researcher (McGraph, 1982). Following McGraph (1982), my considerations of alternative approaches to this research were carried out in the light of the ability of each approach to maximise one of the three desiderata (see McGraph, 1982) of a research strategy. The three desiderata in research strategy against which different methodological approaches were considered were the following: (A) *generalisability* with respect to the population, (B) *precision in the measurement* of variables related to the behaviour of the decision makers and (C) faithfulness to the *realism of the context* within which the behaviour takes place (based on McGraph, 1982). From now on I shall refer to the three desiderata as A, B and C.

The alternative approaches considered in the light of the three desiderata described above were (1) experiments (e.g. Busenitz and Barney, 1997) (2) participant observation and (3) mixed methods including qualitative interviews and quantitative measures of heuristics and performance (e.g. Bingham 2007, 2009).

Experimentation (e.g. Tversky and Kahneman, 1974) was considered as a robust methodology that would have maximised desideratum (B), that is the precision in the measurement of the use of heuristics and, depending on sample size, it could have produced generalisable findings (thus supporting desideratum A). The precision offered by experiments in the measurement of the heuristics used in decision making stems from the fact that the all participant are presented with the same scenario (i.e. the layer/engineer scenario used by Busenitz and Barney

to appraise the use of the Representativeness Heuristic). The scenario offers a single benchmark against which it is possible to evaluate how the reasoning of the respondent deviates from rational logic. Despite those positive attributes of experiments, a decision was made not to use them in this study. The reasons for this choice are threefold. Firstly, in order to use experimentation the use of fictitious scenarios would have been required. This would have equated to sacrificing desideratum C, that is the faithfulness to the real life context. Given the exploratory nature of this thesis, staying close to the real life context was considered a top priority. In fact, it is essential that at theory building stage the researcher stays as close as possible to the empirical reality of the setting he is theorising on (Glaser and Strauss, 1967). Secondly, by using scenarios, one would have been able to appraise the rationale for country and entry mode selection at one point in time. Consequently, it wouldn't have been possible to attempt an exploratory investigation of the way the use of heuristics and biased in internationalisation decisions changes over time. Thirdly, on a more practical note, experimentation would have required a larger number of respondents than the empirical context within which this research was commissioned and conducted (that of Scottish firms participating to the Global Companies Development Programme - see dedicated section) would have allowed for.

Participant observation would, in principle, have maximised desiderata B and C in that by being present in the real life context as the internationalisation decision takes place it is possible to measure the latter with maximum precision. The precision in the measurement stems from the fact that the decision would have been appraised in real time, thus eliminating retrospective recollection bias and post-hoc rationalisation by the respondent. However, despite the strong points in favour of participant observation, this approach was discarded on a number of basis. Firstly, given the nature of involvement required in a participant or non participant observation strategy, I would have had to commit to one single site (i.e. one firm) in that I would have had to spend most of the data collection time in one location. This approach may have been risky in that there would have been the possibility that no internationalisation decisions would have been made during my time in the firm. Thus, I would have run the risk of being left with no data relevant to the research question. Furthermore,

no firm gave the indication that it would have been possible to negotiate such a high degree of access (this is a well known issue associated with participant observation).

Finally, following Bingham et al. (2007), I could have associated *quantitative measures to the qualitative data* collected. This would still have maintained a high level in desideratum C (faithfulness to the real context) but, in my view, would not have added much to the precision in the measurement of the heuristics measures used (desideratum B). In fact, differently from Bingham et al. (2007) who address the question of the impact of firm's use of heuristics in country selection on performance, this thesis is concerned with an observation of the way heuristics are used across different internationalisation decisions (country selection, entry mode and country exit) and over time. Thus, a quantitative appraisal of performance was not part of the research question. Furthermore, quantitative data collected on a small number of respondents would not add the ability of the study to increase desideratum A (generalisability).

To sum up, this section has provided an outline of alternative methodological approaches considered and ultimately not used due to the aim of this research and its exploratory nature. Alternative methods considered have been (1) experiments, (2) participant observation and (3) mixed methods on a small sample of firms (following Bingham et al., 2007). The latter have been evaluated along McGraph (1982) three desiderata and priority has been given to methods maximising faithfulness to real life settings over generalisability of findings. This is in line with the theory building, exploratory nature of this research.

4.1.5. Inductive Approach to Data Collection and Analysis

“An open mind is good; an empty mind is not”

(Siggelkow, 2007: 21)

This research takes an inductive approach to the problem being tackled. In collecting and analysing the data, I kept an open mind on the mechanisms underpinning internationalisation decisions, while still benefiting from prior knowledge of the field of internationalisation. In doing so, I followed Eisenhardt (1989), who advocates the desirability of some *a priori* knowledge of the field of study and of the main constructs that the researcher intends to consider. However, as Eisenhardt (1989) points out, a fundamental characteristic of theory-building research is to start with as little prior theory as possible. It is, of course, impossible to start with a “clean theoretical slate” (Eisenhardt, 1989: 536). Nevertheless, theory and/or derived propositions should not bias the data collection process by putting the researcher in the position of “seeing only what he is prepared to see” (Eisenhardt, 1989: 536). Rather, I endeavoured to approach the fieldwork with an open mind in order to be able to take into consideration unanticipated outcomes. This allowed me to identify emerging mechanisms that could prove relevant in answering the research question at hand. This was in line with Eisenhardt (1989)’s idea that the researcher should be ready to readjust his/her theoretical framework according to emerging unexpected constructs.

Therefore, I did not follow a purely inductive approach to research - also known as *grounded approach* (Strauss and Corbin, 1998, in Yin, 2003) - observing reality in order to make sense of it with no prior knowledge of theory and with the intention of building theory anew (Ghauri and Grønhaug, 2005). Neither did I follow a deductive approach, starting with existing theory then creating logically-derived propositions to be tested (Ghauri and Grønhaug, 2005).

As Perry points out, the amount of desirable theory depends on the subject area and the topic being investigated (Perry, 1998). Initial theoretical frameworks may be “looser” or “tighter”, depending on how well-researched and structured the research field is (Perry, 1998). It follows that when a research field is well-developed, but the focus of the research within it is still at theory building level, a looser theoretical framework should be preferred. This is indeed the case of the research being undertaken here. In fact, although the field of Internationalisation is by now substantiated by a vast and varied body of literature, the role of cognitive decision making processes within it is relatively

new and requires inductive exploration (see for example, research on cognition advocated by Zahra et al., 2005; Acedo and Florin, 2006).

Therefore, although I had a clear research focus in mind (e.g., that by Yin, 2003), namely, the cognitive decision making processes in international entrepreneurs, no particular theoretical frames of reference were taken into consideration during the data collection stage. The inductive approach is reflected in the semi-structured interview method used (see dedicated section below). I avoided using close-ended questions that would stem from one or more particular theoretical approaches.

At the data analysis stage, the research gap previously identified gave me a clear focus and avoided the temptation of wanting to analyse “everything” (Yin, 2003). The inductive approach taken allowed for the identification of cognitive mechanisms that I was then able to pattern-match with a specific cognitive theory, namely Heuristics and Biases (Tversky and Kahneman, 1974).

Matching data to theory after the data collection and analysis was completed also avoided tautological problems. In fact, had I been looking for decision making processes based on heuristics (based on Tversky and Kahneman, 1974) from the outset, I would have asked leading questions that would have yielded results in which heuristics were present. In other words, I would have found what I was looking for because I would have planted the seeds for finding it.

4.2. Sampling Criteria and Case Study Selection

This section outlines how the selection of suitable cases moved from the original sample available from the GCDP to the final group of SMEs that are featured in the study.

4.2.1. Initial Sample: Scottish Enterprise and the GCDP

This research is part of a joint project with Scottish Enterprise, the Scottish agency for economic development. The firms comprising the initial sample of case studies were those participating in the Global Companies Development

Programme (GCDP currently known as the International Strategy Development Programme).

The International Strategy Development Programme (ISDP, formerly GCDP) is a programme funded and managed by Scottish Enterprise with the aim of supporting high growth potential firms in their internationalisation process. Thus, all firms taking part in the programme had the common characteristic of being either internationalising firms or firms with international growth aspirations. Since this study aims to make a contribution to internationalisation theory, the latter was the basic criteria for case study selection.

Firms participating to the GCDP (currently ISDP) were Scottish small and medium-Sized enterprises (European Commission, 2003). They came from a range of industry types, forming a random combination of services and manufacturing.

The total sample of firms participating in the GCDP that agreed to take part in the research numbered 17. During the exploratory stage of the research, all firms in the GCDP (currently ISDP) sample were interviewed in order to gain an understanding of their characteristics, background, international posture, milestones of domestic and international growth, etc (see “The First Interview” section below for details). Only once the exploratory stage was completed had the researcher gathered sufficient information to select the cases that best suited the purpose of understanding the role of cognitive processes in internationalisation decisions. This further selection is outlined in the section below.

4.2.2. Replication Logic and Case Study Selection

As explained above, the purpose of case study research is analytical generalisation and theory building (Yin, 2003). This has implications for the sampling strategy as well as the sampling size (Patton, 1990). The aim was to select case studies purposefully, according to the research question at hand, rather than randomly. Preference was given to cases where the phenomenon of interest was clearly observable (following Pettigrew, 1990). In addition, information rich cases were given preference, so that it was possible to learn as much as possible from them (Patton, 1990).

4.2.3. Further Case Study Selection and Final Sample

Homogeneity in decision making power represented the first criterion for sub-selection of cases from the initial sample. That is, the interviewee should have power to single-handedly make decisions on the internalisation of the firm. This selection strategy mirrors what Patton (2002: 243) labels “homogenous sampling” and is aimed at controlling for variables that may alter the outcome of the study.

It is the researcher’s view that when investigating group decision making, such as in instances where firms are led by teams of individuals sharing equal decision making power, each decision maker must be interviewed in order to have a clear understanding of the decision making process. This is not the focus of this study, which aims to examine the cognitive processes of “the” decision maker within the firm. Thus, the research addresses issues of imbalance in decision making power by focusing solely on firms where the owner⁴ and/or manager was identified as the ultimate decision maker. This was ascertained during the first interview by uncovering whether the respondent was the person reasoning on and ultimately making the decisions in the firm, as well as having the power to do so.

From the initial sample of seventeen firms, eleven were identified as having a single main decision maker. Those were then subject to further selection according to the criteria specified in the section below.

Maximum variation in industry, sector and time to internationalisation represented the second selection criterion.

Eisenhardt (1989) points out that, in order to control for environmental variations, cases should be chosen from different settings. In this research the main environmental variation is represented by industry factors. In fact, industry structure may substantially affect internationalisation (e.g. Fernhaber et al., 2007; Andersson, 2004). For example, firms in the oil and gas industry tend to be subcontracted by large oil multinationals to service international locations (Keogh et al., 1998). Moreover, manufacturing and servicing may face different

⁴ For a perspective on the role of ownership in the internationalisation of the firm see Fernández and Nieto (2006)

constrains when internationalising due to the differences in assets investment required (e.g. Johanson and Scholes, 2006).

Cases selected were representative of three industries, namely *environmental/electronics recyclables*, *textiles* and *oil and gas*. Care was also taken to ensure that the sample of cases would include a balanced mix of manufacturing and servicing firms.

Finally, the researcher aimed to ensure that both *international new ventures* (Oviatt and McDougall, 1994) and *traditional internationalisers* (e.g. Johanson and Vahlne, 1977, 1990) were represented in the study.

This selection is in line with Patton's maximum variation sampling strategy (Patton, 1990). That is, it allows the identification of "important common patterns that across variations" (Patton, 2002: 243).

Nine firms from the original GCDP (currently ISDP) sample fitted the criteria specified above. Therefore all of those firm were interviewed a second time (see "The Explanatory Interview" section below for details).

Following a second interview with leaders of the nine firms identified through the criteria above, a further selection of cases was carried out once the data collection was fully completed. The final selection of cases was based on whether or not the interview material allowed for a clear observation of the issues being investigated.

Phenomenon clearly observable was the third criterion employed in the final selection of case studies to be carried through to research findings stage. As mentioned above, the researcher should opt for cases where the phenomena under investigation are clearly observable (Pettigrew, 1990). In this case, the phenomenon being studied is the entrepreneur's reasoning processes leading to internationalisation decisions. Therefore, the ability of the interviewee to articulate his thoughts clearly and openly, especially with regards to decision making, was considered critical to the quality of the case study. However, this could only be established after the researcher had completed the fieldwork, interviewing all the firms that fitted the criteria of homogeneity in decision making power and variation in industry outlined above.

Six cases out of the initial sample fitted the criteria above. The figure fits with the number of cases (4 to 6) recommended by Yin (2003:47) for both a *literal replication* and a *theoretical replication*. A literal replication allows for reinforcement of case study outcomes by replicating the findings with other similar cases (Yin, 2003; Eisenhardt, 1989). A theoretical replication allows for a comparison and contrast of results from samples that are expected to produce diverging results. This is the case of this research, which is composed of samples selected according to maximum variation logic.

Although the number of cases selected for this study fit within the guidelines offered by well recognised scholars (e.g. Eisenhardt, 1989; Yin, 2003), the researcher feels that Patton's (1990) quote below mirrors her own belief more closely:

“The validity, meaningfulness and insights generated from qualitative enquiry have more to do with the information-richness of the cases selected and the observation/analytical capabilities of the researcher than the sample size.”

(Patton, 1990:185)

4.3. Sources of Evidence and Data Collection Procedures

So far, justification has been made for the case study research strategy, outlining why it was deemed suitable to the research purpose at hand and how it was used in this research.

In this section I move on to give an outline of the sources of data used as part of the case study approach and the methods used for data collection.

4.3.1. Sources of Evidence

A number of data source were used as part of the case study strategy adopted in this thesis. Those include the following:

- firms' profiles (as provided by the agency for the economic development of Scotland);

- semi-structured interviews;
- repertory grids;
- researcher's diaries.

Firms' profiles were sourced from the economic development agency for Scotland, Scottish Enterprise, which acted as the industrial partner in this research project. The latter had gathered this information from firms at the time of firm's registration to the Global Companies Development Programme. Firms profiles would cover factual information about the firm, including foundation data, ownership and management structure, industry and sector of commercial activity, size (number of employees), turnover (retrospective up to four years and projected up to 3 years) and international posture (a snapshot of firm's cross border activities at the time of compiling the profile).

This evidence was used mainly for categorisation purposes, so that an appropriate meaningful sample of cases could be chosen. Along with data collected through the semi-structured interviews, firms' profiles formed the basis for the description of the case studies, which is to be found in the next chapter (Chapter 5).

Semi-structured interviews represented the main data source and allowed for the collection of longitudinal data on the firms. These formed the basis for the construction of the causal-cognitive maps of decision makers. The design and implementation of the semi-structured interviews is outlined in detail in a dedicated section later in this chapter.

Repertory grids were collected at the end of the explanatory interviews and used for triangulation purposes, as a means of strengthening construct validity. The theoretical background of the repertory grid technique and the way I used it in the data collection process are both described later in a dedicated section of this chapter.

I kept a *researcher's diary* throughout the empirical phase of the research that I present in this thesis. The diary served the purpose of keeping a record of my

thoughts, ideas and impressions both during the face-to-face data collection (or immediately after) and away from the sites of the empirical investigation. Writings from the diary formed the basis for the inductive approach I took later, during the data analysis stage. In fact, the research focus was built very much inductively and with no *a priori* theoretical focus being defined. By consulting the researcher's diary, I realised that over and over I had noted down insights that suggested a link to heuristic reasoning theory. This led to the theoretical approach taken in the analysis of the data, and later to the findings and contributions of the thesis.

4.3.2. Data Collection Procedures 1: Semi-Structured Interviews

Crucial to the research at hand is a comprehensive understanding of *meaning*. That is, understanding what events, experiences and knowledge mean to the research subjects and how they make decisions on the basis of such meanings is the purpose of the research being carried out. Issues of *meaning* are reflected in the *how* and *why* questions that Yin advocates as being at the centre of case study research. Uncovering deep meaning requires prolonged contact with the subjects of investigation (Hartley, 2004).

Thus, semi-structured interviewing was chosen as the main means of data collection.

The interviews were part of the longitudinal case study design (see below). The first interview served primarily an exploratory purpose as well as establishing good rapport with the interviewees. The second interview served the purpose of a further exploration of specific internationalisation decisions identified from the first interview, and it enabled me dig deeper into the reasoning of the respondent surrounding each decision.

Collecting Longitudinal Data

Longitudinal data on the internationalisation of the firm was reconstructed through the two interviews with each firm leader, with the second interview taking place within a maximum time lag of two years from the first interview. Through these interviews it was possible to collect both retrospective and real

time accounts (following Pettigrew, 1990 and Leonard-Barton, 1990) of firm internationalisation patterns.

Retrospective accounts were provided by the interviewees during the first interview and dated back up to 15-20 years for each firm leader.

Real-time accounts were collected during the second interview and represented the time lag between the first and the second interview, which was up to two years (Based on Pettigrew, 1990).

The collection of longitudinal data and time series accounts was deemed relevant to the research question at hand. In this research, time is not considered merely from a chronological perspective, but from a succession of events viewpoint (based on Jones and Coviello, 2005). Time is important in the measure in which one event follows on from the previous one. Thus, the decision “n+1” is recognised as finding its roots in antecedent events such as “n” or “n-1”. In the words of Pettigrew (1990: 273) “Understanding these underlying logics in the process of change is the goal, and this requires data on events, interpretations of patterns in those events, when they occur in socially meaningful time cycles, and the logics which may explain how and why these patterns occur in particular chronological sequences.”

Preparing and Conducting Exploratory and Explanatory Interviews

The interviews are based on the idea of a *phenomenological enquiry* (e.g. Cope, 2005), wherein respondents are asked to discuss their own thinking and reasoning surrounding the internationalisation pattern of their firms as opposed to being asked direct questions.

The interviews allowed for an exploratory as well as an explanatory investigation (Yin, 2003) of the processes leading to the main internationalisation decisions made.

As outlined above, there were two phases to the interviewing process. The first phase, or “exploratory interview”, was conducted with the entire sample of case studies, totalling seventeen first interviews. The second phase of interviews, here referred to as “explanatory interview”, was conducted with a reduced

number of firms selected according to the criteria outlined above. Leaders of a total of nine firms were interviewed a second time.

The Exploratory Interview

The first interview was exploratory, with a general aim of understanding the history to date, structure and pattern of growth of the firm as well as the personal history and development of the firm leader.

Below is a description of the procedures followed during the interview.

On entering the premises, I would introduce myself to the interviewee. Since this would be our first meeting, I would spend a few minutes on an informal conversation. This would allow me to build rapport and trust with the respondent.

I would then follow with a brief introduction to the interview, explaining the purpose of my first visit and the general aims of the research being undertaken.

I would deliberately avoid giving too much detail on the research focus, for a variety of reasons. Firstly, by hinting at one type of information in particular (i.e. decision making processes, life experiences or information at hand during the decision making process) I may have affected the memory retrieval process of the interviewee. That is, the interviewee would have been searching his memory for information directly linked to the types of item prompted to him, rather than let relevant memories emerge spontaneously, whichever the type.

Secondly, the reason for avoiding too much detail on the focus of the study served the purpose of avoid using academic jargon, which may alienate businessmen and could put them in a disinterested, if not defensive, position.

Finally, I avoided specifying that the theoretical background of the research was on cognitive processes as this may make the interviewee feel “psychoanalysed”.

Giving the impression of attempting to “read the mind” of the interviewee had to be avoided, as this may either alienate individuals or push them to give manufactured answers in an attempt to comply with what they believe the expectations of the researcher are.

Following the introduction and the signing of the research consent form, and before starting the interview, I would ensure that the entrepreneur was comfortable with my digitally recording it. All interviewees agreed to have the interview digitally recorded.

Once the interview was underway, I would encourage the respondent to discuss a number of themes from his own perspective (based on Cope, 2005).

The respondent's own understanding of these themes was captured by asking him to discuss the following (see full exploratory interview schedule in Appendix 5):

- Please describe this firm to me, the business it does, the nature of its products, its role within the industry and its competitors in the domestic and foreign markets.
- Please tell me about the foundation of this firm, who was involved, how they founded it, why they founded it and the aspirations and objectives of founding members.
- Please tell me about what you consider to be the main milestones - or events - in the development of the firm.
- Please describe to me the internationalisation process of the firm, from its first international links and contacts, to its first international agreement and investment, to its current situation in relation to its international business.
- Please tell me what you feel you have learned subsequent to the international involvement of the firm.

Exploratory interviews were carried out between May 2006 and May 2007. All interviews were carried out in the firms' own premises in various regions of Scotland.

Interviews were carried out in seventeen firms at this stage, yielding a total of twenty-one hours and twenty-seven minutes of interview recordings, with an average interview time of one hour and fifteen minutes per firm. This data translated into four-hundred and six interview transcript pages (see table below).

Table 4.1: Exploratory Interviews - Interviews Length and Information Collected

Firms Interviewed	Total Interview Recording Time	Average Interview Time	Total Interview Transcription Pages
17	21h 27min	1h 15min	406

The Explanatory Interview and the Elicitation of Repertory Grids

The explanatory interview served the purpose to explore and explain further each of the internationalisation decisions identified during the exploratory interview.

This second interview represented the final opportunity to gather all the data relevant to each internationalisation decision process. Thus, preparation was paramount.

Preparation for the Explanatory Interview

In order to prepare for the second phase of data collection with each firm, or explanatory interview, I would set aside a full day to prepare for each interview. This would be done one or two days before the scheduled interview with the company, so that the case study at hand would stay fresh in my mind as well as the topics I would aim for the interview to revolve around.

In order to analyse the interview effectively, I would start with listening to the interview recording twice. This would enable me to immerse myself into the

interview situation again and familiarise myself with the case study. In fact, up to two years may have passed since the interview was carried out.

I found that listening to the interview a few times before formulating any probing questions for the second interview was also serving the purpose of raising my interest in the case study. To this end, it was important not to start analysing a new case study until the one at hand was completed, with the schedule for the second interview completed and the interview itself carried out.

Once the content of the interview had sunk in, probing questions would emerge spontaneously. These would revolve around the entrepreneur's internationalisation decisions, probing further, in an attempt to complete the storyline with the missing information. I would also ask questions aimed at determining antecedents to those decisions. I would also attempt to formulate questions that would encourage the interviewee to disclose how the experiences resulting from the implementations of previous internationalisation decisions had affected him, in order to tease out whether significant events had had an impact on later internationalisation decisions. (Copies of the schedules prepared for the explanatory interviews were kept and can be seen in Appendix 6)

I would finally make a list of the foreign market entries discussed during the first interview. If the list did not appear to be exhaustive (i.e. the entrepreneur had simply referred to servicing foreign countries or having various joint ventures, without giving further details), I would include direct questions aimed at identifying exactly how many countries have been entered and what was the rationale for entering them.

Conducting the Explanatory Interview

To start off the explanatory interview there would be no need for "ice-breakers". Rather, a short exchange of "How are you?" and "It has been a long time since our last meeting" would take place.

I would briefly cover the purpose of the second visit and the general theme around which it would be centred, namely each of the internationalisation events mentioned during the first interview. As for the first interview, the focus of the study would not be mentioned to avoid influencing the respondent's thought processes. I would also ensure that I had permission to digitally record the interview.

The first part of the interview would generally cover the probing questions on each internationalisation decision emerging from the exploratory interview. I would read out the selected quote from the previous interview and then ask the probing question prepared in advance of the interview (explanatory interview schedules for each of the six case studies presented in the thesis are available in Appendix 6) . Mostly, I found that people had no problem at all casting their minds back to what had been said during the first interview, a clear sign that the stories that they had shared with me the previous time were still very meaningful to them and vivid in their minds, as well as being reliable.

Often, the answers offered to the probing questions echoed the content of interviewees' answers from the exploratory interview. This was considered an indication that the respondent had already brought up all the thoughts linked to the event and had little or no details to add. In fact, I found that the more I attempted to formulate different probing questions, trying to uncover different angles of the reasoning of the interviewee, the more the respondent started to go round in circles, returning to the same themes discussed previously.

I would not attempt to keep the interview focused on the structured questions prepared. If the interviewee digressed, I would go along with it, in an attempt to uncover other data that may give a fuller picture of the situation. No information volunteered by the informant would be considered irrelevant. On the contrary, I would seize the opportunity to understand why it had been brought up and what it meant in terms of the focus of the research.

Once the structured part of the interview was over, I would encourage the interviewee to talk about the *developments* of the firm since my previous visit. To the majority of my interviewees this translated into talking about firm growth, both domestic and international. Again, I would ask questions to dig

deeper into the reasoning behind both types of growth. The discussion emerging, in my view, had the potential to shed some light on the reasons for internationalisation or preference for investment into the home market. Thus, it would offer data on the cognitive processes surrounding internationalisation decisions.

I would wind up the exploratory interview with the elicitation of the repertory grid. The procedure that was followed is described below, followed by a brief outline of the theoretical background of the technique.

Explanatory interviews were carried out between June and September 2008, with a long break during the vacation period (July and August). As for the first interviews, all second interviews were carried out in the firms' own premises. Leaders of nine out of the seventeen firms from the initial sample were interviewed. These interviews provided me with a total of ten hours and eight minutes of interview recordings, with an average interview time of one hour and seven minutes per firm. This data produced two-hundred and three pages of interview transcripts (see table below).

Table 4.2: Explanatory Interviews - Interviews Length and Information Collected

Firms Interviewed	Total Interview Recording Time	Average Interview Time	Total Interview Transcription Pages
9	10h 8min	1h 7min	203

4.3.3. Data Collection Procedures 2: Repertory Grids

Repertory grids were used in this research in order to elicit decision makers' cognitive understanding of their internationalisation decision criteria using a different reasoning process from that of the interview. Later, the constructs elicited through the repertory grid would be compared with the antecedents to decision making emerging from the analysis of the longitudinal data from the interviews for triangulation purposes.

The Technique

The Repertory Grid technique is one of the applications of Kelly's (1955) Personal Construct Theory. This is a theory that originated in the field of psychology and it is based on the logic that each person attempts to make sense of his/her experience as they go through life (Easterby-Smith et al., 1996). As he/she does this, the individual builds his own set of "constructs", of underlying assumptions and criteria derived from their individual interpretations of their experiences. Those constructs form the basis of future action, as individuals act on the basis of their interpretation of reality. In turn, as new action takes place and is interpreted by them, their set of constructs will be adapted and modified (Easterby-Smith et al., 1996). This process repeats itself constantly throughout people's entire lives. According to Kelly (1955) then, each person acts as a scientist, constantly striving to make sense of their world (Cassell et al., 2000).

Although Kelly (1955) believed that people strive to make sense of their world through constructs, he also believed that they are unaware of doing so. Thus, a technique is required to "surface embedded assumptions", as Cassell et al (2000) put it. One such technique is the repertory grid technique (Easterby-Smith et al, 1996), which is defined, described and applied to the current research below.

Easterby-Smith et al (1996: 4) define repertory grids as "[A] tool through which we can attempt to uncover and formally represent how individuals construct

their world. A grid can, at one level, be thought of as a cognitive “map” charting a particular aspect of a person’s world.”

Repertory Grid technique is used during face-to-face interaction with the respondent, (i.e. an interview) and -as in the research at hand - it may be used as part of an in-depth case study approach (Cassell et al., 2000).

The technique is extremely versatile and has been applied to a large number of research issues (Jancowicz, 1990). However, it may be described through some fixed characteristics. In fact, it consists of three main *features* (Easterby-Smith et al., 1996: 4) and three main *stages* (Gammack and Stephens, 1994:76).

The three features are (1) *elements*, (2) *constructs* and (3) *linking mechanisms* (Easterby-Smith et al., 1996).

1. *Elements* are the objects of the investigation, and they may be events, persons, objects, situations, etc. The element may be thought of as the anchoring point around which the personal construct of the individual will be elicited. In the current research, elements constituted by internationalisation decisions, as is evident from the internationalisation events emerging from the implementation of the decision.

2. *Constructs* are the characteristics that the person associates with the elements. That is, the qualities that come to the subject’s mind when discussing an element. In the research being carried out here, the constructs are the characteristics that the international entrepreneurs associate with each internationalisation event. Those may be of a technical/operational nature (e.g. country time differences, shipping times, etc.) or of a cultural/political nature (e.g. respect for authority, business culture, etc.).

3. *Linking Mechanisms* may be thought of as the mental maps that link elements to their associated constructs in the reasoning of the person.

The three main stages mirror the three main features of the technique; they are (1) *eliciting elements*, (2) *eliciting constructs* and (3) *constructing the grid* (Gammack and Stephens, 1994:76).

1. *The elicitation of elements* consists of building a list of all the subjects (or elements) to be explored. In the current research, the elements are the internationalisation events. Those were first elicited through an exploratory conversation with the interviewee, to then be reviewed and completed through probing questions during a later explanatory interview (see section below on preparing for and conducting explanatory interviews)
2. *The elicitation of constructs* is a core part of the technique and is the most delicate part of it (Easterby-Smith et al., 1996). There are various ways in which the elements can be presented to the person. One of them, and the one used in the current research, is the elicitation from triads (Easterby-Smith et al., 1996). That is, the person is presented with three elements at one time and asked to think of ways in which two of those three elements are alike and different (or opposite) to the third. Then they are asked to list the characteristics according to which they have made this similarity/difference choice. This process is described in detail in a dedicated section below. Easterby-Smith et al. (1996) warn that constructs elicited have to be unambiguously clear in order for the technique to generate sound and reliable results. They encourage the researcher to probe the respondent as appropriate in order to remove any ambiguity surrounding the constructs generated (Easterby-Smith et al., 1996).
3. *Constructing the grid* means linking each element (usually displayed on the columns) to each construct (usually displayed on the rows) by establishing how they are related to each other in the mind of the subject. An instance from the current research may illustrate this more clearly. If the element is “opening of manufacturing plant in France” and the construct is “complexity of employment law”, then we may want to know how those two are linked. A dichotomising approach was taken in this research (based on Easterby-Smith et al., 1996). In our example, this would translate into the construct being polarised as either “simple employment law” or “complex employment law” and applying one pole to the element “opening manufacturing plant in France”. Again, the implementation of this procedure (based on Gammack and Stephens, 1994) in the current research is further explained below.

Eliciting Repertory Grids

In introducing the repertory grid technique to the interviewee, I would refer to an “experiment of mine that may look weird”, and therefore I kindly asked the entrepreneur to “please bear with me”.

I would pull out colourful cards and write each individual firm’s internationalisation event on a separate card. As I did this, some respondents appeared curious, others wary. By and large, however, everyone engaged with the exercise.

The internationalisation decisions (and associated internationalisation events) may have emerged during either the exploratory or the explanatory interview. Card titles would be written in the form of “Servicing Oil Plants in Alaska”, or “Joint Venture in Sweden”. These titles would reflect the language used by the respondents. This would ensure that there was no ambiguity in the interpretation of the elements of the repertory grids that were being investigated.

I would then choose three cards randomly and ask the interviewee whether two of them were similar to each other and different from the third. Once he had made his selection, I would ask in what ways the pair was similar and different from the third. I would keep prompting more *constructs* (that is, characteristics that are common to two internationalisation events and that differentiate these from the third event presented to the interviewee) on the same triad till the person had nothing more to say. (Easterby-Smith et al., 1996 offer clear and detailed guidelines on the use of repertory grids in management research). Then I would move on to a new triad of cards and repeat the same process. I would continue until either the interviewee was not coming up with new constructs, and thus was repeating himself, or he looked tired or uncomfortable, whichever happened first.

The technique suggests to keep going until the person has nothing more to say, in order to uncover all the possible constructs that the respondent holds in his mind (Easterby-Smith et al., 1996). However, little is mentioned about avoiding

exasperating the respondent, thus jeopardising the relationship built with him. Moreover, if the respondent is bored or uncomfortable with the exercise, it is unlikely that the constructs that the researcher may extract from him could be considered reliable.

Once I had gathered the constructs, I considered the exercise completed. I did not rate or rank the constructs against the elements, as theory suggests (Easterby-Smith et al., 1996). This decision was based on the logic that the extra information collectable through rating or raking would not add sufficient value to the study to justify the extra time and effort required of the respondents.

The interview would then come to an end. I would inform the entrepreneur of this and prepare to leave. I would make sure that the interview ended on a positive note, chatting about something that perhaps the entrepreneur seemed to have found interesting either during or before the interview and then wishing him a good rest of the day on departure.

4.4. Data Analysis Procedures

There are two parts to the data analysis of this thesis. In the first part, causal cognitive maps were constructed indirectly from the interview transcripts (following Calori et al., 1994; see also Thorpe and Holt, 2008). The procedure followed in the first part of the data analysis is outlined in the remaining part of this chapter.

The second part of the data analysis consists of pattern-matching data to the heuristics theory adopted as theoretical framework in this thesis. The latter part of the data analysis is presented in the next chapter (Chapter 5). In the pattern-matching exercise, the causal cognitive maps were broken down into sections related to each internationalisation decision. Then, each decision was analysed in light of the heuristics presented in the previous chapter. Resulting elements relevant to each decision from the causal cognitive map were then triangulated with the content of the repertory grid of the respondent.

4.4.1. Causal-Cognitive Mapping: The Technique, Validity Issues and Elicitation Approach

Before moving on to a description on how causal cognitive maps were built from the raw interview data, I shall clarify what causal cognitive maps are and why they were elicited indirectly.

“A causal cognitive map is a graphical representation where nodes represent concepts and links (arcs or lines) represent the “perceived” causal relationship between concepts.”

(Thorpe and Holt, 2008: 40)

Thus, through the construction of a causal cognitive map, it is possible to have a graphical representation of the thinking that an individual has surrounding each internationalisation decision. In addition, unlike a cognitive map, a causal cognitive map allows for the representation of causal links between the elements involved in the thinking of the individual (based on Thorpe and Holt, 2008). The construction of causal links allows for the appraisal of antecedents and outcomes of internationalisation decisions. In turn, understanding antecedents and outcomes to decisions allows for the identification of the heuristic being used.

“Maps provide a frame of reference for what is known and believed. They highlight some information and fail to include other information, either because it is deemed less important, or because it is not known. They exhibit the reasoning behind purposeful actions.”

(Fiol and Huff, 1992: 265)

This second definition of cognitive mapping by Fiol and Huff (1992) points out another issue of contention in the use of the technique. Does the cognitive mapping include all the relevant information to the phenomenon under study? This question equates to asking whether the technique appraises what it claims to appraise. In other words, does the technique ensure construct validity?

Whether cognitive maps represent the workings of the minds of the respondents is a matter of open debate (McDonald et al, 2004).

Cognitive psychologists recognise that one of the greatest challenges in investigating cognitive phenomena is that those phenomena are not clearly observable and inferences have to be made on the basis of respondents' accounts. Consequently, cognitive scholars advocating qualitative enquiry have adopted the stance that language is reflective of thought (that is, of cognition), and that what respondents say reflects what they really think (Ormerod and Ball, 2007; Gore and McAndrew, 2009).

Scholars using cognitive mapping techniques acknowledge that a cognitive map cannot be correctly defined as the graphical representation of an individual's cognition, but rather a graphical representation of an individual's understanding of a particular domain at a given time (Eden, 1992).

In this thesis, I take the stance that cognitive maps are a representation of understanding of a certain phenomenon, as opposed to a representation of actual cognition (following Eden, 1992), and that information that is not included in the account given is either not known or not important (Fiol and Huff, 1992).

Consequently, the causal cognitive maps built in this thesis are considered robust on the assumption that all relevant, known information was given by the respondents at interview stage. As discussed in the dedicated section above, probing was used to ensure that all relevant information surrounding internationalisation decisions was collected.

As pointed out earlier, causal cognitive maps were elicited indirectly in this thesis. That is, they were constructed after the interview, drawing on interview transcripts and without the involvement of the respondent.

Direct elicitation of cognitive causal maps would have required these to be constructed during the interview and with the participation of the respondent (Thorpe and Holt, 2008). Although this would have been a further check on validity, a choice was made to remain less intrusive by not involving respondents in the representation of their own mental map, running the risk of alienating them by making them feel psychoanalysed (based on Thorpe and Holt, 2008).

Direct elicitation of causal cognitive maps was also identified as carrying another potential bias. In fact, faced with his own decision making process on paper, the respondent may have felt driven to adjust the map in order to manage the impression he wanted to convey of his decision making process or in order to improve on a decision making process that did not look sufficiently rational. Indeed, improving the cognitive processes of managers is one of the aims of direct elicitation approaches to cognitive mapping (e.g. Eden, 1988; Eden, 1992, Fiol and Huff, 1992; Cosette and Audet, 1992). Thus, direct elicitation was excluded on the grounds that it may bias the account of the decision making process.

4.4.2. Constructing Causal-Cognitive Maps

The indirect elicitation of causal cognitive maps in this thesis follows the procedure used by Carley and Palmquist (1992) and Calori et al. (1994, based on Holsti, 1969). This approach involves a *4-stage procedure* to constructing the causal-cognitive maps from the interview transcripts. The procedural guidelines for the construction of the causal maps were drawn from Miles and Huberman (1984). Each stage of the data analysis is explained below.

Stage 1: Concept Identification

The first stage of the data analysis consisted of identifying the main broad concepts that emerged inductively from the interview transcripts. This stage is named “surfacing of first order concepts” (Calori et al., 1994) or “concept identification” (Carley and Palmquist, 1992). The procedure involved going over the interview transcript from the first interview in order to identify the main topics that the respondent discussed during the interview. At this stage, every main concept, or topic, was considered. The reason for not excluding any concept at this stage was that any of those could later prove to be an antecedent (either direct or indirect) to internationalisation decisions made.

1 - Concept Identification

Examples of broad concepts are “pre-firm foundation work experience of the entrepreneur”, “entry into a particular market” or “industry crisis”.

Once the main concepts were elicited from the first interview, the same procedure was followed with the second interview. Where the second interview contained further probing on topics already elicited through the first interview, the probing section was added to the paragraph discussing the concept in the first interview. Each section was given a general title representing the broad topic discussed. Those may include “pre-firm foundation work experience of the entrepreneur”, “entry into a particular market” or “industry crisis”.

To conclude the first step of the data analysis, topics representing events were ordered chronologically, whenever chronological ordering was possible (i.e. whenever events did not take place simultaneously).

Stage 2: Establishing Second Order Concepts and Relationships

In the second stage of the data analysis, each broad concept was explored in order to identify the elements (or second order concepts) composing it and to establish the relationships linking those elements (Carley and Palmquist, 1992). The coding of each element was carried in the third stage. The second stage was determinant mainly in uncovering the possible relationships existing among elements.

Three main link types were identified. Elements were either linked by *temporal lines* (represented as a slim continuous line linking two elements), *causal lines* (represented by an arrow pointing in the direction of the element emerging from the element at the root of the arrow) or *cognitive connection lines* (represented by a thick line linking two elements, where the elements consist of thoughts that the decision maker is linking in his reasoning process).

The temporal line is used when the respondent refers to chronological order of events using wording such as “years later”, or “after that I did”, “then we moved into”, etc.

The causal line is used when a thought or event is indicated as a direct consequence of a certain element. For instance the respondent may say “I worked for company X and there I realised that the optimum company size is Y”. In the graphical representations of this concept, an arrow would link the “work for company X” to “optimum company size”, as the latter element comes into existence as a consequence of the former element.

The cognitive connection line is used when the respondent outlines his reasoning process and the process assembles more than one thought in order to arrive to a certain conclusion. The cognitive connection line is based on Baron’s idea of “connecting the dots” (Baron, 2006; Baron and Ensley, 2006), used in entrepreneurial research to establish how entrepreneurs assemble different, even unrelated thoughts, in order to identify opportunities. In this thesis, the connection of multiple thoughts is used as an analytical tool to capture multiple factors determining internationalisation decisions.

2 - Relationships among Second Order Concepts

Second order concepts (or elements) may be linked by the following relationships:

- Temporal lines: 
- Causal lines: 
- Cognitive connection lines: 

Stage 3: Coding of Second Order Concepts

In the third stage of causal cognitive map construction, specific portions of text representing each second order concept (based on Carley and Palmquist, 1992) were extracted and coded (or tagged). These tags were then used in the graphical representation of the causal cognitive map as nodes linked by the relationships established during stage 2.

Second order elements may refer to the respondents’ understanding of external world events or internal thoughts forming part of a broader concept (see stage 1

above). At this stage, every event and thought was coded. The wording used to code each text extract was based as much as possible on the respondent's own wording and the use of academic language was avoided. This was done in order to ensure minimisation of data analysis bias consisting of alterations to the meaning of the text. The procedure aimed to be as inductive as possible and to avoid juxtapositions of academic and practitioners' language.

For exemplification purposes, an example of the coding procedure is shown in the box shown in the page overleaf.

3 - Coding of Second Order Concepts

From First Order Concept “Pre-firm Foundation Experience” - Case Study A

“I started working for a company called [company 1]. They were a US, high-tech electronics workstation manufacturer, so I went to work for them immediately when I left college, and I guess that’s where the international aspect started, in ‘86.

It was a good size, and I think size is important. A lot of people talk about the optimum size of a company, and when I joined it was probably at the optimum size, in terms of a facility. It was about 200 people and 200 people means typically you can know everyone, and you can understand a lot about the operation.”

To Second Order Concept Coding

(See code on left hand side and text coded on right hand side)

First Work Experience in industry and Exposure to international business:

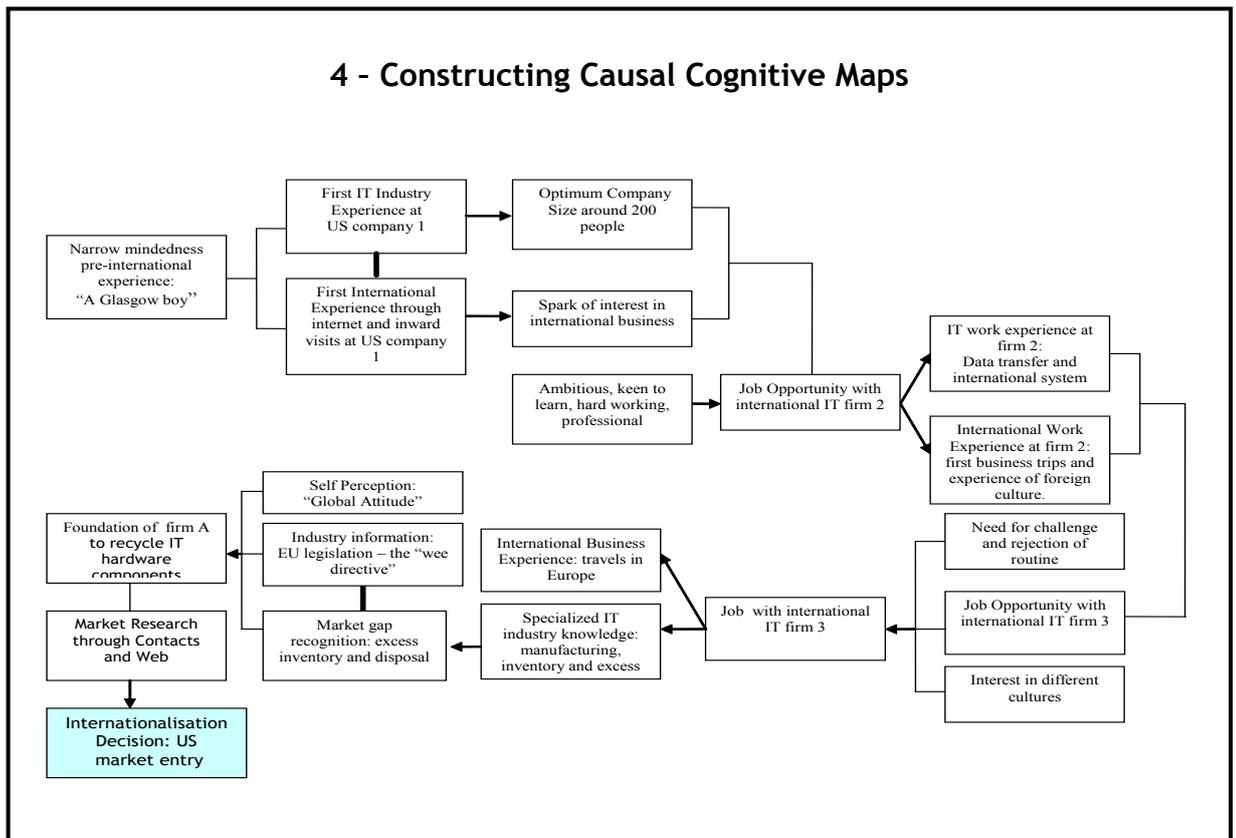
“I started working for a company called, [company 1]. They were a US, high-tech electronics workstation manufacturer, so I went to work for them immediately when I left college, and I guess that’s where the international aspect started, in ‘86.”

Optimum company size (around 200 people):

It was a good size, and I think size is important. A lot of people talk about the optimum size of a company, and when I joined it was probably at the optimum size, in terms of a facility. It was about 200 people and 200 people means typically you can know everyone, and you can understand a lot about the operation.”

Stage 4: Constructing the Causal Cognitive Map

The fourth and final stage consists of building a graphical representation of the causal cognitive map (Calori et al., 1994; Carley and Palmquist, 1992). This is achieved by connecting all coded elements (as in stage 3) with each other through the relationship lines identified in stage two. Below is an extract of one of the causal cognitive maps constructed, as it presented itself in the final stage.



4.4.3. Pattern-matching Casual Cognitive Maps with Heuristics Theory: Rationale and Accuracy Issues

Once the data was fully analysed inductively through the construction of the causal-cognitive maps, the latter could be pattern-matched to the theory of heuristics and biases (Tversky and Kahneman, 1974) outlined in Chapter 3. For transparency, the matching with theory of each decisional process in every case study is reported in a subsequent dedicated chapter (Chapter 5). Here, however,

I shall briefly outline the procedure used to identify each heuristic and to ensure its accuracy.

First, I will define the reasoning processes attributable to each heuristic based on the original theory.

According to theory, the *Availability Heuristic* is associated with estimating the likelihood or the frequency of an event according to instances of similar events that are readily available in the mind of the person making the judgement (Tversky and Kahneman, 1974; Braisby and Gellatly, 2005).

In pattern-matching data with theory, evidence of the use of the availability heuristic was taken to be a *reasoning process whereby the decision maker gave evidence of estimating the likely outcome of a certain decision on the basis of past experience that is easily retrievable (recent or vivid⁵)*. The latter would trigger a decisional process consisting of either a repeat or an avoidance of the retrieved instance.

Theoretically, the *Representativeness Heuristic* is associated with making judgements on whether the situation, event or object at hand is a member of a certain category by reasoning on how similar or typical it is of that category (Braisby and Gellatly, 2005, based on Kahneman and Tversky, 1973).

In the pattern-matching exercise, evidence of the use of the representativeness heuristic was taken to be a *reasoning process whereby the decision maker gave evidence of comparing the situation at hand, requiring a decision, with instances of situations believed to belong to the same category on the basis of few characteristics of the situations itself*.

Anchoring and Adjustment Heuristic is associated with estimating the likelihood or value of something starting from an initial anchor and adjusting the estimate on the basis of the anchor (Tversky and Kahneman, 1974).

⁵ Recency was evident from the reconstruction of the chain of events based on the interview. Vividness was estimated based on the emphasis put on the memory during the interview - as reflected in the causal cognitive map - and triangulated with the repertory grid.

Evidence of the use of the anchoring and adjustment heuristic was taken to be a *reasoning process whereby the decision maker gave evidence of retrieving a piece of information considered relevant and using it as the base from which to make incremental changes in order to judge what to do in the situation at hand.*

In order to ensure accuracy in labelling each decision from the data with the correct heuristic, the following measures were taken.

First, an initial pattern-matching of each decision with the aforementioned definitions was carried out case by case, creating the first version of the pattern-matching chapter in July 2010. This first version of the pattern-matching chapter was revisited some four months later (November 2010). Revisiting the pattern-matching chapter four months later meant that the chapter could be viewed with a fresh eye and that parts considered inconsistent or unclear could be rectified.

A final revision of the pattern-matching chapter was carried out in December 2010, when the cross-case analysis was written up. Comparing decisional processes by type of decision presented the opportunity to challenge the pattern-matching procedures one more time by enquiring as to the reason why similar decisions had been pattern-matched to different heuristics. Similarly, I questioned why apparently different decisional processes were pattern-matched with the same heuristics.

In summary, the pattern-matching process was triangulated by revising it over time and through a different categorisation (that is, by case and by decision type).

4.5. Measures Taken to Ensure Rigour

One of the major issues in producing high standard qualitative research, especially when it comes to case studies, is to ensure that the research is carried out following rigorous research criteria. All too often, in fact, qualitative research is dismissed on the grounds that it is too fuzzy and flimsy. Thus, this research seeks to avoid such shortcomings by following established criteria for conducting good quality case study research. In doing so, it follows Yin`s (2003)

recommended tactics for addressing the four established tests on research quality, namely *Construct Validity*, *Internal Validity*, *External Validity* and *Reliability* (Yin, 2003: 33-39, see also Gibbert et al., 2008 for an in-depth treatment of rigorous case studies in management). Each of those tests and their applications are outlined below

4.5.1. Construct Validity

Construct validity deals with the operational measures used to appraise the concepts being investigated. Are those appropriate measures? Do they appraise what the study sets out to appraise?

In order to strengthen the construct validity of the cognitive processes involved in internationalisation decisions, I use data triangulation (Patton, 1987). Data triangulation allows for the construct being appraised to be observed from different sources of evidence (Yin, 2003) so that the bias that may be associated with a single piece of evidence is removed.

In this research, the constructs emerging from the first interview are triangulated with those emerging from the second interview and from the repertory grid technique.

Accounts of internationalisation decision processes emerging from the first interview are triangulated with accounts of the same processes in the second interview. With a time lag of one to two years between interviews, whenever the decision maker gave the same account of the decision making rationale, the cognitive processes underpinning the decision making process were considered valid.

A further confirmation of the validity of the rationale behind the decisions made was obtained through triangulation with repertory grids. This allows for the elicitation of the way decision makers thought of the internationalisation of their firms using a different technique. In doing this, I follow Patton (1987), who advocates *methodological triangulation* as a means of ensuring construct validity. This is based on the assumption that by using more than one method to appraise a certain construct on the same evidence, biases and limitations associated with specific methodologies may be overcome.

In addition, as suggested by Yin (2003), I keep a chain *of evidence* to ensure construct validity. In order to achieve this, I outline the process that brought me from the initial research questions to the outcomes of the research. This description of the process followed should enable the reader to trace back the steps taken to go from any point of the research to another. Particularly, I aim to keep a clear chain of evidence throughout the data analysis section (see dedicated section on Data Analysis above). This should put the reader in a position to track back to where any significant evidence comes from and why it was deemed to be significant.

Although it is recommended that a draft report of each case study be reviewed and approved of by key informants (Yin, 2003), this recommendation could not be followed in this research. The reason behind the choice not to ask informants to review their reasoning (or cognitive) processes behind internationalisation decisions is that, faced with a report of their reasoning processes, entrepreneurs may feel psychoanalysed and become alienated (Thorpe and Holt, 2008). In addition, some entrepreneurs may not be aware of the content of their reasoning until they see it on paper (based on Fiol and Huff, 1992) and, once they see it, they may be inclined to attempt to adjust it in order to appear more thorough and professional. Written accounts of respondents' reasoning, such as cognitive mapping, tend to be submitted to the respondent for review in instances where the researcher is seeking to improve the decision-making abilities of the respondents (e.g. Eden, 1992; Fiol and Huff, 1992) as opposed to merely appraising them.

4.5.2. Internal Validity

Issues of *internal validity* are of particular relevance when attempting to conduct explanatory research involving causal-effect inferences (Yin, 2003). In the instance of the research being conducted here, the researcher has to be careful in concluding that certain antecedents influence the choice of heuristic used in the reasoning behind decision making. How can this be achieved? Since direct observation of the process as it unfolds is not possible, the researcher has to make inferences.

In making inferences, I use a *pattern-matching* technique (Yin, 2003). The technique consists of matching the causal effect pattern of the data with that predicted by the theory. If it matches, the case study's internal validity may be considered strong.

This pattern-matching reasoning is used in the data analysis chapter that follows. In it, the theoretical description of each heuristic is matched with the causal cognitive map representing each internationalisation decision (see next chapter).

A particular technique derived from pattern-matching is used here, that of *logic models*. "The logic model deliberately stipulates a complex chain of events over time. The events are staged in repeated cause-effect-cause-effect patterns, whereby a dependent variable at an earlier stage becomes the independent variable for the next stage" (Yin, 2003: 127).

This causal-effect chain is reconstructed in the causal-cognitive maps built from the original data.

However, the question remains as to how to extract the building blocks of the cognitive-causal map from the raw data. This very practical task has a significant impact on the internal validity of the case and it is all the more challenging since interviewees do not talk "in boxes". Thus, they may not specifically state that "event A led to decision B". However, causal relationships may become apparent from the wider content of the interview. Hence, it is also the researcher's job to piece together discrete pieces of information that lead to inferences (Miles and Huberman, 1984). The way this was achieved in this research is outlined in the dedicated data analysis section of this chapter.

4.5.3. External Validity / Generalisation

The external validity test deals with whether or not the results of the case study are generalisable. When talking about generalisability of research findings it has to be specified whether the aim is to generalise to the population or to the theory. As is the case with case study research, this study aims for the latter, thus it addresses issues of *analytical generalisation* (Yin, 2003). This is in contrast to *statistical generalisation*, which is addressed, for instance, by

surveys and aims to generalise to the entire population from which the research sample was taken.

Generalising to theory means that the case study provides support to the theory, thus confirming it and helping its further development. Yin (2003) equates case studies to experiments. As in experiments, one case study may support a theory. However, replicating the experiment (with another case) is desirable in order to further confirm or disconfirm the theory (Yin, 2003). Six case studies are used in this research, in order to start building a theory of cognitive processes in decision making in the context of internationalising firms. In order for the case studies to allow for generalisation to theory, they are to be chosen purposefully. Issues of replication logic and case study selection have been specifically addressed in this thesis and are discussed separately in this chapter.

4.5.4. Reliability

The reliability test in case study aims to minimise errors and biases in case study procedures. Thus, I endeavoured to establish a protocol for conducting research at the outset and to follow it closely. In Yin's words, research should be conducted "as if someone was always looking over your shoulder" (Yin, 2003: 38).

In order to strengthen the reliability of the case studies, I document the procedures followed in each stage in dedicated section of this chapter and the next. I have dedicated a separate section to the description of the procedure I followed during the data collection process as well as the process of data analysis leading from the raw data to the construction of causal-cognitive maps. The final analysis of each internationalisation decision in the causal-cognitive map of each respondent is presented in full in the next chapter on data analysis. In the latter chapter I also outline the pattern-matching rationale (following Yin, 2003) linking the data to Heuristics and Biases (Tversky and Kahneman, 1974) theory. The aim is potentially to enable other researchers to replicate the study, obtaining the same results (Yin, 2003).

4.6. Limitations of Methodology and Avenues for Future Research

Although the case study approach was chosen in this thesis in order to preserve the richness of a real life context, it presented some shortcomings.

In some instances it was not possible to detect whether heuristics reasoning was used or which heuristic was in play. In a few instances, conflicting inferences were made on the heuristic used. In addition, establishing specific biases affecting the heuristics used was often problematic. All these issues stem from the fact that, in order to establish the heuristics and biases affecting the reasoning process, it is necessary to compare the reasoning process used against a benchmark representing rational reasoning. In a study set in a real-world context, the latter benchmark was not available (had the interviewee been aware of it, there would have been no need to investigate imperfect heuristic reasoning in the first place).

An alternative avenue for future research in the use of heuristics in internationalisation decision making is an experimental design (following Tversky and Kahneman, 1974). The latter would enable the investigator to compare the reasoning process used and the associated biases with the rational reasoning process/baseline (as set out by the design of the experiment). This approach would address the methodological issues discussed above.

Another limitation in the methodological approach taken is the issue of *retrospective recall bias*. Issue with *post-hoc* methods such as retrospective accounts may be problematic as they may not capture the full content of the cognitive reasoning at the time the decision is made (J. Hayton, interview, 5 November 2010). Retrospective accounts may sound decisive and straightforward, as opposed to the doubtful and multifaceted accounts that entrepreneurs give in real-time accounts (e.g. Dimov, 2011).

In order to counteract this issue, real time accounts are recommended (Busenitz et al., 2003). These may include protocol analysis (e.g., Sarasvathy, 2001),

conjoint analysis (Shepherd, 1999) and policy capturing (Zacharakis and Meyer, 1998 - see Busenitz et al., 2003).

Due to the fact that the pattern matching of the data to heuristic theory was conducted by a single researcher, despite the measures taken to ensure rigour in the process, the data analysis may still suffer from *interpreter bias* (e.g. Autio et al., 2011). This phenomenon is associated with the fact that in pattern matching each instance of internationalisation decision to one or more heuristics I had use a degree of inference. The inferences I made may have been more robust if triangulated with the interpretation of another researcher. In this thesis this wasn't possible due to constraints in access to a fellow researcher's time for the entire duration of the data analysis period (which lasted several months). However, future research using a pattern matching approach is encouraged to make use of multiple researcher triangulation to avoid interpreter bias.

Finally, two more shortcomings associated with this research are linked to the fact that the methodological approach taken is based on the assumptions of *no post-hoc rationalisation* and of *decision cognisance*.

The former assumption is associated with retrospective accounts of events. Those events may be considered accurate only if it is assumed that the respondent hasn't adjusted his understanding of facts through rationalising them retrospectively (see Bernstein et al., 2011). When rationalising events retrospectively respondents give inaccurate accounts of what was known and believed before the event took place (Bernstein et al., 2011).

The latter assumption, that of decision cognisance, is linked to the nature of the research question, namely to uncover cognitive reasoning in the respondent. Since these cannot be observed directly, an assumption is made that the respondent is aware of his reasoning processes and that those are reflected in the content of his speech (e.g. Ormerod and Ball, 2007; Gore and McAndrew, 2009).

4.7. Conclusions and Implications

To summarise, this chapter has taken the reader from the philosophical assumptions of the research to the fine-grained details of data collection and analysis. It has been argued that the decision maker's interpretation of the context calls for an interpretivist approach. The lack of current understanding of decision making according to principles of bounded rationality calls for a theory building approach based on case studies. Cases are purposefully selected according to principles of homogeneity in decision making, maximum variation in industry and possibility to observe the phenomenon clearly. Multiple semi-structured interviews (both exploratory and explanatory) are used to elicit causal-cognitive maps for each decision maker representing a case study. Repertory grids (reflecting the of cognitive schema content of the decision maker) are also elicited during the interview. This allows for triangulation purposes, checking the construct validity. Other robustness issues are tackled through keeping a chain of evidence of the data analysis process and by following strict data collection and analysis procedures. Still, this methodological approach recognises that limitations are unavoidable. In this instance, the main limitations are identified in the retrospective recollection of the decisional processes.

Having outlined here how the complete causal cognitive maps of each decision maker are constructed, the next chapter starts from the maps (as opposed to the raw data). Each map is broken down into sections representing each decision made.

Chapter 5

Within Case Analysis: Pattern-matching Data to Theory

This chapter analyses multiples sets of data, obtained through the procedure described in the previous chapter, in light of the theoretical framework adopted in this thesis (i.e. heuristics reasoning based on Tversky and Kahneman, 1974). The analysis follows a pattern-matching procedure. That is, it establishes the extent of fit between data and theory.

In cross-comparing data to theory, this chapter draws on both causal-cognitive maps (constructed indirectly following the procedures outlined in the Methodology chapter and broken down into single decisions) and repertory grids (elicited during the explanatory interview, see Methodology chapter).

Elements of reasoning leading to each decision (as represented by the causal-cognitive map) are checked for in the repertory grid of the decision maker (data triangulation). Those elements, checked for validity through data triangulation, are compared to the main types of heuristics outlined by theory.

The theory of reasoning and decision making under conditions of bounded rationality (Tversky and Kahneman, 1974) used in this thesis is based on three main types of heuristics. Those include the Availability Heuristic, the Representativeness Heuristic and the Anchoring and Adjustment Heuristic (Tversky and Kahneman, 1974; Kahneman et al., 2003). A full discussion of heuristics theory can be found in the dedicated literature review chapter (Chapter 3). However, for the reader's convenience, a concise description of the aforementioned heuristics is presented below.

<i>Availability Heuristic</i>	Used when people estimate the likelihood or the frequency of an event according to instances of similar events that are readily
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available in their mind (Tversky and Kahneman, 1974; Braisby and Gellatly, 2005).

Representativeness Heuristic Used when making judgements on whether the situation, event or object at hand is a member of a certain category by reasoning on how similar or typical it is of that category (Braisby and Gellatly, 2005, based on Kahneman and Tversky, 1973).

Anchoring and Adjustment Heuristic

Used when estimating the likelihood or value of something starting from an initial anchor and adjusting the estimate on the basis of the anchor (Tversky and Kahneman, 1974)

The task of pattern-matching presents the challenge of making inferences about cognitive decision making processes where the latter are, by their very nature, unobservable. In pattern-matching data to theory in this thesis, inferences about the reasoning processes at play in each decision were based on the following main elements:

- Respondent's Account [RA]
- Respondent's Past Experience [RPE]
- Applied Heuristic Theory [AHT]
- Researcher Interpretation [RI]

The above tags in square brackets are used in the pattern-matching discussion in order to make clear to the reader what the rationale behind the inferences made is.

In the title of the paragraph discussing each decision is a code (in brackets). For instance, "Case Study A - Internationalisation Decision 1" is coded as "(CSA-

ID1)". This coding system is adopted for ease of cross referencing to the decisions in the following chapter on discussion and contributions.

The title of each foreign market entry decision contains both the country and the mode of entry. However, the title puts emphasis on the part of the decision (either country *or* entry mode) that the reasoning process explains. This is achieved by putting in brackets the part of the decision that is not explained by the reasoning process.

5.1. Case Study A

Firm A was founded in 1999 in the South-East of Scotland. The firm operates in the environmental sector. Its business model consists of collecting excess inventory from IT hardware manufacturing companies, to be resold into a dedicated remanufacturing channel.

The firm was founded and owned-managed by entrepreneur A and a partner, with the latter leaving the company in 2004. It is a small firm, employing less than fifty employees worldwide (European Commission, 2003).

Straight after inception, the firm enters the United States market through direct exports (foreign market entry classification based on Young et al., 1989).

In 2001 the firm establishes a wholly-owned subsidiary (WOS -Young et al., 1989) in Italy, managed by an Italian national. Later, the firm retrenches through sale of the subsidiary.

The following year, the firm enters Eastern Europe through wholly-owned subsidiaries. Those are sold in the year 2004.

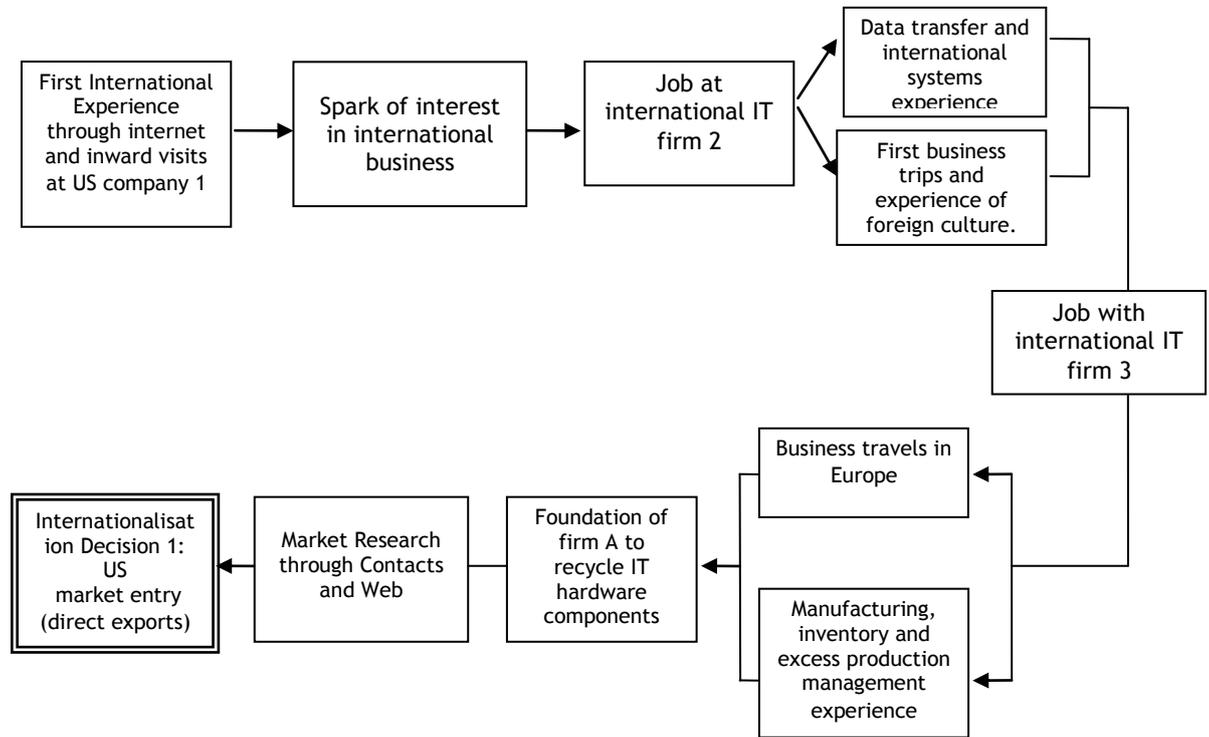
In 2006 the firm enters the Chinese market by setting up a wholly-owned subsidiary (Young et al., 1989) managed by a Chinese national that has previously trained in the Scottish headquarters of the firm.

Since involvement in foreign markets started soon after firm inception, the latter falls under the definition of International New Venture (Oviatt and McDougall, 1994).

(Based on interviews with entrepreneur A on 2006 and 2008, plus SE baseline information on firm A)

Case Study A - Internationalisation Decision 1 (CSA-ID1): US market entry (direct exports)

Figure 5.1: Case Study A - Internationalisation Decision 1 (CSA-ID1)



Following incorporation of the new firm, the decision to enter the US market through direct sales is taken through some information searches, both through the web and through personal contacts. The entrepreneur declares:

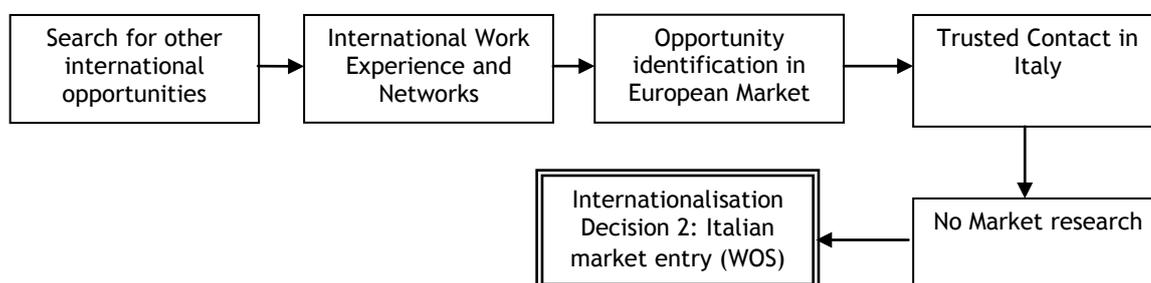
“Who we were going to take the product to was again through using the web, through using new contacts, through different and every means possible. And those customers who would purchase the product were US- and UK-based” (Entrepreneur A, 25th May 2006) [RA].

The rationale used to select alternatives and make the final decision is not explained in any further detail by the entrepreneur. There is reason to believe that the entrepreneur is using an *anchoring and adjustment heuristic* [AHT], based on the fact that he is adjusting from the information found through market research (namely, that a potential customer base may be in the US) to

establish that direct exports in the US could be promising for the firm [RI based on RA].

Case Study A - Internationalisation Decision 2 (CSA-ID2): Italian market entry (Wholly-Owned Subsidiary)

Figure 5.2: Case Study A - Internationalisation Decision 2 (CSA-ID2)



Following the successful early firm performance with sales in the domestic and the United States market, the entrepreneur decides to find new opportunities to expand abroad.

He recalls memories from his international work experience, including the contacts he has established internationally.

From memory, Europe seems an appropriate market to enter [RA]. However, this information is based on the entrepreneur's recollection of his own experience rather than on a collection and evaluation of alternatives. In fact, by the entrepreneur's own admission, no market research is conducted in this instance. Therefore, he is using heuristics reasoning as opposed to classical rationality reasoning. When he thinks of opportunities, Europe comes to mind readily. This is likely to be due to the fact that the entrepreneur has had experience of the European market for the industry the firm operates in through his previous employment [RPE]. Consequently, the European experience is likely to be more salient in his mind and be more readily available for retrieval [RI]. Thus, it is

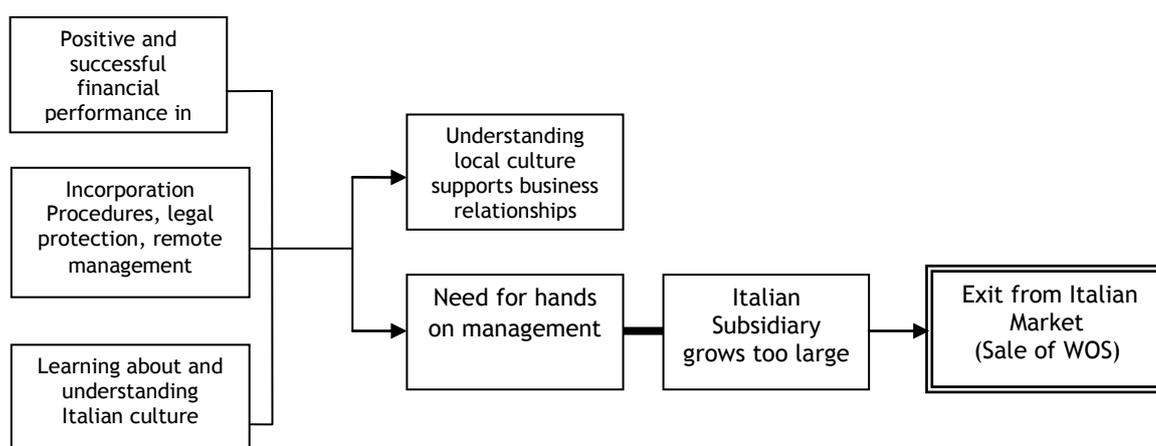
reasonable to conclude that he is using the *Availability Heuristic* (Tversky and Kahneman, 1974) to reason on markets to enter [AHT].

Within the wider context of Europe, one country has to be chosen for entry. Again, rather than evaluating a series of alternatives in the European market and selecting one according to specific criteria, the entrepreneur recalls of a contact in Italy [RA]. He refers to this contact as a “trusted” one. This gives reason to assume that the entrepreneur has sufficient personal experience of interacting with the Italian contact to think of him as a trustworthy person [RI]. The entrepreneur is likely to have vivid positive memories of his interaction with this individual as well as positive feelings associated with him [RI]. Both these factors, according to heuristics theory (Tversky and Kahneman, 1974), are linked to the use of an *Availability Heuristic* [AHT].

Based on this process, a decision is ultimately made to enter the Italian market through a sales office to be managed by the Italian contact.

Case Study A - Internationalisation Decision 3 (CSA-ID3): Exit from the Italian market

Figure 5.3: Case Study A - Internationalisation Decision 3 (CSA-ID3)



The decision to exit the market is based on a single path of reasoning. That is, the firm has grown beyond what the entrepreneur has come to consider the “optimum company size” [RA]. This is an old belief, developed during the

entrepreneur's early work experience [RPE], which is vivid in the entrepreneur's mind [RI]. Thus, this belief becomes readily available to him when a decision is to be made, activating an *Availability Heuristic* reasoning process (based on Tversky and Kahneman, 1974) [AHT].

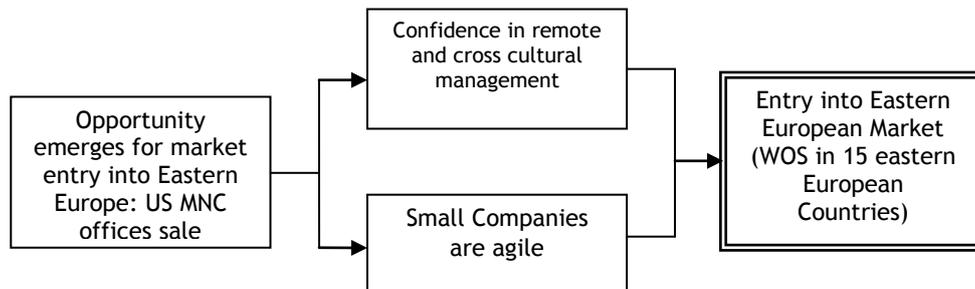
This train of thought is also reinforced by the recent negative critical incidents (Cope and Watts, 2000) in the Italian market, from which the entrepreneur has come to the conclusion that operating in a market like Italy requires a "hands-on" management style. This learning has taken place following a series of issues encountered during the experience in Italy [RA]. The vividness and recency of this experience places it at the forefront of the entrepreneur's mind, becoming readily retrievable in his reasoning process [AHT]. This reasoning process conforms to the *Availability Heuristic*. In fact, not only the two pieces of information retrieved are based on vividness and recency but also other information that should have been weighted-up in the decision was ignored [RI]. The decision is taken despite the fact that the firm is performing rather well in the market from a financial viewpoint. Moreover, the decision overrides the fact that the entrepreneur has learned how to operate in the Italian market after encountering a series of legal and cultural challenges [RA].

Thus, the heuristics logic, in this instance, overrides the maximisation of profit logic (e.g. Buckley and Casson, 1976) as well as the logic that with increased foreign market knowledge there is an increase in commitment (Johanson and Vahlne, 1977, 1990).

Connecting the two thoughts retrieved through the availability heuristic - the need for hands-on management and the firm being too large - he reasons that the firm is now becoming too large to be managed in a "hands-on" fashion [RA]. Consequently, a decision is made to sell off the Italian subsidiary and exit the market.

Case Study A - Internationalisation Decision 4 (CSA-ID4): Entry into the Eastern European Market (WOS)

Figure 5.4: Case Study A - Internationalisation Decision 4 (CSA-ID4)



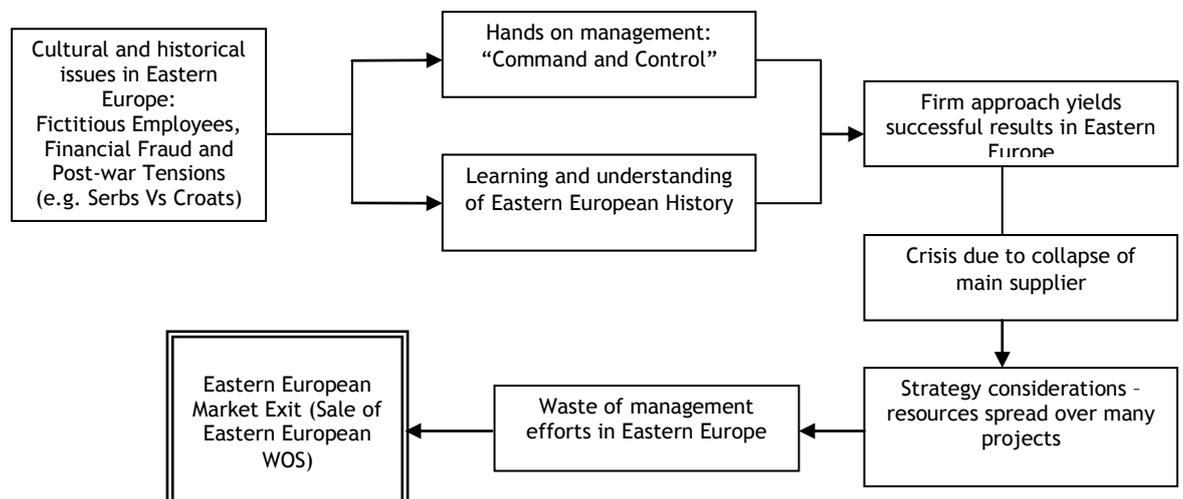
A new opportunity emerges serendipitously, as an American Multinational Corporation (MNC) is selling their Eastern European offices and the entrepreneur's firm has to decide whether to acquire those wholly-owned subsidiaries.

The entrepreneur reasons on this opportunity by drawing on two thoughts. Firstly, that he is now confident in cross-cultural management and in remote management [RA]. These considerations are based on his recent experience of the Italian market [RPE]. Thus, it may be said that he is using the availability heuristic, as the information is recent and vivid in his mind. However, this reasoning process may also be viewed as a *Representativeness Heuristic* (Tversky and Kahneman, 1974) [AHT]. In fact, the entrepreneur is taking the main features of his experience in Italy to be representative of the Eastern European office management [RI]. The features he believes to be representative of both Italy and Eastern Europe are general cross-cultural management and hands-on management [RA]. By reasoning in terms of similarities between the two situations he is not considering that there are other relevant features along which Italy and Eastern Europe differ [RI]. In line with this analysis, a Representativeness Heuristic seems a more suitable paradigm in this instance [AHT].

As for the other item retrieved in this decision making process, the belief that small firms such as firm A are agile, an *Availability Heuristic* seems to apply [AHT]. As discussed in the previous decision analysis, this view of the entrepreneur has been developed during his early working years, reinforced through his experience in Italy [RPE] and it is very vivid and readily available in his mind [RI].

Case Study A - Internationalisation Decision 5 (CSA-ID5): Exit from the Eastern European Market

Figure 5.5: Case Study A - Internationalisation Decision 5 (CSA-ID5)

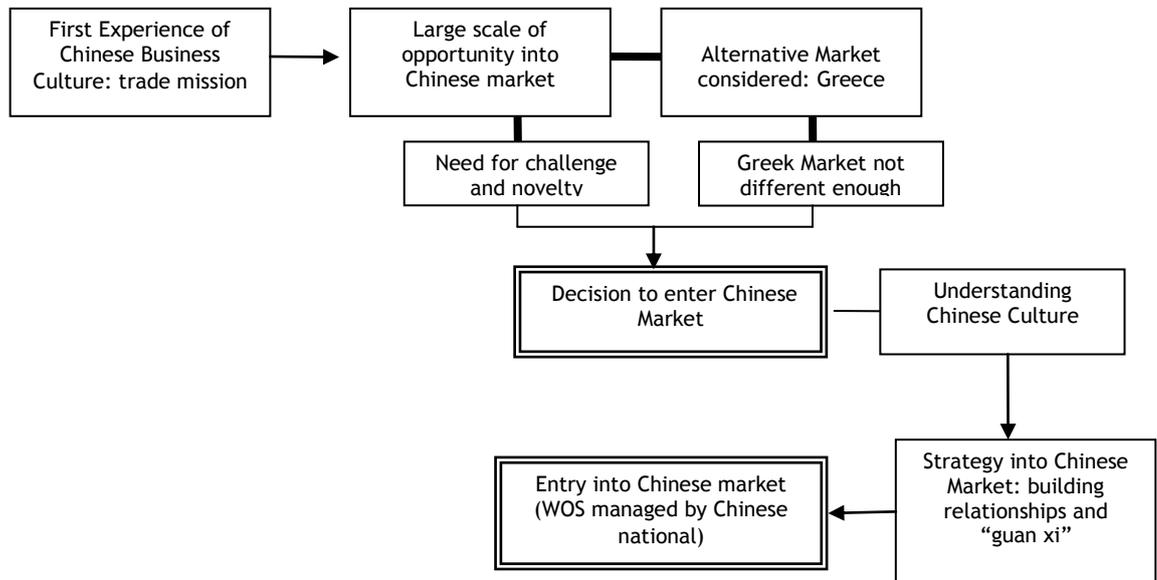


The decision to exit the Eastern European market is taken following a company crisis due to the collapse of one of the firm’s main suppliers. This forces the firm to reconsider its approach. In doing so, the entrepreneur reasons that there is a waste of managerial efforts, since he has to travel across all the Eastern European offices [RA]. The reason he believes he has to manage the offices so closely is that he has encountered a series of cultural problems in the block of countries, which require a “hands-on “ management style, which he names “command and control”. However, the spread of offices across the difference countries makes this managerial style very challenging. Therefore, a decision is made to sell off the Eastern European offices and exit Eastern Europe [RA].

This reasoning is fundamentally relying on one main item from the entrepreneur's cognitive schema, namely the need to for "hands on management", or "command and control" [RPE] which is closely linked to the idea of having a firm of limited size which can be closely monitored [RPE]. These items have been reinforced in the entrepreneur's mind with the experience in the Italian market and in the Eastern European market [RI based on RPE]. Therefore, they are likely to be primed easily in the entrepreneur's mind when reasoning on the decision to be made [RI based on AHT]. On the other hand, the positive outcomes of the efforts Eastern Europe and the in-depth knowledge of the market are not taken into consideration in the reasoning process. This supports the view that the entrepreneur is reasoning using the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT]. Moreover, this decision making process yet again does not support the incremental commitment approach by Johanson and Vahlne (1977, 1990, 2006, 2009), since an increase in market knowledge and an increased ability to operate in it do not lead to an increase in commitment.

Case Study A - Internationalisation Decision 6 (CSA-ID6): Entry into the Chinese market (Wholly-owned Subsidiary)

Figure 5.6: Case Study A - Internationalisation Decision 6 (CSA-ID6)



The decision to enter the Chinese market follows a reasoning process involving the comparison of two alternatives, namely to enter China or Greece [RA]. The entrepreneur does not specify why Greece came to mind as an alternative. On the other hand, he states that the reason China was being considered depended on the fact that he had recently joined a trade mission in the country and was left with the positive impression that it offered opportunities [RA]. Thus, in considering the entry in China, the retrieval mechanism is likely to have worked on the basis of recency and positive feeling association [RI], both linked to the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

In reasoning on the choice to make, he evaluates both alternatives. However, the selection of alternatives is based on the personal motivation of the entrepreneur (as by Cyert and March, 1963), namely the need for experiencing a culture that is different from what experienced before [RA]. On the basis of this reasoning, Greece does not appear sufficiently different, so the choice falls on China [RA]. Interestingly, there is no evaluation of alternatives based on profit maximisation, as transaction cost theory advocates (Buckley and Casson, 1976).

Having chosen the market to enter, a choice is made on the mode of entry. In this instance, the entrepreneur does not seem to rely on his own reasoning but rather on market research aimed at understanding the Chinese market [RA]. From the research, he understands that the market works through networks of contacts - named "*guan xi*". Therefore, he decides that a local presence and a Chinese national are required to best operate in the market. Consequently, he decides to enter the Chinese market through a foreign office managed by a Chinese national [RA].

Triangulation with repertory grid of entrepreneur A

The decision making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross-compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.1: Entrepreneur A's Repertory Grid of Internationalisation

Entrepreneur A's Repertory Grid of Internationalisation	
<ol style="list-style-type: none"> 1. Europe 2. Formal, Lengthy, Complex Incorporations Procedures 3. Western Culture 4. Trust-Based Business 5. High Need for Control 6. High Recognition of Authority 7. Requires Authoritative Behaviour 	<ol style="list-style-type: none"> 1. Non-Europe 2. Simple, Fast, Informal Incorporation Procedures 3. Eastern Culture 4. Formal Contract Based Business 5. Low Need for Control 6. Low Recognition of Authority 7. Allows Friendly, Informal Behaviour

Items on the repertory grid are a reflection of the constructs considered by the entrepreneur when thinking of internationalisation events. All items in the grid

refer to cultural issues, except perhaps for item 2, referring to more institutional issues. This reflects the belief in learning about cultural issues that this entrepreneur has acquired. Therefore, this construct of the entrepreneur is confirmed by the repertory grid.

Items 5, 6 and 7 refer to the issue of remote management and need for control. This reflects the other main cognitive construct held by the entrepreneur, as seen above. Thus, the construct is confirmed as being at the forefront of the cognitive processes of the entrepreneur that surround internationalisation issues.

Ultimately, there is reason to be confident that the longitudinal data used to make assertions about the cognitive processes involved in decision making is reliable, in that the same key items behind the main foreign market selection decision of the entrepreneur emerge when a different technique is used to elicit the entrepreneur's main cognitive schema content.

Case Study A - Main Findings

- In five of the decisions made by the entrepreneur there is evidence of the use of heuristics in the decision making process;
- Although in one instance of foreign market selection (CSA-ID6) a more rational decision-making approach is taken at the stage of evaluation of alternatives, the final selection of a course of actions is based on the personal motives of the entrepreneur, as opposed to principles of profit maximisation (following Buckley et al., 2007)
- Four instances of foreign market selection decisions are present in from this case (CSA-ID1, CSA-ID2, CSA-ID4, CSA-ID6).
- Two cases of foreign market selection involve a reasoning process based only on the availability heuristic (CSA-ID2 and CSA-ID6). Both of those draw on experiential factors.
- One case of foreign market selection (CSA-ID1) is based on the anchoring and adjustment heuristic. This reasoning process draws on vicariously acquired foreign market information.
- One case of foreign market selection (CSA-ID4) draws on a combination of the representative heuristic and the availability heuristic. This reasoning process is based on elements of entrepreneurial experience.
- Two instances of foreign market exit decision are present in the case study (CSA-ID3 and CSA-ID5). Both decisions are based on a reasoning process involving the availability heuristic. In both cases the reasoning process draws on a specific element of entrepreneurial experience, namely a critical incident.
- Over the first six to seven years from inception, the leader of this international new venture does not substantially change the elements (experientially based) on which his decision making processes draw. Moreover, fluctuations in the reasoning processes (i.e. heuristics) used over this period of time seem to be attributable to the framing of the decision (i.e. whether the country of potential entry can be compared to one previously experienced or not) rather than to an enduring evolution in the thinking strategy of the entrepreneur.
- Triangulation with repertory grid: Most items from the grid mirror the key themes emerging from the causal-cognitive maps of A. Of particular note are items linked to cultural issues and those addressing remote management.

5.2. Case Study B

Firm B was founded in 1999 by entrepreneur B, who remains the firm's only owner and manager to date.

The firm is located in the South West of Scotland and operates in the environmental and recycling industry. It collects second hand print cartridges and mobile phones on behalf of a number of charities, resells them onto a dedicated refurbishment channel and gives part of the profits to the charities on whose behalf the collection has been carried out.

The firm falls within the definition of Medium-sized, employing just one hundred staff (European Commission, 2003).

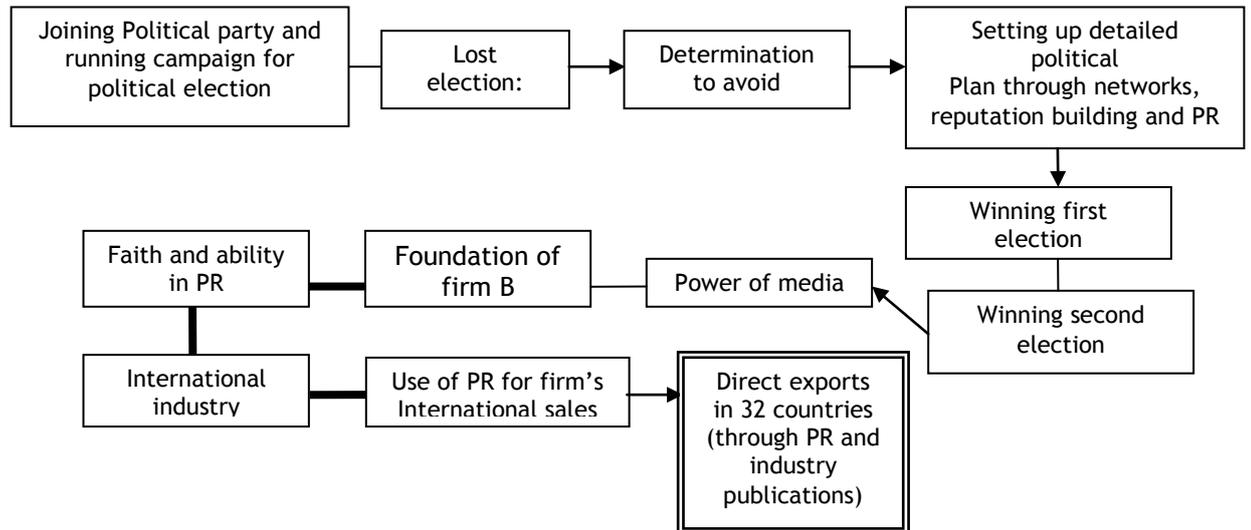
Two wholly-owned subsidiaries are set up in Ireland and France in quick succession. The firm exits the French market in 2006. In the same year, the firm enters the United States market through a wholly-owned subsidiary in Atlanta. The firm retrenches by exiting Atlanta by 2008. A wholly-owned subsidiary is set up in the Italian city of Rome. In 2008, the firm is still active in the Italian market. Finally, the firm sets up international licensing in 2008.

The firm's foreign market entry and development takes place within the first five to six years from inception, through direct exports as well as wholly-owned subsidiaries (WOS - Young et al., 1989). Therefore, the firm is defined as an International New Venture (Oviatt and McDougall, 1994).

(Based on interviews with entrepreneur B in 2006 and 2008, plus SE baseline information on firm B)

Case Study B - Internationalisation Decision 1 (CSB-ID1): Direct Exports (International Sales through PR and Industry Publications)

Figure 5.7: Case Study B - Internationalisation Decision 1 (CSB-ID1)



The first decision the entrepreneur describes is the process that leads to using international trade publications in order to sell internationally. In this decision, he does not consider alternative ways in which foreign markets may best be entered. Rather, he relies on a single item from his memory, that of the power of media and Public Relations (PR) that can be cultivated through the use of media. He reasons that he can use media in general and international industry publications in particular to make the industry aware of company B worldwide, and so doing expand its customer base beyond national borders [RA].

This belief in media and PR finds its roots in the early political life of entrepreneur B [RPE]. In fact, prior to founding the firm, the entrepreneur had joined a political party, running a political campaign for the party. When the party loses the election, he takes this personally and finds it humiliating. From there on, he develops a determination to avoid humiliation. Therefore he prepares a detailed political plan based on networking and public relations aimed at building the party's reputation. The strategy yields successful results and the party wins a first and a second election [RPE].

From these positive experiences, the entrepreneur strengthens his belief in the valuable use of media and public relations (PR) in order to achieve success [RI based on RPE].

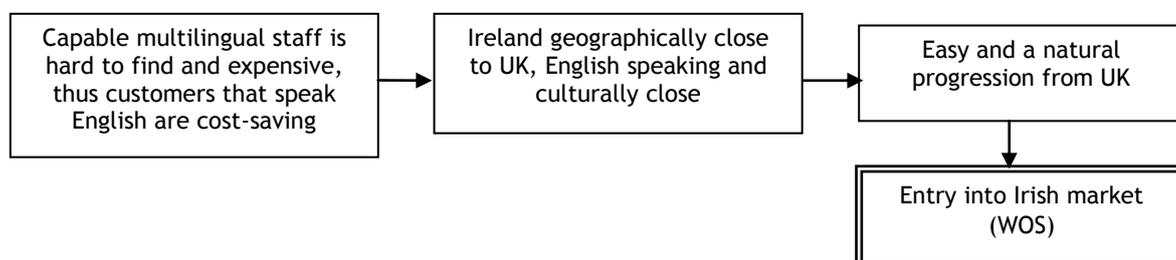
The idea of the powerful positive effect of media and PR is, therefore, likely to be vivid in the entrepreneur's mind and it is likely to yield positive results [RI]. Consequently, this item is likely to be easily retrievable, thus leading to the use of an *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Following this line of reasoning, the entrepreneur decides to sell internationally via dedicated editorials on industry publications.

In this case, the decision made using this rule of thumb is successful, and the firm acquires customers in 32 countries worldwide.

Case Study B -Internationalisation Decision 2 (CSB-ID2): Entry into Irish Market (Wholly-Owned Subsidiary)

Figure 5.8: Case Study B -Internationalisation Decision 2 (CSB-ID2)



A problem identified by the entrepreneur requires a solution and a decision has to be taken. The entrepreneur is faced with the problem that multilingual staff necessary to communicate with customers from different countries are hard to find and expensive to keep [RA]. This negative critical incident triggers the need for a decision to solve the problem. Thus, the reasoning process is set off by the critical incident [RI based on RA]. The latter is vivid in the mind of the entrepreneur, triggering the use of the availability heuristic [AHT].

Entrepreneur B reasons that English speaking customers are widespread worldwide and that they would allow the firm to save on the high cost of multilingual staff [RA].

Following this line of reasoning, Ireland is identified as English-speaking as well as both geographically and culturally close to UK. It is therefore seen by the entrepreneur as a natural progression from the UK base of the firm [RA]. This line of reasoning results in the opening of a sales office in Dublin, in the Republic of Ireland.

In making this decision, the entrepreneur reasons on two main items. Firstly, that English-speaking customers are less expensive to keep in touch with. Although this line of reasoning may seem very obvious and objective, it is not necessarily so. In fact, depending on who his main customers are, the extra cost of multilingual staff may be justified by the extra income made through those customers. Generally, there is no evidence that he considered alternatives to just selecting English-speaking customers only in order to find the most cost-effective solution. Thus there is no evidence of a classical rationality type of reasoning.

The entrepreneur is searched through his memory and found that English speaking customers are a good choice because a number of customers worldwide speak English [RA]. Consequently, there he relies on easily retrievable information from his mind, using an *Availability Heuristic* [RI based on AHT].

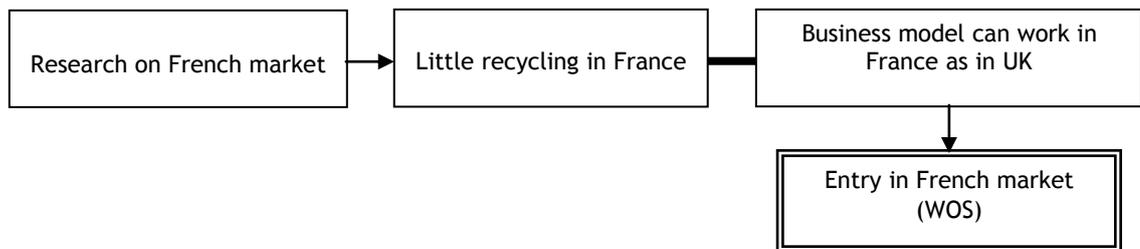
Another plausible explanation is that he unconsciously thought that English is assumed to be a widely-spoken language, thus representative of a larger share of potential customers worldwide [RI based on AHT]. This is in line with a *Representativeness Heuristic* (Tversky and Kahneman, 1973, 1974) [AHT].

When he thinks of choosing a market to enter in order to recruit English-speaking Staff, he is evaluating it in terms of physical and cultural proximity as well as its being English speaking [RA]. There is no evidence of other features, such as staff costs, incorporation costs and cost-benefit analysis, being considered. The priming of a mental item on the basis of few characteristics is associated with the *Representativeness Heuristic* (Tversky and Kahneman, 1973, 1974) [AHT].

Ultimately, the reasoning process leading to the decision to enter the Irish market seems to be based on a combination of thoughts elicited through the Availability and Representativeness Heuristics.

Case Study B - Internationalisation Decision 3 (CSB-ID3): Entry into French market (Wholly-owned Subsidiary)

Figure 5.9: Case Study B - Internationalisation Decision 3 (CSB-ID3)



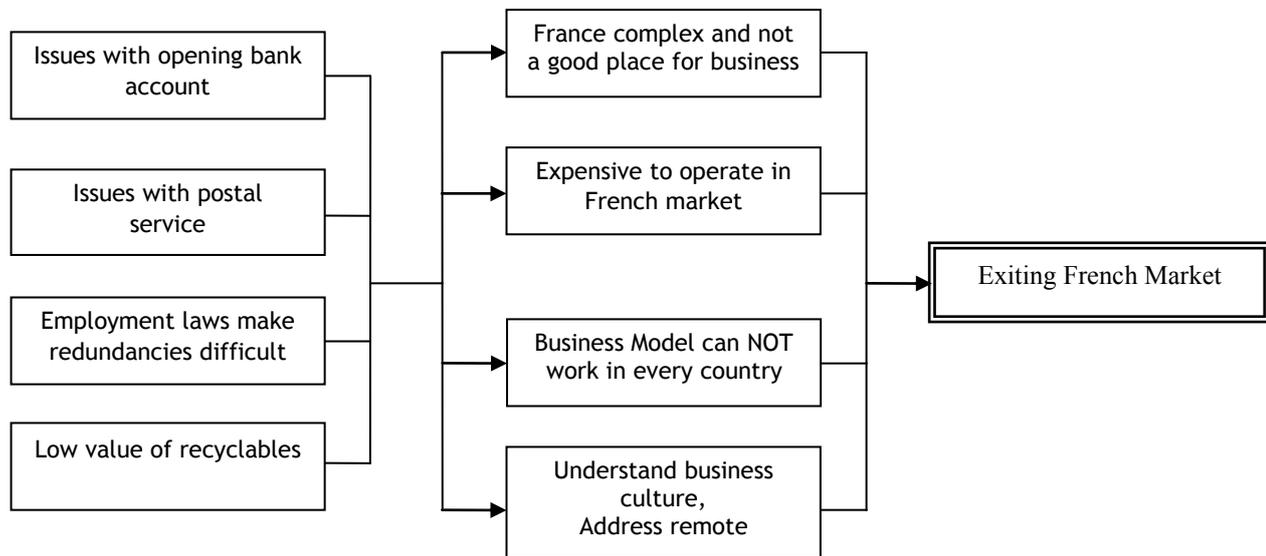
The opportunity to enter the French market is identified through market research. Following the identification of the opportunity, the entrepreneur has to decide whether to enter or not [RA].

He reasons that the business model of the firm is likely to work in France as it does in UK [RA]. This conclusion is not reached through a systematic search for information on the workings of the French market and an evaluation of pros and cons. Rather, in reasoning in this fashion, the entrepreneur is using the only current information he has, which is about the effectiveness of his business model in UK [RI based on RA]. He uses this information as a base to establish whether the same could be the case in France. In heuristic terms, he is using the information he has as an “anchor” from which to adjust in order to establish the feasibility of the business elsewhere [AHT]. Therefore, it can be said that he is using the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974). However, the use of this heuristic is biased by insufficient adjustment, in that a decision is made to enter the French market using the business model in exactly the same way as it has been used in UK [AHT based on RA].

As it turns out later (see decision on exiting French market below), the Anchoring and Adjustment Heuristic on which this decision is based lead to error. In fact, the entrepreneur is to discover that the business model does not work in France as it did in the UK.

Case Study B - Internationalisation Decision 4 (CSB-ID4): Exit from the French market

Figure 5.10: Case Study B - Internationalisation Decision 4 (CSB-ID4)



In France the entrepreneur and his firm experience various negative critical incidents. They encounter issues with opening a bank account, issues with the postal service, and issues with employment laws. Moreover, products recycled in France are of low market value [RA].

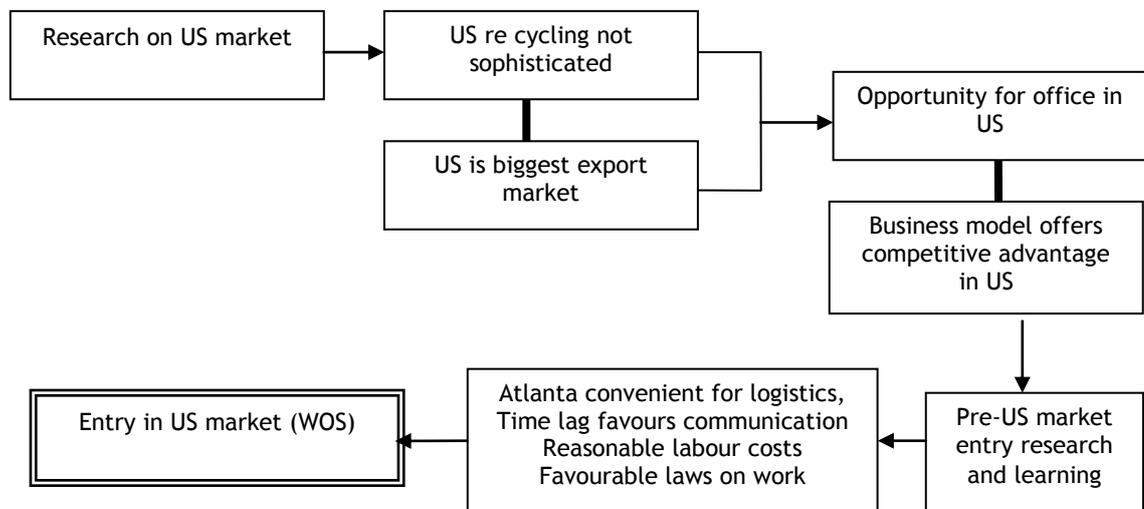
The adversities encountered during the experience leave the entrepreneur with a series of considerations. He reasons that France is a complex and difficult nation to do business in, and that operating in France is expensive. Also, he learns that the business model of the firm doesn't necessarily work in every country. Thus, the experience forces him to review the belief that the business model could work everywhere, belief that the entrepreneur held before entering the French market and that was determinant in the decision to enter the market itself. Finally, he learns that in order to manage remotely in a country such as France, he needs to understand the local business culture [RA].

The result of the reflections on the French market experience is the decision to exit France by selling the office in Perpignan [RA]. In making this decision, he is clearly drawing on a series of recent and emotionally charged memories [AHT

based on RA]. Thus he is using the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Case Study B - Internationalisation Decision 5 (CSB-ID5): Entering the United States Market (Wholly-owned Subsidiary)

Figure 5.11: Case Study B - Internationalisation Decision 5 (CSB-ID5)



The decision as to whether to enter the United States market or not follows the identification of an opportunity in the market. The opportunity is identified through market research, which has revealed that the US recycling market is not very sophisticated and that the US market is also the biggest export market of the firm [RA].

Based on this information, the entrepreneur reasons that there is scope for considering opening up a subsidiary office in the US [RA]. The identification of this opportunity can therefore be based on an *anchoring and adjustment heuristic* [AHT].

Once the opportunity is identified, he evaluates it by thinking whether the business model of the firm would work in the American market, concluding that it would [RA]. In this reasoning, the entrepreneur is again using the information he has about his business as a base to evaluate the opportunity in US [AHT based on RA]. Thus, he is using an *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [AHT].

However, differently from what he did in his previous decision during the entry in the French market, this time he does not make a final decision on the sole basis of his reasoning. Instead, he decides to do some research on the functioning of the American Market [RA]. This behaviour suggests that experience changes the use of heuristics (as it has been discussed in the literature review chapter). In this instance, the higher learning triggered by the critical experience (Cope and Watts, 2000; Cope, 2005) in the French market seems to have changed the thinking process of the entrepreneur in making future decisions [RI based on RA].

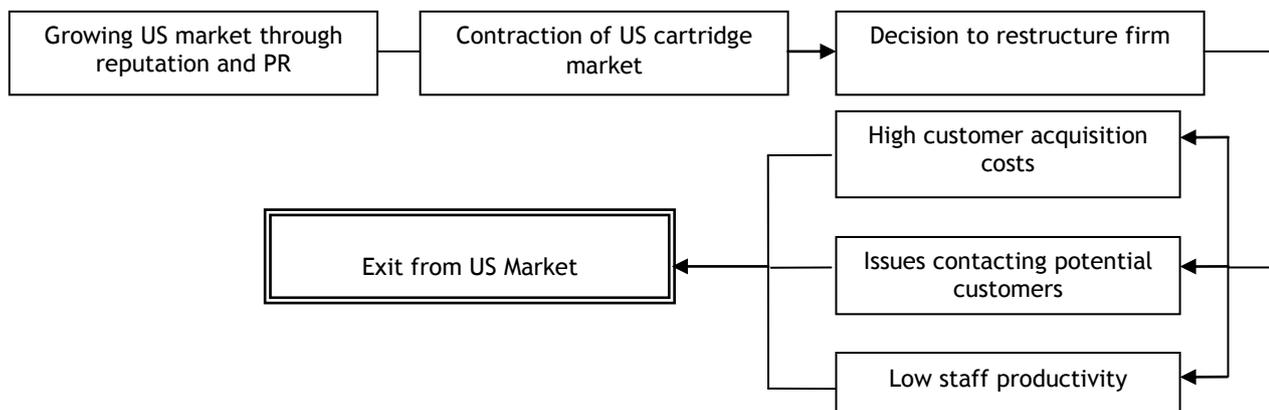
The market research is conducted by means of a direct visit to the United States. The market research he conducts revolves around four points: the ease of logistics, the time lag, the labour costs and the employment laws [RA]. Significantly, with the exception of the time lag, those are issues that the entrepreneur has had direct experience of and problems within the past [RPE]. Therefore, although he is attempting a systematic and objective evaluation of the market, his evaluation criteria are limited to the issues he is able to foresee as potential problems due to previous experience of them [RI based on RPE and RA]. These are likely to be at the forefront of his mind and readily available when searching through his memory for “potential issues to be checked” [RI based on AHT]. Thus he is using an Availability Heuristic (Tversky and Kahneman, 1974) [AHT].

In the light of this, it is plausible that the use of heuristics in the entrepreneur’s reasoning has not changed. What has changed is the content of his cognitive schema which the representativeness heuristic draws on [RI].

Ultimately, this decision-making process leads to a positive evaluation of the opportunity in the United States and to an entry in the market through the establishment of an office in the city of Atlanta.

Case Study B - Internationalisation Decision 6 (CSB-ID6): Exiting the US market

Figure 5.12: Case Study B - Internationalisation Decision 6 (CSB-ID6)



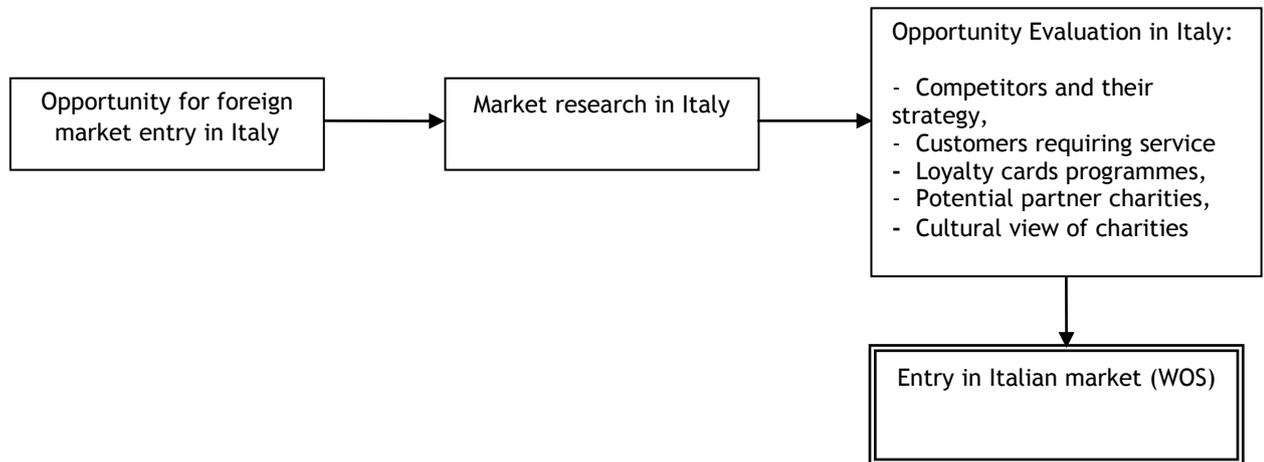
Following a contraction of the cartridge market in the United States, which represents the firm's main export market, the entrepreneur decides to restructure the firm.

In making this decision, he recalls a series of negative critical incidents he has experienced in the American market, including the high cost of customers' acquisition, the difficulty in contacting potential customers and the view that staff's productivity is low [RA]. These issues are all very recent in the entrepreneur's experience, thus the recollection of them may be said to be based on recency [RI]. They are also negative issues, likely to be attached to strong negative emotions [RI]. Both recency and emotional charge are associated with the *Availability Heuristic* (Tversky and Kahneman) [AHT].

The decision making process outlined by the entrepreneur does not show evidence of other information drawn upon to make the decision. For instance, there is no evaluation of the cost-effectiveness of the American office. Also, there is no evidence that alternatives to this decision were formulated and evaluated on the basis of factual information, thus there is no evidence of the use of a more objective decision-making style (e.g. Mintzberg, 1976). Rather, only recent and salient information was recalled [RI based on RA], confirming the use of an *Availability Heuristic* in this decision [AHT].

Case Study B - Internationalisation Decision 7 (CSB-ID7): Entry in Italian market (Wholly-owned Subsidiary)

Figure 5.13: Case Study B - Internationalisation Decision 7 (CSB-ID7)



An opportunity arises serendipitously to enter the Italian market and the entrepreneur decides whether to exploit it.

In reasoning on this opportunity he draws on a “checklist” of items. In order to check each item, he conducts market research in Italy [RA].

The need for market research has been emerging over the latest few experiences of the entrepreneur, who has learned that relying on his intuitive evaluations alone may result in mistakes in judgments on foreign markets [RI based on RA].

Through market research he checks who the market competitors are and what their strategy is, who are the clients requiring the service, the scope for incentives such as loyalty card programmes, who the charities operating in the market are and which ones could act as partners. He also checks the country’s view of those charities [RA].

The items on which the evaluation of the opportunity to enter Italy is based ensure that the business model of the firm fits in with the country [RA].

The entrepreneur is using the information collected to make inferences as to whether or not the business model of the firm could work in the Italian market. Thus, he is using an *Anchoring and Adjustment Heuristic* [AHT].

However, this behaviour suggests a shift from the use of the anchoring and adjustment heuristic that the entrepreneur had adopted to establish whether

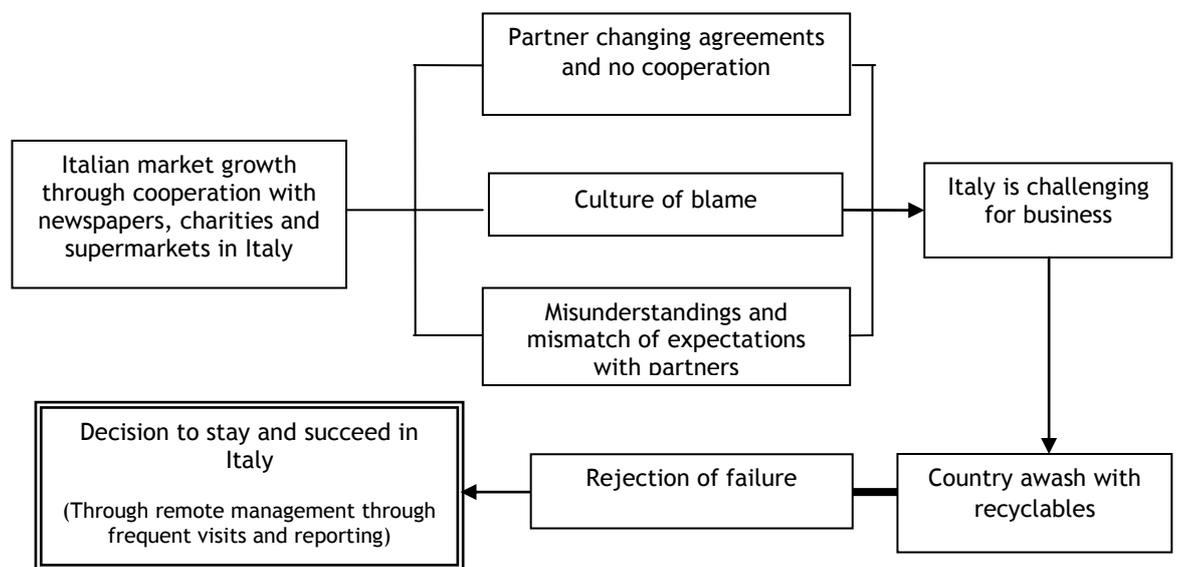
the business model could work in France and in the USA as it works in the UK [RI]. The evidence suggests that, following higher learning from the critical negative experiences (Cope and Watts, 2000; Cope, 2005) in the aforementioned markets, the entrepreneur is aware of the limits of his understanding of foreign markets and relies of extra foreign market information.

Still, In recalling items forming the market checklist, there is reason to conclude that entrepreneur is using an *Availability Heuristic* (Tversky and Kahneman, 1974), in that those items stem from salient, recent and emotionally charged critical incidents [RI based on AHT]. Nevertheless, the cognitive schema which the heuristic draws those items from would have become far more complex (see Walsh, 1995; Cohen and Levinthal, 1990), producing a more extensive international market entry evaluation checklist of items [RI]. However, it may be argued that this extensive checklist of is still bounded to previous experience (Gavetti and Levinthal, 2000).

Following an evaluation of the Italian market based on the entrepreneur’s cognitive checklist, the entrepreneur decides to enter the market.

Case Study B - Internationalisation Decision 8 (CSB-ID8): Staying in the Italian market (despite challenges)

Figure 5.14: Case Study B - Internationalisation Decision 8 (CSB-ID8)



The firm expands in the Italian market, through the use of PR and a series of co-operations with charities [RA]. Nevertheless, the market presents the entrepreneur with a series of challenges which force him to review whether the Italian market is still viable [RA].

The entrepreneur first reports the challenges he faces. The relationship with the local partners becomes difficult as there are misunderstandings and each party has different expectations of the counterpart. Also, the entrepreneur finds that there is a culture of blame others rather than taking responsibility for one's own mistakes. Moreover, there are instances where, according to the entrepreneur, the partner changes the terms and conditions of the original agreement without making the entrepreneur aware of it [RA].

From those difficulties, the entrepreneur concludes that Italy, although beautiful as a country, is very challenging to do business in. A decision is now required as to whether the firm should stay in the market or exit it [RA].

The entrepreneur reasons that the Italian market has positive aspects. It is "awash" with mobile phones, which are the main recyclable that the firm collects there [RA].

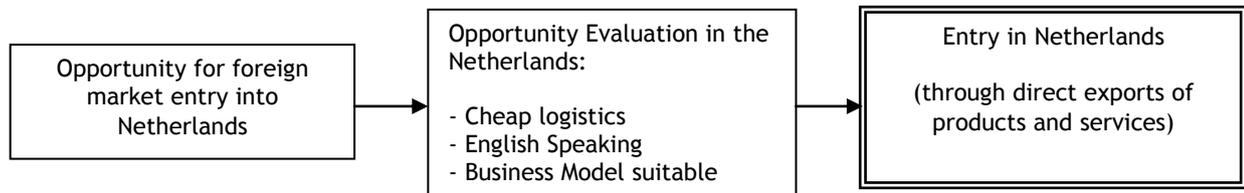
It is not possible to ascertain whether the idea that there are large quantities of mobile phones to collect in Italy is factual information or whether it is an impression stemming from the entrepreneur's own experience of the country. Thus, it is impossible to establish whether a heuristic is at play here [RI].

In conjunction with the reasoning on the amount of mobile phones, the entrepreneur also reasons that he wants to avoid failure in the market [RA]. The failure avoidance idea has been developed early in his political career [RPE]. The strongly negative critical incidences associated with early political failure are emotionally charged and very vivid in the mind of the entrepreneur [RI based on RPE and RA]. These are, once again, characteristics associated with the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

The two thoughts in favour of staying in the Italian market override the thoughts of the challenges against staying in the market and a decision is made not to exit it.

Case Study B - Internationalisation Decision 9 (CSB-ID9): Entry in the Netherlands (Direct Exports)

Figure 5.15: Case Study B - Internationalisation Decision 9 (CSB-ID9)



An opportunity emerges to enter the Netherlands through a network connection in the country that would facilitate servicing exports. Thus, the entrepreneur has to decide whether to exploit the opportunity or not. He conducts extensive market research and reasons that in the Netherlands the logistics are inexpensive, that most people speak English there and the business model is suitable [RA]. He comments:

“So a good example, we’re looking at the Netherlands just now, we’ve done a lot of this research, we know that logistics are cheap, everyone speaks English, the business model with charities will work fairly well.”

(Entrepreneur B, interview 2008)

It may be argued that the items on which the entrepreneur reasons, namely the cost of logistics, the language spoken and whether the business model would fit in the country, all stem from salient past experience [RI based on RPE]. This would explain the reason for his use of those search and evaluation criteria as opposed to other evaluation criteria potentially relevant to the decision he has to make [RI].

He establishes that logistics are cheap and that most people speak English [RA]. It is reasonable to assume that the idea of checking the cost of logistics comes from previous experience with firm exports [RI based on RPE].

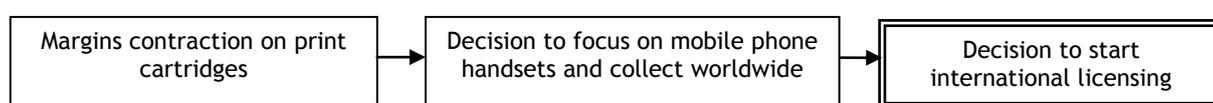
The item “language spoken” also stems from previous salient experience [RI], as the entrepreneur established early on in the history of the firm that multilingual staff adds costs to the transactions [RPE].

The third item is the fit of the firm’s model to the foreign country [RA]. The entrepreneur has experienced significant problems in previous foreign market entries [RPE] because he had established whether the model would fit on the basis of his own intuition as opposed to factual data from market research [RI]. Because of the problems experienced, the idea of checking the fit of the business model to the country to enter is likely to be at the forefront of his mind [RI based on RPE and AHT]. Thus, those three items may have been recalled because they are all salient in the mind of the entrepreneur, triggering the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

However, the inference made about the possibility of the business model in the Netherlands is based on the information collected about the foreign market [RI based on RA]. This information is used as the anchor from which the inference is made. Thus, the evidence suggests that the entrepreneur is using an *Anchoring and Adjustment Heuristic* [AHT].

Case Study B - Internationalisation Decision 10 (CSB-ID10): International Licensing

Figure 5.16: Case Study B - Internationalisation Decision 10 (CSB-ID10)



Due to a contraction in the margins on ink cartridges, the entrepreneur decides for a change of strategy, which leads him to a new entry mode decisions. The contraction of the margins on the main product that the firm collects and resells internationally can be considered a negative critical incident (Cope and Watts, 2000) [RI based on RA]. The consideration of the critical incident in the decision making process is taken as evidence of the use of the *availability heuristic* (Tversky and Kahneman, 1974) [AHT].

Once the decision to change strategy is made, B reasons on a plan that will take the firm forward. He reasons that mobile phones carry higher margins. Consequently, he decides to focus solely on the recycling of them [RA]. In order to collect large quantities of mobile phones, he decides to collect in as many countries as possible and potentially worldwide. To this end, he opts for setting up a licensing agreement in multiple countries, with local firms' licensees that would collect on its behalf and would pay a fee to carry the firm's brand [RA]. In making this decision, the entrepreneur is implicitly assuming that the business model will work for other licensees worldwide as it does for his firm, thus allowing him to maximise the number of handsets recycled [RI]. There is no evidence of research carried out to assess whether the model would work and would bring in sufficient revenues.

The decision is based on the fact that the business model has been successful when operated by the firm itself, although following a number of setbacks [RI based on RA]. This fact is used as an Anchor to predict that the model would work for other firms [RI]. Thus, an *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) is likely to have been used [RI based on AHT].

Triangulation with repertory grid of entrepreneur B

The decision making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.2: Entrepreneur B's Repertory Grid of Internationalisation

Entrepreneur B's Repertory Grid of Internationalisation	
<ol style="list-style-type: none"> 1. Small Country (population) 2. Country's culture homogeneous 3. Complex to set-up business 4. Easy country to win business in 5. Country strong in PR 6. Charities open for collaboration 7. High taxation 8. Unfavourable Employment Regulations 9. Non-business oriented / entrepreneurial 	<ol style="list-style-type: none"> 1. Large Country (population) 2. Country's culture no-homogeneous 3. Easy to set-up business 4. Difficult country to win business in 5. Country weak in PR 6. Charities not open for collaboration 7. Low taxation 8. Favourable Employment Regulations 9. Business oriented / entrepreneurial

Items 3 and 8 on the repertory grid of entrepreneur B relate to the ease or complexity of setting up a business abroad and whether the employment law of the foreign country favours employers. These items reflect the challenging experience that the entrepreneur has encountered in the French market (CSB-ID4). Later these items influence the decision to enter the United States market, as evidenced by the market entry decision described above (CSB-ID5).

Item 4 on the repertory grid represents the ease or difficulty of winning business in the foreign country. This item appears to be related to the difficulty in contacting customers in the USA market, as evident from the description of the decision to exit the market (CSB-ID6).

Item 5 on the repertory grid is linked to the effectiveness of Public Relations (PR) in the foreign country. The use of PR has features in the early internationalisation decision of entrepreneur B (CSB-ID1) and is driven by B's previous positive experience of PR through his political campaigns (CSB-ID1).

Item 6 on the repertory grid is linked to the possibility of collaboration with charities in foreign countries. The item features in the decision to enter the Italian market (CSB-ID7) due to the identification of potential partner charities in the market. Also, the item is a key feature of the business model of firm B, since the latter recycles on behalf of charitable organisations. Therefore, it is reasonable to assume that the item is implicitly included when the item "suitability of business model" is considered in an internationalisation decision (e.g. CSB-ID3, CSB-ID9).

It is not possible to establish a direct link between items 1, 2, 7 and 9 of the repertory grid and the content of the causal-cognitive maps of case study B.

Case Study B - Main Findings

- This case study presents evidence of all three heuristics (the availability, the representativeness and the anchoring and adjustment).
- The case features two entry mode decisions: direct exports (CSB-ID1) and international licensing (CSB-ID10).
- The direct exports decision uses the availability heuristic, based on a critical incident.
- The international licensing decision combines the use of the availability heuristic with the anchoring and adjustment heuristic, based respectively on the internationalisation experience of the entrepreneur and vicariously acquired information (market research).
- The case study also offers evidence on five cases of foreign market selection: Ireland (CSB-ID2), France (CSB-ID3), United States (CSB-ID5), Italy (CSB-ID7) and the Netherlands (CSB-ID9).
- The first foreign market selection (Ireland) uses the representativeness heuristic. That is, foreign markets are scanned to judge how representative they are of the features the entrepreneur is searching for.
- All remaining foreign market selections (France, US, Italy and the Netherlands) are based on the anchoring and adjustment heuristic, based on vicariously acquired information about the foreign market. However, in the first two market selection decisions (France and US) the use of an anchoring and adjustment heuristic leads to an overconfidence bias. In the latter two market selection decisions there is no evidence of the bias.
- There is evidence of two foreign market exit decisions: exit from France (CSB-ID4) and from the United States (CSB-ID6). Both decisions are based on the use of the availability heuristic, both drawing on critical negative incidents on the foreign market that is then exited.
- There is evidence that, over time and with the addition of more experiential knowledge (from success and failures in the foreign markets), entrepreneur B's cognitive schema becomes more complex and multifaceted. This results in the collection of more tailored information in later decisions by comparison with earlier ones.
- A non-market exit decision, despite difficulties in the market, is observed (CSB-ID8). This decision falls in a small group of decisions across-cases that do not fit into the current theoretical approach.
- Triangulation with repertory grid: Five out of nine items from the grid mirror items used in B's decisions (e.g. business set up procedures, possible collaborations with charities, winning business, etc.)

5.3. Case Study C

Firm C was founded by entrepreneur C and a business partner in 1997 with headquarters in a north-eastern region of Scotland. The firm operates in the oil and gas industry, providing services to oil companies both domestically and internationally.

The firm employs under one-hundred staff worldwide, thus it is classed as a medium-sized enterprise (EU definition).

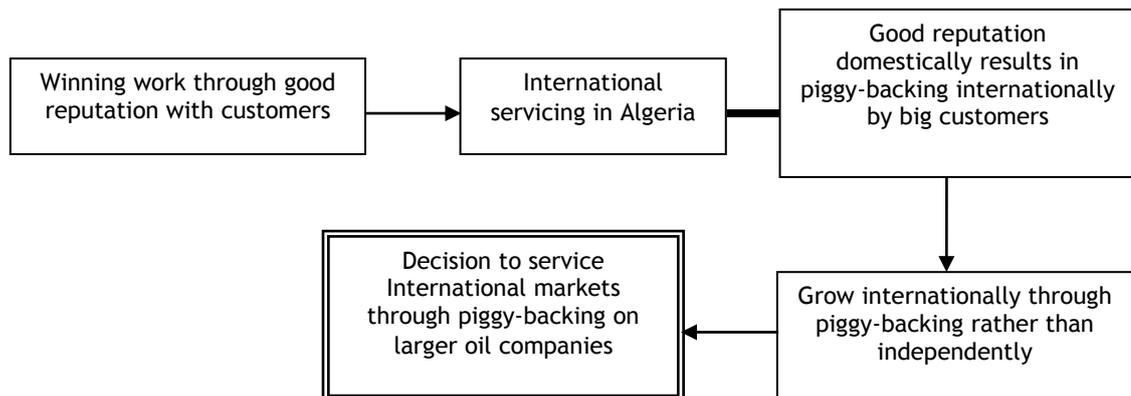
The firm commences its international involvement soon after inception through direct exports (Young et al., 1989) and can therefore be considered an International New Venture (Oviatt and McDougall, 1994).

As well as direct exports in a number of foreign countries, the firm sets up an equity joint venture and a wholly-owned subsidiary abroad with a view to recruit qualified engineers. The equity joint venture is set up in Holland in 2006. The latter is followed by a wholly-owned subsidiary set up in Sweden in 2008. Other opportunities for international wholly-owned subsidiaries are evaluated but ultimately dismissed. Those include the United States and Malaysia.

(Based on interviews with entrepreneur c in 2006 and 2008, plus SE baseline information on firm B)

Case Study C - Internationalisation Decision 1 (CSC-ID1): Indirect Exports (Servicing through piggy backing on large MNEs)

Figure 5.17: Case Study C - Internationalisation Decision 1 (CSC-ID1)



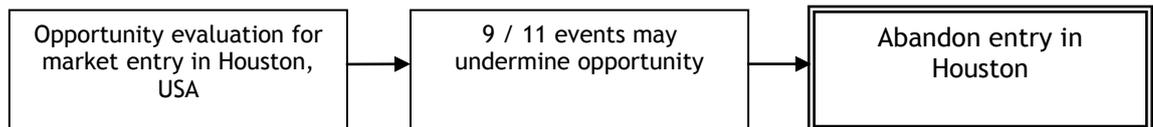
Early on, the entrepreneur decides to enter international markets through piggy-backing on the back of larger oil companies. In order to arrive to this decision, he recalls that he won business in Algeria through a large oil company with which the firm had established a good reputation through previous work contracted in the UK [RA].

The favourable experience stays at the forefront of the entrepreneur's mind [RI], so much so that it forms the basis for the decision to grow the international servicing side of the business through piggy backing with large clients as opposed to entering foreign markets independently [RA].

In making this decision, there is no evidence that the entrepreneur evaluates the costs and benefits of alternatives (such as entering foreign markets independently) in order to make a final choice. Rather, the decision appears to be based on one item retrieved from memory, namely the positive experience of foreign market servicing through piggy-backing [RI based on RA]. The positive experience is obviously vivid and associated with positive feelings in the mind of the entrepreneur, thus leading to the use of an *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Case Study C - Internationalisation Decision 2 (CSC-ID2): No entry in US market

Figure 5.18: Case Study C - Internationalisation Decision 2 (CSC-ID2)



In 2001 the entrepreneur identifies an opportunity to set up offices in the American centre for oil and gas, Houston. However, a decision is made not to enter the American market following the events of the eleventh of September of that year [RA].

The entrepreneur comments:

“[...] Just felt that 9/11 was going to change the whole opportunity, which I think it has.”

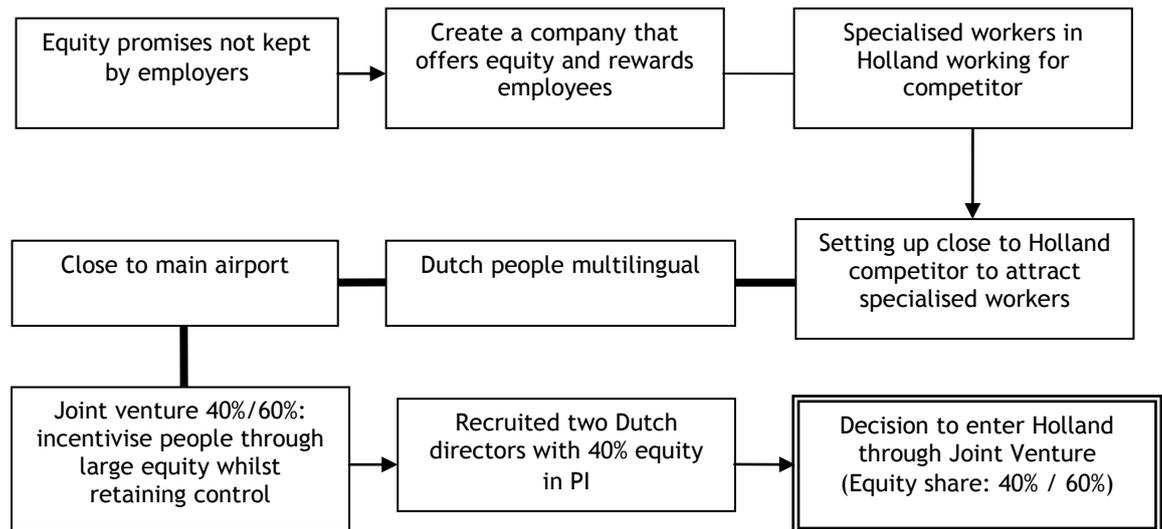
(Entrepreneur C, 2006)

The decision is made on the basis of a single item, namely the expected impact of the terrorist attacks in US on the eleventh of November [RA].

The expected outcome of the “9/11” events on the market is described by the entrepreneur as a feeling, as opposed to the result of objective research and evaluation of the opportunity [RI based on RA]. This strong feeling is likely to depend on the fact that the events of “9/11” (as they have become known) were broadcast on national television repeatedly in the months following the attacks [RI]. Thus, the critical events were very vivid in the mind of the entrepreneur [RI]. The recall of vivid negative instances (critical events) during reasoning is mostly associated with the use of an *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Case Study C - Internationalisation Decision 3 (CSC-ID3): Entry in Holland through Equity Joint Venture

Figure 5.19: Case Study C - Internationalisation Decision 3 (CSC-ID3)



The firm is looking for more engineers to recruit and the entrepreneur recalls from memory that there is a competitor in Holland that employs a number of good engineers [RA]. He comments:

“In Holland we were targeting specific people with certain skills and basically we knew there were a lot of these guys in Holland. [...] They worked for a competitor of ours and we felt we would set up an office not a million miles away to give those people the opportunity to work for us if they chose.”

(Entrepreneur C, 2008)

The decision to explore Holland is once again based on the sole recall of one salient item from the memory of the entrepreneur, as opposed to being the outcome of an extensive market research and evaluation [RI based on RA]. Thus, it can be said that no rational decision making processes (e.g. Mintzberg, 1976, Casson, 2003) are followed. Rather, the entrepreneur relies on one item

developed through industry experience and readily available from memory [RI], thus using the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

The opportunity to set up an office near the competitor in Holland is evaluated along two more dimensions, namely the language spoken and the ease of logistics for the transfer of people [RA].

It is probable that the consideration of those items comes from previous experiences with language and logistics issues [RI based on RPE]. However, there is no sufficient evidence to establish that those items are retrieved to due availability from memory. Consequently, it is hard to establish which heuristic, if any, has brought them to mind in the reasoning process [RI].

The opportunity is evaluated positively, in that most Dutch people speak English and the competitor is located close to the airport, from where engineers can easily be sent abroad for servicing [RA].

Interestingly from a heuristic perspective, the mode of entry selected for the office in Holland is an equity Joint Venture (JV) with 40% equity owned by the foreign directors and 60% owned by the entrepreneur [RA]. The reasoning behind this choice is that, although the entrepreneur wants to retain overall control over the JV with a 60% share, he wants to offer a sufficiently large share to the foreign partners in order to motivate them [RA].

The idea that a firm should motivate people by offering equity is very strong in the mind of the entrepreneur following his own negative work experience before founding the firm [RI based on RPE]. In fact, the entrepreneur never received the equity he had been promised by his employers and decided that he would offer equity in his own firm [RA]. The negativity and vividness of the experience are associated with the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Ultimately, the entrepreneur decides to form a JV in Holland and recruits two directors in the foreign country, with these holding a joined equity of 40% of the venture.

Case Study C - Internationalisation Decision 4 (CSC-ID4): Indirect Export (Training Services)

Figure 5.20: Case Study C - Internationalisation Decision 4 (CSC-ID4)



Following a trial training service in Venezuela on behalf of a large oil company, the entrepreneur sees an opportunity for establishing an international training services division [RA].

The decision to establish an international training service division follows the logic that by offering training services in foreign countries the firm is likely to make those countries aware of the quality of the firm's services, which in turn may lead to their requiring more of the services offered by firm C [RA].

This line of reasoning is based on one item retrieved from memory, namely that good reputation leads to more international servicing [RI based on RA]. This belief has been built and reinforced through a number of positive experiences where the firm was offered offshore servicing contracts by large oil companies due to its good reputation with them [RI based on RPE]. The positive, repeated strong experience is vivid in the mind of the entrepreneur and he displays the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) in recalling it [AHT].

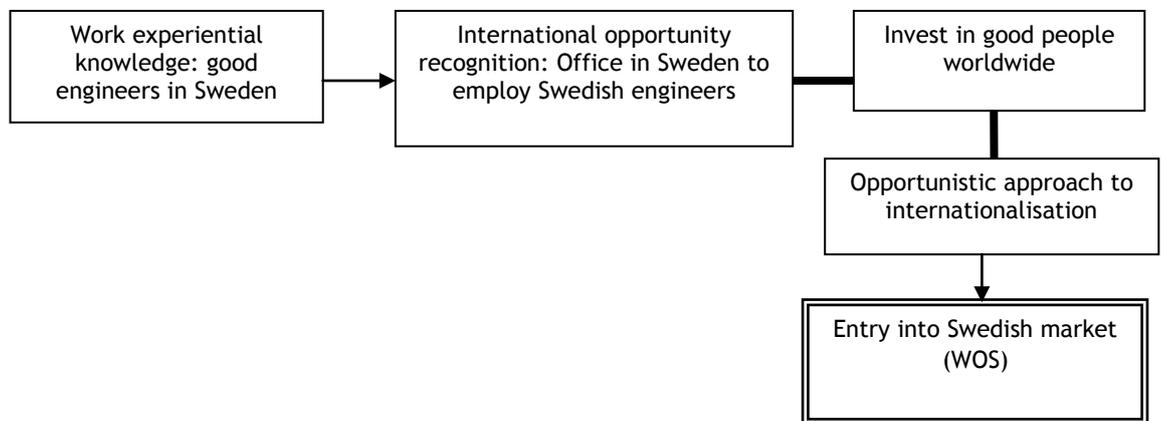
The information retrieved is based on the fact that in the past the firm has been asked to do more of the same services that it had already performed for the client company [RA]. Using this as a base, the entrepreneur reasons that other services could be commissioned to his firm once it establishes its reputation through the training service [RA]. This is quite a departure from being asked to perform the same service again and, in making this leap assumption, the

entrepreneur appears to be using the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [AHT].

The entrepreneur is sufficiently confident in his line of reasoning that he decides to implement the international training division.

Case Study C - Internationalisation Decision 5 (CSC-ID5): Entry into Swedish Market (Wholly-owned Subsidiary)

Figure 5.21: Case Study C - Internationalisation Decision 5 (CSC-ID5)



The decision to enter the Swedish market follows an opportunity identified in the market. Entrepreneur C recalls from experience in the industry that there are good engineers working in Sweden [RA]. The ease of recall of this factor is likely to depend on the vividness of the memory [RI], thus it appears to follow yet again an *Availability Heuristic* (Tversky and Kahneman, 1974) pattern [AHT]. However, the data does not provide sufficient evidence to show the reason why this particular item is vivid in the entrepreneur's mind. Nevertheless, the opportunity recognised in Sweden appears to depend on reasoning on this item only.

In evaluating the opportunity, the entrepreneur reasons that it is worth investing in qualified staff whenever the latter may be found, taking an opportunistic approach [RA]. This consideration is sufficient for the entrepreneur to make a decision to enter the Swedish market through an office there [RA]. There is no evidence that other items were evaluated in making the decision.

The item central to the decision making is the belief in what the entrepreneur defines “good people” [RI based on RA]. The belief in choosing good people and empowering them to do their job has been a strong feature of the entrepreneur’s thinking since the pre-firm foundation stage [RPE]. This line of reasoning follows the experience the entrepreneur had during his early career as an employee, when he felt that staff was not sufficiently valued and was not offered equity [RPE]. According to this logic, the idea of investing in good people as the main reasoning element for deciding to enter Sweden appears to rely on the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT], in that the item is readily available in the entrepreneur’s mind due to salience and possible emotional charge [RI].

Triangulation with repertory grid of entrepreneur C

The decision-making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.3: Entrepreneur C's Repertory Grid of Internationalisation

Entrepreneur C's Repertory Grid of Internationalisation	
1. Servicing	1. Office
2. Practicalities	2. Infrastructure
3. UK personnel	3. Non-UK personnel
4. New/recent work	4. Established/Routine Work
5. High MD involvement	5. Low MD involvement
6. Similar Technical Work	6. Different Technical Work
7. Successful Work	7. Unsuccessful Work

Item 1 of the repertory grid of entrepreneur C distinguishes between direct export of services and wholly-owned subsidiary offices (Young et al., 1989) abroad. This distinction reflects the types of decisions that entrepreneur C

makes. Internationalisation decisions CSC-ID1 and CSC-ID4 are linked to international exports of services, whereas internationalisation decisions CSC-ID2, CSC-ID3 and CSC-ID5 are linked to wholly-owned subsidiary or equity joint venture decisions.

Item 3 is related to the firm staff being British or non British. This item reflects entrepreneur C's decision to invest in "good people" wherever they may be found, leading to an equity international joint venture decision in Holland (CSC-ID3) and to the decision to set up a wholly-owned subsidiary in Sweden (CSC-ID5).

Item 7 represents the quality of the performance of the firm in each contracted piece of work. It is reasonable to assume that this item is linked to the idea of good reputation of the firm, which the entrepreneur considers central in securing successive servicing contracts (see CSC-ID1 and CSC-ID4).

No link could be established between the cognitive causal maps of entrepreneur C and repertory grid items 2, 5 and 6.

Case Study C - Main Findings

- In all five decisions there was evidence of the use of heuristic-based reasoning (Tversky and Kahneman, 1974);
- This case study features two foreign market selection decisions, namely entry in Holland (CSC-ID3) and entry in Sweden (CSC-ID5).
- Both market selection decisions make use of the availability heuristic. Moreover, in both cases the availability heuristic draws on the industry experience of the decisions maker.
- The case also features two entry modes decisions. Both decisional processes lead to an indirect export choice (CSC-ID1 and CSC-ID4).
- In the first instance (CSC-ID1), the entry mode choice emerges from a reasoning process based on the availability heuristic alone. In the second instance (CSC-ID4), the decision draws on both the availability and the anchoring and adjustment heuristic.
- In both cases of entry mode selection, the heuristic processes are based on experiential factors, namely, a positive critical incident and internationalisation experience.
- Finally, the case features a non-market entry decision (following initial consideration - CSC-ID2). Again, this is based on an availability heuristic, drawing on a negative critical incident. This decision does not fall within the categorisation of decisions stemming from the literature, and thus it will not be considered further in this thesis. Nevertheless, there may be value in future studies further investigating such non-entry decisions.
- Triangulation with repertory grid: four out of seven items from the grid mirror the elements on which most of C's decisions are made. Of relevance is the central role of quality of work performed (linked to reputation and the award of more future contracts) and the attention to personnel, in UK and overseas (linked to decisions to expand in foreign markets for recruitment reasons).

5.4. Case Study D

Firm D was founded by entrepreneur D in 1979 in the north-east of Scotland. The firm was founded with the intention to provide engineering services to the oil and gas industry.

From a “one-man” business, firm D grows to a headcount of over one-hundred employees by 2006 (according to Scottish Enterprise Records dated 2006).

In the early years, the firm grows through servicing the domestic oil and gas industry. Following the oil price crisis in 1986, the firm starts its internationalisation process. Therefore, the firm seems to follow more traditional internationalisation pattern (see, for example, Johanson and Vahlne, 1977, 1990) with the first foreign market entered nearly ten years after firm foundation and after the firm is fully established in the domestic market.

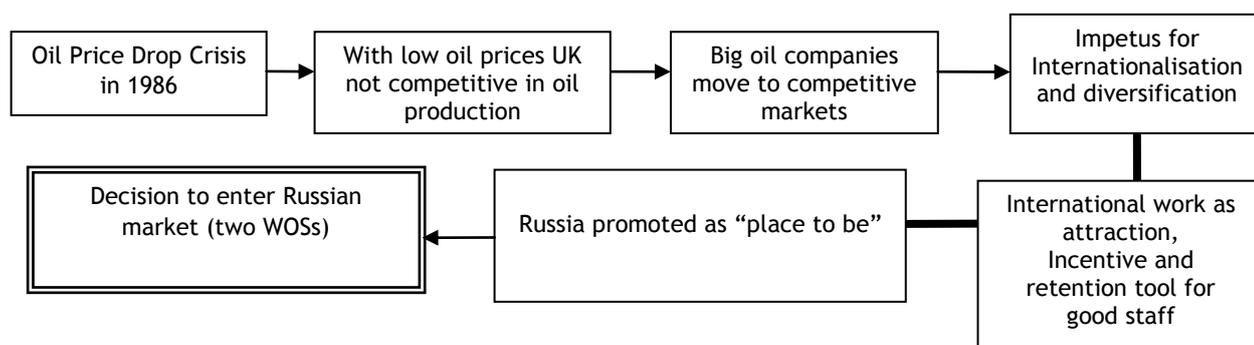
The first foreign market entry is in Russia. Two wholly-owned subsidiaries (Young et al., 1989) are set up in the country. The latter are closed shortly after being set up. Later the firm enters Azerbaijan and America with wholly-owned subsidiaries in Baku and Houston.

Finally, in 2005 the firm enters the Brazilian market through wholly-owned subsidiary (acquisition of a competitor).

(Based on interviews with entrepreneur D in 2006 and 2008, plus SE baseline information on firm D)

Case Study D - Internationalisation Decision 1 (CSD-ID1): Entry into Russian Market (Wholly-owned Subsidiaries)

Figure 5.22: Case Study D - Internationalisation Decision 1 (CSD-ID1)



In the eighties, the price of oil collapses. This sparks a crisis in the industry in general and in the firm in particular. The entrepreneur starts a thinking process revolving around the issue in order to decide on a solution [RA].

He reasons that now that oil prices are low, the oil production in the North Sea is no longer competitive, that major oil companies will move to more competitive places [RA].

From this reasoning, echoing the lessons learned from the crisis, he concludes that the new focus of the firm must be on internationalisation and diversification [RA].

The reasoning leading to this decision is based on the observation of recent events [RI based on RA]. The recency of the events in the entrepreneur's mind makes those events more readily retrievable [RI]. Thus, entrepreneur D is using the *Availability Heuristic* (Tversky and Kahneman, 1974) to reason on this particular decision [AHT].

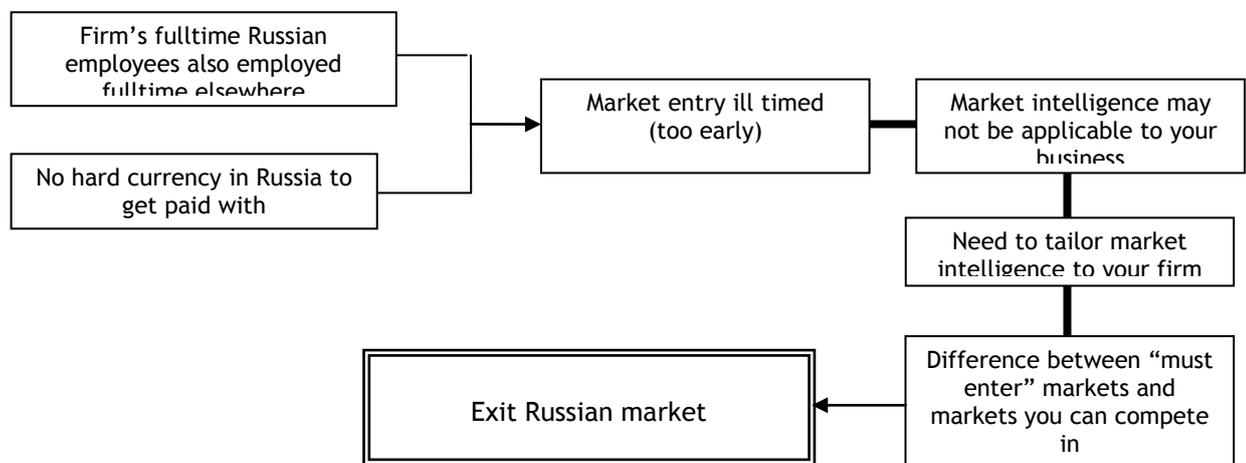
This decision is further corroborated by the entrepreneur's thinking that operating internationally adds a positive dimension to the business as this, he believes, can be used as a tool to attract and retain good staff [RA]. It is not clear from the data where this belief comes from and why it may have come to mind in this occasion. It could be a consequence of the entrepreneur's own early work experience abroad [RI]. However, it is not possible to determine whether a heuristic is being used.

In terms of the market to enter, the entrepreneur learns from governmental bodies and general industry press that a good oil and gas market to enter is Russia. So he decides to enter the Russian market with two subsidiary offices located there [RA].

This decision is based on the sole information that Russia is promoted as the “place to be” [RA]. No market research carried is carried out and no alternatives are constructed and evaluated. Instead, the information received on the potential for oil and gas firms to enter Russia is used as a base to assume that firm D should also enter Russia [RI based on RA]. Therefore, the entrepreneur seems to be using an *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [AHT].

Case Study D - Internationalisation Decision 2 (CSD-ID2): Exit from the Russian market

Figure 5.23: Case Study D - Internationalisation Decision 2 (CSD-ID2)



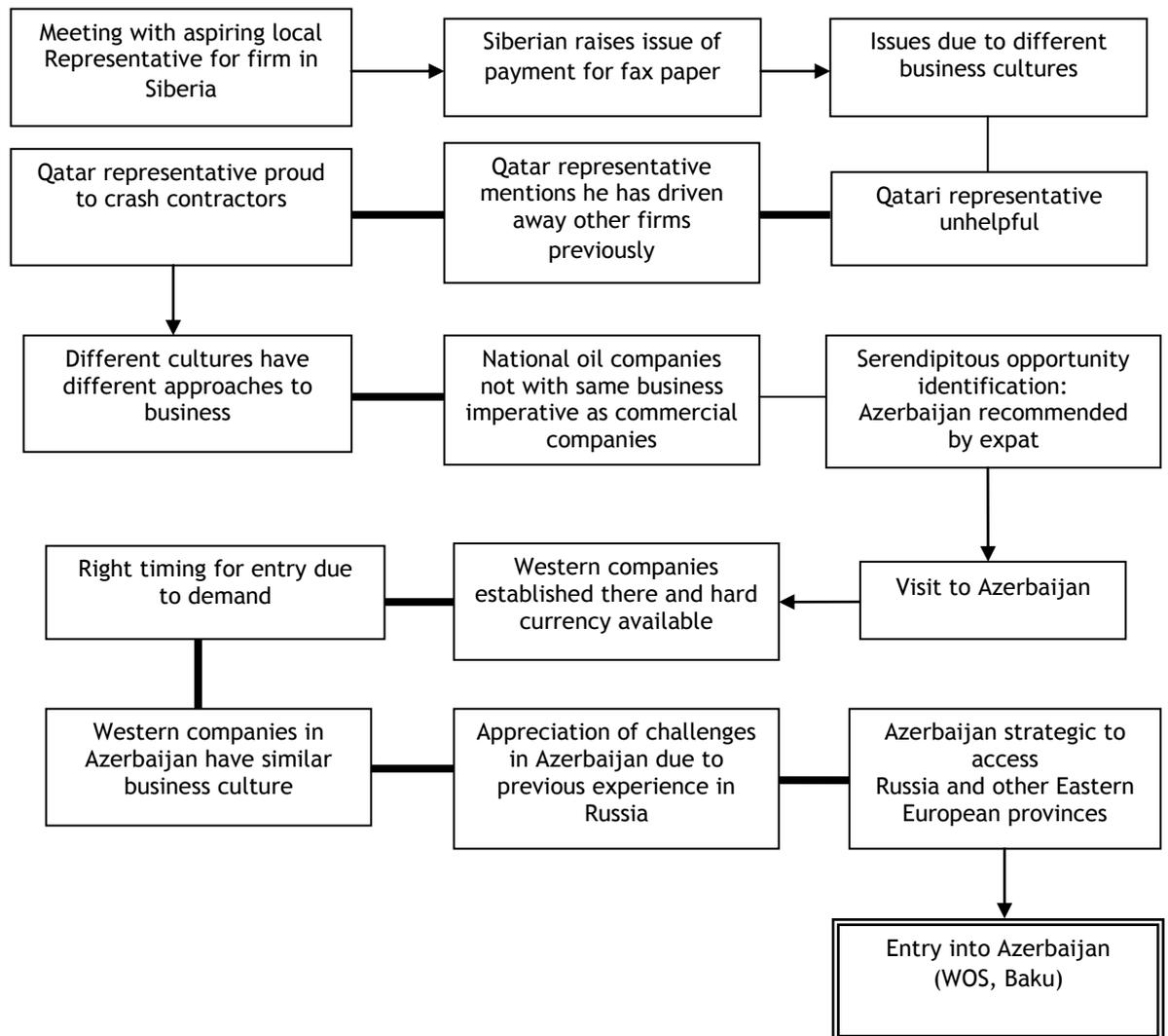
The experience in the Russian market is recalled as negative by the entrepreneur. In Russia the firm faces both cultural and financial problems. The first problem consists of the fact that firm full-time employees also work fulltime elsewhere, a practice that the entrepreneur defines as part of the Russian customs of the time. He also discovers that there is no liquidity in the country to pay firms with [RA].

These two observations, based on negative and recent critical events, form the basis for the entrepreneur's decision to exit the market [RI based on RA]. There is no evidence of an evaluation of alternative courses of action in making this decision. Rather, it is based on two items retrieved from memory on the grounds of recency and criticality [RI]. Both those characteristics are associated with the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

The entrepreneur reviews the thinking process that has led him to enter the Russian market in the first place (see also decision to enter Russian market above). He realises that general market intelligence does not necessarily apply to his own firm and that any market information needs to be thought through and tailored to the possibilities of the firm [RA]. This reasoning process highlights higher level learning following critical negative events (see Cope, 2005).

Case Study D - Internationalisation Decision 3 (CSD-ID3): Entry into Azerbaijan (Wholly-owned Subsidiaries)

Figure 5.24: Case Study D - Internationalisation Decision 3 (CSD-ID3)



Two experiences in foreign markets, namely Siberia and Qatar (first three lines of the cognitive causal map above), lead the entrepreneur to think that the business culture differs from country to country and that it is particularly different between countries where the oil is nationalised (state-owned companies) and those where the oil business is managed by private companies. In his view, the former do not have the business imperative of the latter [RA]. Later, an opportunity arises for entrepreneur D’s firm to enter Azerbaijan. The opportunity emerges serendipitously following a discussion with an expatriate

the entrepreneur knows in the industry. In order to decide whether to exploit the opportunity or not, D visits the country to gather more information about it [RA].

The issues the entrepreneur observes and reasons upon during his visit revolve around five key areas. Those are discussed individually below.

Firstly, D observes the presence of “western” companies in the market (that is, commercial companies with a business imperative) and the presence of “hard currency” (that is, the availability of liquidity with which to be paid) [RA]. This firm item is a direct consequence of his recent experience in Russia, during which he has learned not to do business in countries where there is no liquidity to pay foreign firms [RI based on RPE]. Thus, this item is likely to be recalled due to recency and saliency, triggering the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) [RI based on AHT].

Secondly, he considers that the timing seems appropriate to enter the market [RA]. This observation stems from the consideration that the timing wasn’t appropriate to enter the Russian market, as learned following the critical experience there (see Cope and Watts, 2000) [RA]. Again, the vividness of this item in the mind of the entrepreneur is linked to the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT].

Thirdly, he observes that there are western companies operating in the market [RA]. This observation is linked to the idea that western companies are different from the “state-owned companies” the entrepreneur has recently experienced in Qatar and in Siberia [RI based on RPE]. Because the experience with state-owned oil companies was negative, this item is readily available in the mental checklist of the entrepreneur [RI], thus triggering the use of the *Availability Heuristic* (Tversky and Kahneman, 1974) [AHT]. The entrepreneur associates “western companies” (that is, privately owned companies) with the thought of efficiency and business imperative [based on RA]. This association is based on a stereotypical image of privately owned companies he has constructed in his mind [RI based on RA]. Thus, he is using a *Representativeness Heuristic* (Tversky and Kahneman, 1973, 1974) to assume that the oil firms operating in Azerbaijan are representative of the stereotypical commercially driven western company [RI based on AHT].

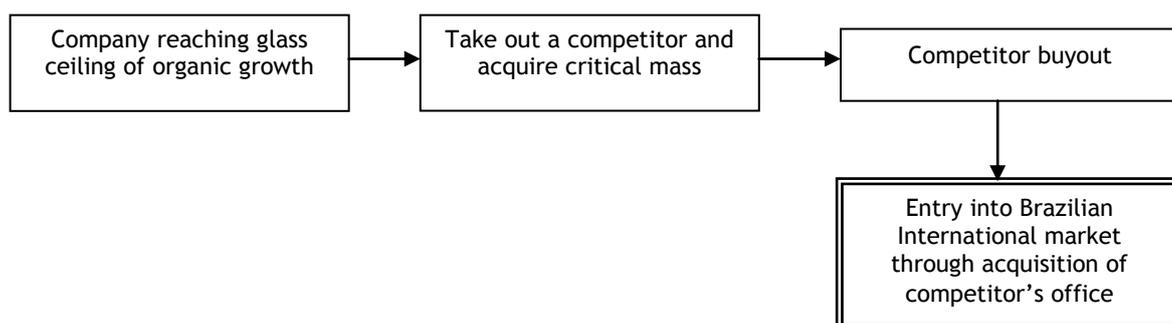
Fourthly, entrepreneur D considers that his firm is equipped to deal with potential challenges emerging in Azerbaijan due to the previous experience in the Russian market [RA]. In making this assumption, the entrepreneur is considering Azerbaijan representative of Soviet Block cultures, along with Russia [RI based on RA]. Therefore, he is using a *Representativeness Heuristic* (Tversky and Kahneman, 1973) [AHT].

Finally, he considers that Azerbaijan is strategic in accessing the Russian market [RA], probably due to the geographical location of the region [RI]. It is not clear from the data why such a consideration may be made, so no further analysis of this item is possible.

Ultimately, this process involving a combination of the three heuristics leads the entrepreneur to decide to enter Azerbaijan through the establishment of offices in Baku.

Case Study D - Internationalisation Decision 4 (CSD-ID4): Wholly-owned Subsidiary (Competitor Buyout in Brazilian market)

Figure 5.25: Case Study D - Internationalisation Decision 4 (CSD-ID4)



Eventually the entrepreneur decides that the firm had reached his glass ceiling of organic growth and that further growth can be achieved only through the acquisition of a competitor. This would remove a competitor whilst giving the company more critical mass [RA]. There is no sufficient background data to understand where this thinking process originates.

The entrepreneur does not explain the rationale followed in the decision to acquire a specific competitor. He comments:

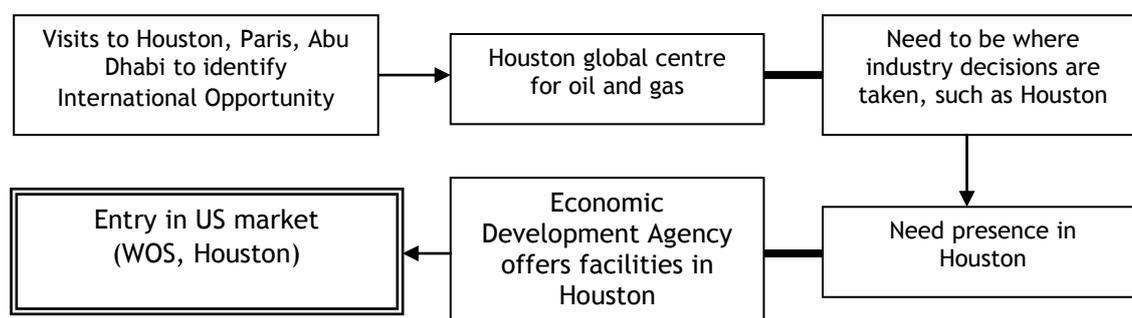
“We were ready to make an acquisition that would take out one of our competitors, but also give us more critical mass. [...] We bought one of our competitors who had an office in Brazil”

(Entrepreneur D, 2006 and 2008)

The decision to acquire this particular competitor leads to entry into the Brazilian market due to the acquisition of the competitor’s office there.

Case Study D - Internationalisation Decision 5 (CSD-ID5): Entry in United States market (Wholly-owned Subsidiary, Houston)

Figure 5.26: Case Study D - Internationalisation Decision 5 (CSD-ID5)



In search for business opportunities, the entrepreneur visits a number of cities including Houston, Paris and Abu Dhabi. Following visits to those places, Houston emerges as the centre of oil and gas [RA]. Whether this observation is based on factual information collected during his visit or merely on the entrepreneur’s own impression of the city is not clear. However, it is reasonable to assume that the view of Houston as the global centre of oil and gas stems from the entrepreneur’s experience of the city as well as the industry information he is exposed to [RI]. Because of these, it may be that Houston seems representative of a global centre for oil and gas, and that a *Representativeness Heuristic* is used [AHT]. Nevertheless, the data does not allow for establishing whether the heuristic is being used with any degree of certainty.

The entrepreneur also reasons that the firm needs to have a presence where industry decisions are made, and therefore a presence is required in Houston [RA]. In so reasoning, the entrepreneur is using a “me too” attitude, thinking that if other companies are located in Houston so should his firm [RI based on RA]. In this reasoning process D is using the information at his disposal, namely that all main firms in the industry have to operate in Houston, as an anchor to establish that his firm should also be in Houston [RI based on RA]. Thus, he is using an *Anchoring and Adjustment Heuristic* [AHT].

Finally, entrepreneur D reasons that the economic development agency of his home country offers office facilities in Houston [RA]. This thought may have been associated with a reduction in expenses or in other barriers associated with market entry [RI]. However, due to the limitations in the data (it is perhaps worth reminding the reader at this stage that the data was collected inductively in order to avoid tautological problems) it is difficult to establish why this thought was brought into the reasoning process of the entrepreneur.

Triangulation with repertory grid of entrepreneur D

The decision-making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross-compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.4: Entrepreneur D's Repertory Grid of Internationalisation

Entrepreneur D's Repertory Grid of Internationalisation	
1. Public / state owned client	1. Private / Commercial client
2. Communist / socialist country	2. Non-communist or socialist country
3. Offshore	3. Onshore
4. Developed infrastructure	4. Undeveloped infrastructure
5. Safe country	5. Unsafe country
6. Entrepreneurial country	6. Non-entrepreneurial country
7. Indigenous oil and gas industry	7. No indigenous oil and gas industry
8. Economic / business oriented	8. Non-business-oriented
9. Natural resources	9. No natural resources
10. High skill set and education levels in country	10. Low skill set and education levels in country
11. Western capitalistic / market driven	11. Non-capitalistic / not market driven
12. Country serving international clients	12. Country serving internally

In the repertory grid of entrepreneur D, items 1 (Private or state owned client), 6 (entrepreneurial or non entrepreneurial), 8 (Business-oriented or non-business-oriented foreign country) and 11 (Western / market driven or non market driven foreign country) all reflect the cognitive distinction that the entrepreneur has established through his experiences in Siberia (where item 2 - Communist / socialist or non communist / socialist foreign market - of the repertory grid is also relevant) and Qatar (see CSD-ID3). These items mirror the items involved in the reasoning process surrounding the decision to enter Azerbaijan (see CSD-ID3).

Item 3 (onshore or offshore business involvement) is linked to the distinction that the entrepreneur makes between the domestic market and the international market. This item is linked to the decision to internationalise due to the sudden failure of the domestic market (see CSD-ID1).

Item 4 (developed or underdeveloped infrastructure) is also linked to entrepreneur D's early experience in Russia and the decision to exit the Russian market (CSD-ID2).

Repertory grid items 5, 7, 9, 10 and 12 are not directly linked to any of the decisions outlined in case study D.

Case Study D - Main Findings

- In four out of five decisions it was possible to establish the use of heuristic based reasoning processes (based on Tversky and Kahneman, 1974);
- Three cases of foreign market selection decisions are available for this cases study, namely the entry into the Russian market (CSD-ID1), the entry into the Azeri market (CSD-ID3) and the entry in the United States Market (CSD-ID5);
- Both the Russian market selection decision (CSD-ID1) and the US market entry decision (CSD-ID5) are based on an anchoring and adjustment heuristic, drawing respectively on vicariously acquired industry information and on industry experience.
- The Azeri market selection decision (CSD-ID3) is based on an availability and a representativeness heuristic, drawing on entrepreneur`s previous experience of the Russian market.
- The use of the anchoring and adjustment heuristic in the Russian market entry decision shows an overconfidence bias.
- A market exit decision is available from the case study (CSD-ID5). This is based on an availability heuristic that draws on a negative critical incident in the market that is then exited.
- Triangulation with repertory grid: Seven out of twelve of the items appearing in the grid are used in the reasoning processes involved in D`s decision making. Of particular note are items separating countries where the oil is state-managed to countries where it is privately managed.

5.5. Case Study E

Firm E is originally founded in 1783 as a family business. It remains a family business for a number of generations, up to the generation of the family of entrepreneur E. In the mid 1980s, entrepreneur E takes over as the main owner of the firm, buying out other family shareholders. He also becomes the managing director and main decision maker of the firm.

The firm operates in the traditional textiles industry as a manufacturing producer and wholesaler.

Firm headquarters are located in the central region of Scotland. The firm employs fewer than 100 employees, and it is therefore classified as a medium-sized firm (European Commission, 2003).

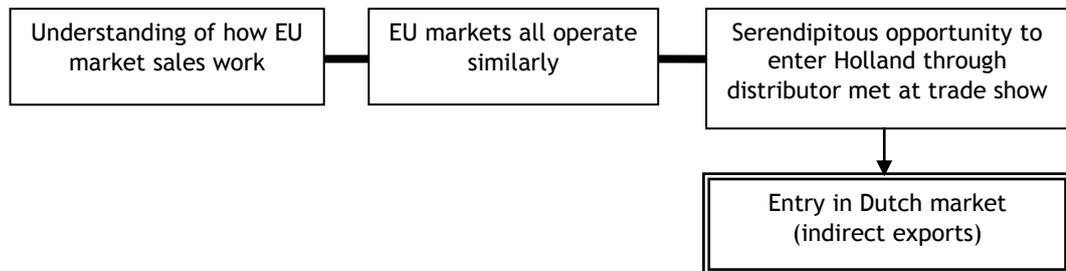
The first foreign market entry since entrepreneur E takes ownership and management of the firm happens in the early 1990s. Therefore, internationalisation takes place once the firm is fully established domestically (Johanson and Vahlne, 1977, 1990).

In the year 1991, the firm enters the European market starting with direct exports in Holland. Other European markets entered subsequently include Germany, Norway, Italy and France, where the firm operates through an indirect exporting mode. In the latter two countries firm E has international subcontracting agreements for sourcing of materials.

Following initial entry into the European market through indirect exports, the firm enters the American market around 1994 through the same entry mode.

Case Study E - Internationalisation Decision 1 (CSE-ID1): Indirect Exports in Holland

Figure 5.27: Case Study E - Internationalisation Decision 1 (CSE-ID1)



Entrepreneur E's early international sales are in Europe. The reason behind this decision is that, according to E's understanding of the European market, he concludes that all European countries operate in similar way when it comes to sales in textiles [RA].

He comments:

"[European markets] operate in much the same way with people going in and buying. You sell a pattern book to a shop, and the shop has the pattern book, and people go into the shop" (Entrepreneur E, 2006).

There is no evidence that the entrepreneur has experienced all the European markets or has gathered factual information on them to be able to draw the conclusion that all European markets operate in the same way. Given the fact that, by his own account, the entrepreneur attends international trade shows, it is likely that this assumption is based on E's experiential information collected through attending those shows [RI based on RA]. On the basis of this information, he concludes that operating in Europe should be the same as operating in the domestic market (of which E has experience) [RI based on RA].

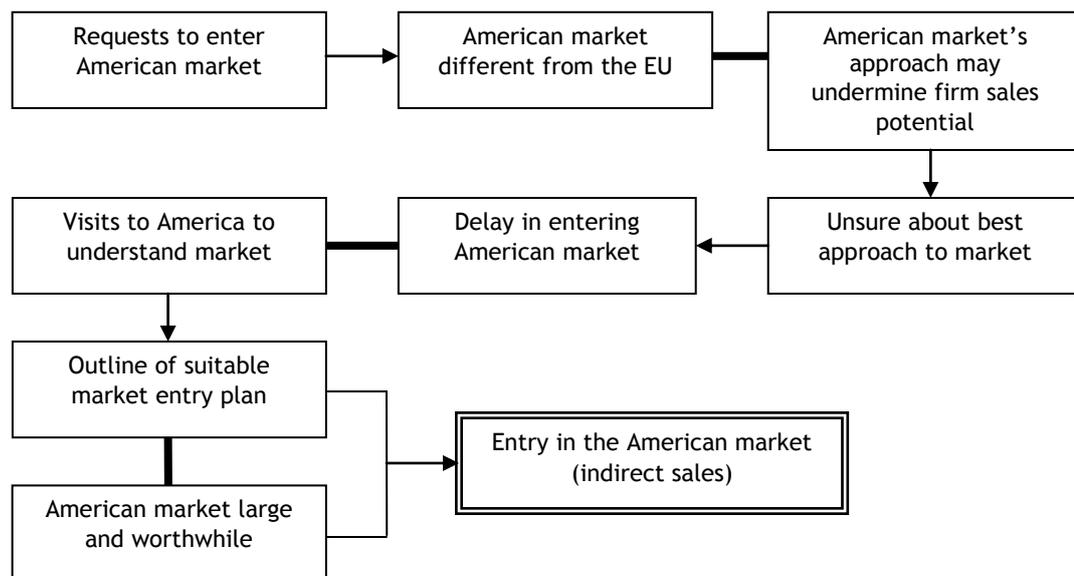
In making this assumption, E appears to cross compare all European countries on the grounds of their similarity in terms of the business culture in the textiles industry [RI]. The comparison of multiple countries based on a limited number of characteristics follows the logic of the *Representativeness Heuristic* (Tversky and Kahneman, 1974) [AHT].

Entrepreneur E also appears to be using the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1973), since, based on the anchoring information that all European markets work similarly, he concludes that entry in the European market can be achieved by operating in the same way as in the home market [AHT].

In line with this reasoning, when a serendipitous opportunity emerges for entry into the Dutch market, entrepreneur E takes the opportunity and enters the market.

Case Study E - Internationalisation Decision 2 (CSE-ID2): Indirect Sales in the American market

Figure 5.28: Case Study E - Internationalisation Decision 2 (CSE-ID2)



The decision to enter the American market follows a reasoning process that sees the entrepreneur reason on the grounds of the dissimilarity of the market to those that he has experience of selling on, including UK and Europe [RA].

The initial opportunity to enter the American market emerges serendipitously, through a series of unsolicited requests. In evaluating whether the firm can operate in the American market, E cross-compares the European market and the American market along specific features, namely the approach to textiles sales [RA]. In making this comparison along a narrow set of criteria, E seems to be

using the *Representativeness Heuristic* (Tversky and Kahneman, 1973) [AHT]. The result of his thinking process is that America does not seem representative of the European market as far as textile trading is concerned [RA]. Since the American market is found to be different from the European one, E reasons that entering the American market could undermine the sales potential of the firm [RA]. This reasoning process, coupled with the fact that he not sure how to best approach the American market, results in the decision to postpone firm's entry into the market [RA].

In order to find a suitable sales strategy in the market, the entrepreneur visits the country and conducts some market research on site [RA]. Eventually, the entrepreneur accumulates sufficient information on the American market and, using the information as a starting point, he elaborates a plan that seems suitable to the market [RA]. This reasoning process appears to follow an *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974), where the anchor is the market information acquired, adjusted to craft a sales plan that, in the view of the entrepreneur, is likely to yield the desired results [AHT]. The strategic plan drafted, coupled with the fact that the American market is large and therefore is likely to carry large sales potential, a decision is finally made to enter the American market [RA].

Triangulation with repertory grid of entrepreneur E

The decision making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.5: Entrepreneur E's Repertory Grid of Internationalisation

Entrepreneur E's Repertory Grid of Internationalisation	
<ol style="list-style-type: none"> 1. Brand based strategy 2. Same language 3. High level of contact with customer 4. Prompt payment 5. Market requiring products variety 6. Payments in own currency (Pound Sterling) 7. Low cost of shipping 8. Import duties 	<ol style="list-style-type: none"> 1. Wholesales strategy 2. Different Language 3. Low level of contact with customer 4. Non prompt payment 5. Market not requiring product variety 6. Payments in foreign currency 7. High cost of shipping 8. No import duties

Item 1 in the repertory grid of entrepreneur E regards whether a brand based or a wholesale based exporting strategy is best in the foreign market. This item is linked to the different entry strategies used in Holland and in the United States of America.

No sufficient information is available on the case study to triangulate the remaining repertory grid items with the causal-cognitive map of entrepreneur E.

Case Study E - Main Findings

- The two internationalisation decisions observed in this study represent foreign market selection decisions, namely the Dutch market (CSE-ID1) and the United States Market (CSE-ID2).
- In each of the two foreign market selection decisions available from this case study there is evidence of the joint use of the representativeness heuristic and of the anchoring and adjustment heuristic (Tversky and Kahneman, 1974).
- In both market selection decisions, the representativeness heuristic is based on industry knowledge stemming from the entrepreneur's own experience of some European countries. This is used as a term of comparison with the new markets considered for entry, of which the entrepreneur has vicariously acquired information.
- Once the representativeness of the new countries with respect to previously experience countries has been ascertained, the entrepreneur adjusts that entry strategy in the country using an anchoring and adjustment heuristic.
- Triangulation with repertory grid: Only one item from the grid (item 1) is in line with the content E's approach to decisions. The grid confirms that the approach to market selection is based on whether the market functions as in Europe or as it does in the US (as reflected in the sales by wholesale or by brand).

5.6. Case Study F

Firm F was originally founded in 1947 as a textile manufacturer specialising in Scottish tartan production. Entrepreneur F becomes the Managing Director of the firm in 1994, and has been the main decision maker in the firm ever since.

Firm's main headquarters are located in the South-East of Scotland, with production facilities and offices totalling a workforce of 150 employees. Around 50 more employees worldwide give the firm a total headcount of 200, making it a medium-sized enterprise (European Commission, 2003).

The firm has been involved in international exporting long before the arrival of managing director F. According to F's own account, early firm exports date back to the 1950s, with sales in European countries such as Germany and Sweden as well as in Russia.

Most of the internationalisation decisions made by F are linked with maintaining or expanding involvement in pre-existing foreign markets. Those involve Italy, France, Japan, Canada and the United States. The latter two markets are identified by F as high growth potential markets. Consequently, F decides to invest in a wholly-owned subsidiary in Canada (competitor buyout) around the year 1999 and in setting up another wholly-owned subsidiary (distribution warehouse) in America around the year 2000.

Case Study F - Internationalisation Decision 1 (CSF-ID1): Change of export strategy in Italy and France

Figure 5.29: Case Study F - Internationalisation Decision 1 (CSF-ID1)

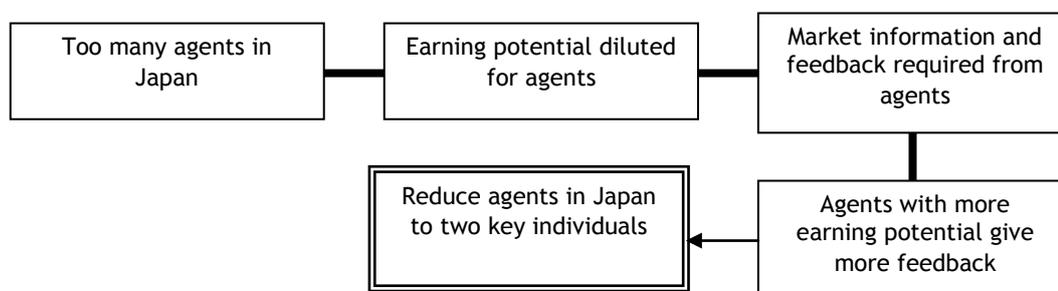


Following the experience in the Italian and French market, F realises that, given the premium quality of the products the firm produces, there are only a few customers that can afford them [RA]. Using this information as a starting point, he reasons that keep attending trade shows to promote the products is no longer the best strategy, as the majority of customers attending them are not going to be able to purchase from the firm [RA]. He reasons that, from market experience, he knows who the customers that can afford his firm's products are. From this, he reasons that it would be more cost effective to invest in visiting those customers individually in order to sell to them [RA].

In these reasoning processes, the entrepreneur starts off with market information as the base for possible changes to the firm's strategy [RI based on RA]. Thus, he is using the existing information from the market as the anchor and is making adjustments from it, using an Anchoring and Adjustment Heuristic (Tversky and Kahneman, 1974) [AHT].

Case Study F - Internationalisation Decision 2 (CSF-ID2): Change in indirect export strategy in Japan

Figure 5.30: Case Study F - Internationalisation Decision 2 (CSF-ID2)



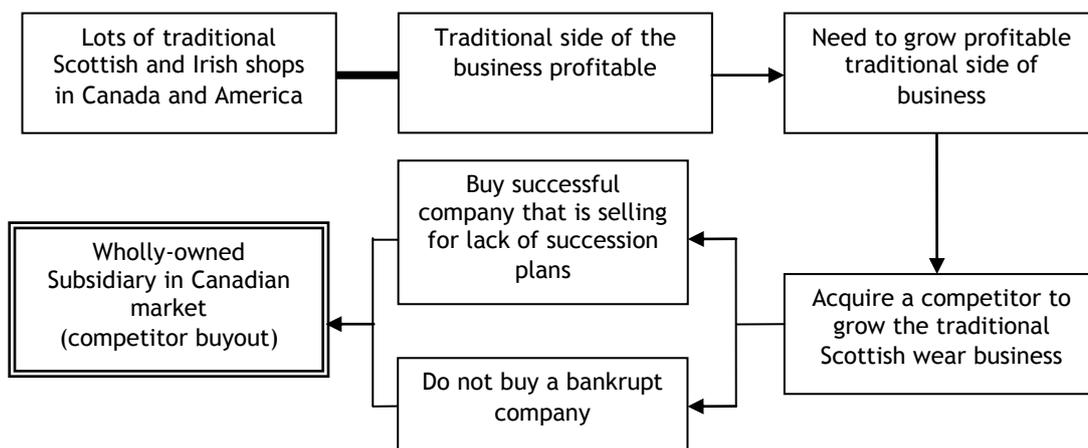
In the Japanese market, F decides to consolidate all the sales efforts in the hands of two agents, as opposed to the larger number of agents previously employed. He reasons that with more agents representing the firm, each agent has a reduced earning potential. He also reasons that he needs sales agents to be sufficiently involved in the Japanese market to be able to provide F with feedback from the market and general market information [RA]. From this reasoning pattern, he concludes that in order for agents to provide him with more market information and feedback, he needs to increase their earning potential. This leads to the decision to reduce the number of agents in Japan to two key sales representatives [RA].

It is hard to analyse this decision from a heuristic viewpoint. In fact, if the reasoning that leads the entrepreneur to the conclusion that increased earning potential leads to increased feedback from agents results from previous salient experience, he may be using the *Availability Heuristic* (Tversky and Kahneman, 1974) [RI based on AHT]. However, there is no evidence in his account of a salient experience that would lead to this reasoning.

If the decision is based on factual information, then he could be using the information as an anchor to establish a plausible course of action, thus using the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [RI based on AHT]. Again, he does not specify whether this reasoning is based on factual information. Consequently, it is not possible to establish whether this particular heuristic is being used either.

Case Study F - Internationalisation Decision 3 (CSF-ID3): Wholly-owned subsidiary in Canada (Competitor buyout)

Figure 5.31: Case Study F - Internationalisation Decision 3 (CSF-ID3)



The decision to acquire a foreign competitor in Canada is the result of a reasoning process that leads F to the conclusion that the traditional tartan business has potential for growth [RA].

Following the long standing export experience of the firm in Canada and the United States, plus his own experience of those markets, managing director F observes that there are a large number of traditional Scottish and Irish shops in Canada and the United States. He also reasons that the traditional side of the business is robust and profitable, both because there are many clients in America and Canada and because in the words of F “because it was something that... the price, we can command...” (Managing Director F, 2008) [RA].

The managing director does not state explicitly where this information is sourced. However, based on the tone and the body language he uses during the interview, he appears to convey that it is information drawn from firm’s records and his own experiential knowledge of those markets [RI].

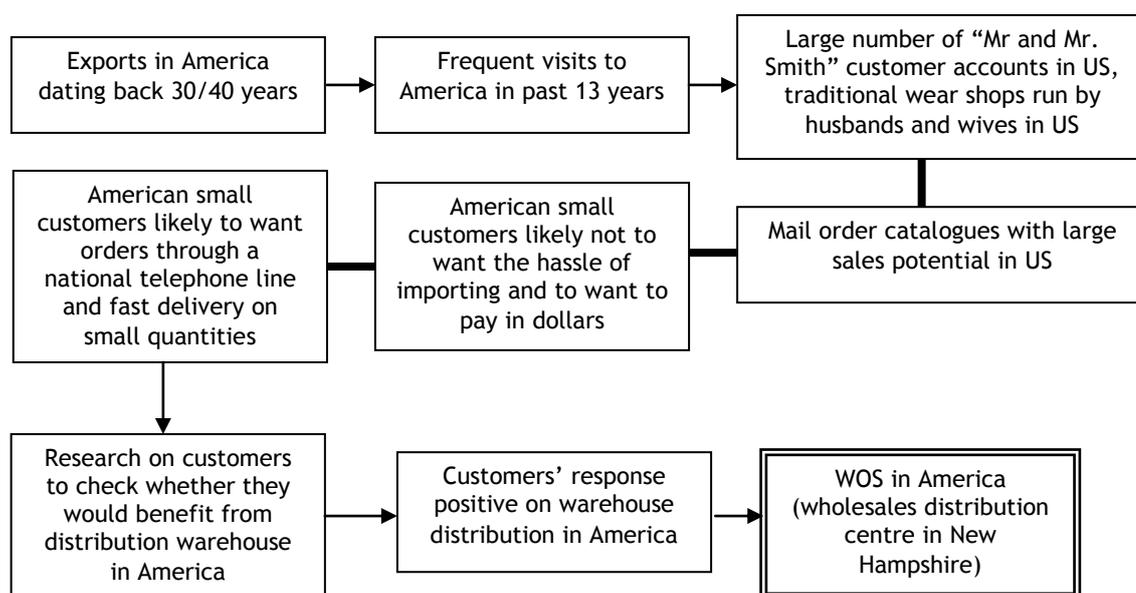
Based on this information, F concludes that the traditional side of the business is worth growing [RA]. This conclusion is drawn from the two pieces of information he uses as the bases for his reasoning. Thus, he appears to be using an *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [AHT].

In order to grow the business in Canada (where the firm is already operating through exports), he reasons that he needs to buy out a competitor [RA]. It is not clear what reasoning process triggers this approach. He does not outline whether alternative courses of action, other than a competitor buy-out, were considered and evaluated. Neither does he state where the idea of a competitor buy-out stems from. He may be using the Representativeness Heuristic (Tversky and Kahneman, 1973) by considering a competitor buy-out as representative of a growth option that is fast and substantial [RI]. However, he does not discuss this aspect of the reasoning process in sufficient detail to allow for an evaluation to be drawn.

Following the decision to purchase a competitor, he reasons that he would rather buy a firm that is successful but that has no succession plans rather than a firm that is unsuccessful or bankrupt [RA]. Again, there is no evidence of the reasons behind this thinking. Nevertheless, managing director F, in line with his decision, travels to Canada to find a successful competitor that is on sale and purchases it.

Case Study F - Internationalisation Decision 4 (CSF-ID4): Wholly-owned Subsidiary in America (Greenfield investment, set up warehouse distributor)

Figure 5.32: Case Study F - Internationalisation Decision 4 (CSF-ID4)



The decision to set up a wholesale distribution centre in the United States follows an in-depth reasoning process from F, informed by his experiential knowledge of the foreign market. His reasoning is then confirmed by some research conducted on existing customers [RA].

Firm F has been exporting to America for 30 to 40 years and, since F joins the firm, he travels there regularly to manage American customers. Due to those frequent visits, F has gained an in-depth experiential knowledge of the customers in America [RA].

He reasons that they are small, family-run shops selling traditional Scottish and Irish wear. He labels those types of customers, “Mr and Mrs Smith” accounts. He also identifies an order catalogue account in America that has potential for more sales. He reasons that those accounts are likely to want to pay in dollars and do not want the hassle of importing. He also reasons that they are likely to want to be able to phone to a national landline number at a time that suits them, as opposed to making international phone calls and take into account time differences. Similarly, they are likely to prefer shorter delivery times and the ability to make small orders [RA].

All of those assumptions are based on the knowledge F has developed of the firm’s typical customers [RPE]. He is using this knowledge to draw conclusions on the type of services customers are likely to value and, in turn, use more of, increasing firm sales [RI based on RA]. In making these assumptions, F seems to be using the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974) [AHT]. The anchor comprises the profile of the customers, and adjusting from it F establishes what they may require to purchase more from the firm, namely a warehouse distribution centre [RI].

Rather than trusting his judgement and making the decision to open the warehouse on the grounds of his reasoning alone, F conducts some research among his customers in America. He finds that customers respond positively to the idea of having a distribution warehouse within the United States [RA].

Following confirmation from customers, the final decision is made and the warehouse is set up in New Hampshire in 2000.

Triangulation with repertory grid of entrepreneur F

The decision-making processes described so far are based on the longitudinal data built from the sequential interviews conducted with the entrepreneur. Those are now cross compared with data on the entrepreneur's cognitive schemas elicited through a different technique, that of the repertory grid (see methodology chapter for more details on the technique).

Table 5.6: Entrepreneur F's Repertory Grid of Internationalisation

Entrepreneur F's Repertory Grid of Internationalisation	
1. Same language as entrepreneur	1. Different Language from entrepreneur
2. Same time zone	2. Different time zone
3. Same work ethics as UK	3. Different work ethics from UK
4. Informal work style	4. Formal work style
5. Business from multiple small customers	5. Business from few large customers
6. Short meetings / working lunches	6. Lengthy meetings / working lunches
7. Boutique shops market	7. Large chains market
8. Climate requires reduced product range	8. Climate allows for full product range
9. Timely payments	9. Untimely payments
10. Buyers not versed in textiles	10. Buyers well-versed in textiles

All items in the repertory grid of entrepreneur F can be said to be linked to the large variety of international business arrangement that the firm has, spanning across different continents and putting the entrepreneur in contact with different cultures.

Item 5 from the repertory grid (business from multiple small customers or business from few large customers) is reflected in the decision to set up wholly-owned subsidiaries in Canada and the United States (CSF-ID3 and CSF-ID4).

Aside from item 5, it is not possible, to establish direct links between the repertory grid and the content of the decisions from the causal-cognitive maps of entrepreneur F for triangulation purposes.

Case Study F - Main Findings

- Two of the decisions made by this entrepreneur revolve mainly around the entry mode, although the country entered is also of importance since the entry mode decision is based on market specific experience.
- Both entry mode decisions are decisions to set up wholly-owned subsidiaries (CSF-ID3 and CSF-ID4). Both decisions are made using an anchoring and adjustment heuristic, drawing experiential market information.
- The adjustment from the baseline information (the anchor) in this decision is tailored to situation of the firm based on the specific market information available. Furthermore, in one of the decisions (CSF-ID4), the decision made is further corroborated by market research.
- This case study also provides evidence of two decisions consisting of changes in strategy within the existing entry modes abroad (CSF-ID1 and CSF-ID2). These fine-tuned micro decisions do not fall into any of the categories of decisions discussed in this thesis (see Chapter 6). Nevertheless, they provide insights worthy of further investigation in future research.
- Triangulation with repertory grid: the variety and nature of items in the grid confirm the multifaceted cognitive schema content developed by F over the years of international involvement in multiple foreign markets.

5.7. Conclusions and Implications

In this chapter, internationalisation decisions have been analysed case by case, each in chronological order. All decisions were coded, including country selection, entry mode and market exit decisions. The analysis of those decisions will be further elaborated on in the next chapter, with an analysis of decisions by type and with a further clarification of the experiential and vicarious items which those decisions are based on.

However, in this chapter other decisions were observed that do not belong to any of the typologies identified in the literature (i.e. country selection, entry mode and exit decisions). Those decisions include non-market entry decisions (following initial consideration), non-market exit decisions (following consideration to exit) and fine-tuned decisions aimed at changing the firm's strategic approach to an existing entry mode in a specific country (for an example see CSF-ID1 and CSF-ID2). These decisions are not carried over in the cross-case analysis. Nevertheless, it is noted that those typologies of decisions are worthy of further considerations in future research.

Finally, I note that, overall, the items elicited through the repertory grid of each decision maker reflect the items on which the decision processes (observed in the causal-cognitive maps) draw. This triangulation procedure gives reason to be confident that the constructs appraised in this research (i.e. the reasoning processes and the cognitive items leveraged in the process) are valid.

Chapter 6

Cross-Case Analysis

This chapter cross-compares the case studies analysed in the previous chapter. The cross-comparison of cases is carried out in light of the literature on internationalisation of firms.

The cross-case analysis of internationalisation decisions follows three main characteristics of the general internationalisation process model by Jones and Coviello (2005), namely time and time sequence of internationalisation decisions, entry mode decisions and foreign country selection decisions (Jones and Coviello, 2005).

Jones and Coviello's (2005: 293) general internationalisation model is used as a framework for the cross-case analysis as the model is deemed particularly suitable for the purpose of this chapter in that it addresses the process-based nature of firm internationalisation with references to decision and decisional outcomes (in terms of behaviour) over time. The general nature of the model accommodates a variety of internationalisation patterns as well as the entrepreneurial level analysis that this thesis focuses on.

In particular, this chapter cross-compares decisions by *time sequence* and *type*. *Time sequence* refers to the patterns of early internationalisation of firms as expressed in the sequence of internationalisation decisions they make (based on Jones and Coviello, 2005). In order to allow for direct comparisons, this analysis focuses on the four cases of international new ventures (case studies A, B, C and D - see chapter 5 for a description of each case). This allows for comparisons of first, second, third decisions - and so on - across-cases. This type of direct comparison on decision sequence cannot be performed on the other two cases, namely cases E and F. This is because the "case window" (Czarniawska, 1997) of this research was open at a later stage in the internationalisation process of

these two firms. They are at different stages of international development. Consequently, their internationalisation decisions are not directly comparable from a time sequence viewpoint. Hence, case studies E and F are excluded from the time sequence analysis.

The cross-case analysis by *types* of internationalisation decisions includes three main categories, namely foreign market selection (Johanson and Vahlne, 1977, 1990), entry mode (based on Young et al., 1989) and foreign market exit decisions (e.g. Crick, 2003, 2004). The former two categories of decisions - foreign market selection and entry mode - mirror widely accepted dimensions of firm internationalisation process (see Jones and Coviello, 2005). The latter category - foreign market exit - has been identified as a somewhat under-researched in the small firm internationalisation literature (see literature review chapter), although it emerges as relevant from the inductive analysis of data in this thesis.

In keeping with the heuristic lens taken in this thesis, the cross-case analysis focuses on the use of different heuristics across the different categories of internationalisation decisions.

As well as comparing the heuristics used by the different decisions makers, the elements on which the heuristic processes draw upon are also compared. Those elements consist mainly of decision makers' experiences and information.

Since heuristic theory elaborates on the leveraging and use of information stored in the individual's cognitive system, it follows that the information element (whether experientially or vicariously acquired) has to be addressed directly in this exploratory study.

More importantly, knowledge in general, and experiential knowledge in particular, have been identified as key factors in the literature on internationalisation to which this thesis intends to make a contribution. In fact, experience and knowledge, respectively at the individual and the firm level, have been found to influence the very creation of an international new venture and to impact on the successive process of firm growth in the international arena. The process of leveraging and use of the different types of knowledge in

decision making, not yet addressed by the literature to date, is indeed one of the intended contributions of this thesis.

The decision makers' experiences, experiential knowledge and information fall into the following main categories⁶:

- Vicarious Foreign Market Information [VFMI]
- Positive / Negative Critical Incident [PCI/NCI]
- Foreign Market Experience and Knowledge (with current firm) [FME&K]
- Internationalisation Experience (with current firm) [IntE]
- International Work Experience (previous work) [IWE]
- Industry Experience and Knowledge [IE&K]
- Work Experience [WE]

Each of these elements forming the basis of heuristic reasoning is defined below and a tag is assigned to each of them. Those tags are used in the cross-case discussion forming the rest of the chapter for ease of cross-referencing with the definitions.

Vicarious Foreign Market Information [VFMI]

Vicarious Foreign Market Information refers to all the information that is not held by the decision maker and is, therefore, externally sourced. The concept of vicariously-acquired foreign market information is part of the information acquisition activities of the firm (e.g. Yeoh, 2000).

⁶ This categorisation is intended to reflect the typology of experiences addressed by the literature in internationalisation as well as dimensions of experience (e.g. positive and negative critical experiences) emerging as relevant from the inductive analysis of the data.

Positive/Negative Critical Incident [PCI/NCI]

The term *critical incident* indicates an occurrence that is emotionally charged and vivid for the person experiencing it. The criticality of the incident triggers higher level learning, changing the frame of reference of the individual (based on Flanagan, 1954; for an application of the concept in the field of entrepreneurship see Cope and Watts, 2000; Cope, 2003, 2005).

The concept of “incident” differs from that of “experience” in that an incident refers to an episode or an event that takes place over a finite period of time (Cope and Watts, 2000). From this viewpoint, the concept mirrors that of “stream” of experience, as opposed to “stocks” of experience, discussed by Reuber and Fischer (1999).

In this particular study, a distinction is made between *positive* and *negative* critical incidents, with a view to verify their different effect in the reasoning processes of internationalisation decision makers.

Foreign Market Experience and Knowledge (with current firm) [FME&K]

The concept of *Foreign Market Experience and Knowledge* is based on the idea that direct experience of a specific foreign market increases the knowledge that the decision maker has of that market (Johanson and Vahlne, 1977, 1990, 2006, 2009; Davidson, 1980).

Chetty et al. (2006) define foreign market experience as “*the diverse set of experiences acquired from multiple business deals in one country*” (Chetty et al., 2006: 701).

This study adopts this definition with the qualification that foreign market experience is considered at the level of the individual and represents his accumulated idiosyncratic experience in a specific foreign market during his time with the current firm.

Internationalisation Experience (with current firm) [IntE]

Internationalisation Experience refers to the collection of experiences accumulated through previous cross border activities of the firm (Eriksson et al., 1997). It is not country or entry mode specific and represents the firm's own “way of going international” (Eriksson et al., 1997: 345). Internationalisation

experience has been defined as “*experiences from past businesses in diverse foreign markets*” (Chetty et al., 2006: 701).

This study adopts this definition with the qualification that internationalisation experience is considered at the level of the individual and represents his accumulated idiosyncratic experience in cross border venturing during his time in the current firm.

International Work Experience (previous work) [IWE]

The concept of *International Work Experience* is based on the decision maker’s acquisition of international experience prior to involvement with the internationalising firm and refers specifically to his international work experience.

International work experience is part of the wider concept of international experience that has been linked mainly to INV creation and the speed and scope of the international involvement of the firm (e.g. Bloodgood et al., 1996; Madsen and Servais, 1997; Reuber and Fischer, 1997; Kuemmerle, 2002; Weerawardena et al., 2007; Evangelista, 2005; Ibeh, 2003).

In this study, prior international work experience is used to explain the reasoning processes at the core of firm growth or retrenchment decisions. Thus, it is more in line with the idea of the impact of managerial experience on the growth of early internationalising firms (Sapienza et al., 2006).

Industry Experience and Knowledge [IE&K]

The concept of *Industry Experience and Knowledge* is based on the idea that the decision maker brings his industry specific experience to the internationalisation process of the firm (McDougall et al., 2003; Evangelista, 2005). In this study, the term industry experience refers both to the experience that the decision maker has at the beginning of the internationalisation process and that which he acquires during the process itself.

Work Experience [WE]

The general concept of *Work Experience* is intended to incorporate all those types of experience that stem from the working life of the decision maker prior to his involvement with the internationalising firm (e.g. Evangelista, 2005, McDougall et al., 2003) but that do not fall into any of the specific categories outlined above (i.e. Industry, Market or Internationalisation). An example of this type of experience is the managerial experience of one of the entrepreneurs, which leads him to believe that there is a headcount cap beyond which people's management can no longer be efficient.

6.1. Heuristics in Internationalisation Decisions:

Time and Internationalisation Patterns

The first section of the cross-case analysis focuses on the time dimension of internationalisation decisions. The decisions made in each case study are ordered according to the time sequence in which they were made (based on Jones and Coviello, 2005), starting with the first decisions and then moving on to the second and third decisions made and so on. In the tables used to summarise the main characteristics of the decisions discussed, the reference time of each decision (as manifested by the internationalisation event) against the previous event is also given. For instance, in the first decision, the reference time against the foundation of the firm is given (please note that reference times are often presented in the form of time estimates, since respondents often could not name a specific date for a decision that took place over a certain time period. On other occasions, the respondent simply did not remember the exact date or month for the specific decision related internationalisation event).

The purpose of this first section on the time dimension of internationalisation decisions is to see what heuristics are used in the very early stages of the internationalisation process. The aim is also to discover whether the heuristics forming the bases of the decision making process change over time.

Consequently, a deeper discussion of the relevance of heuristic reasoning to the specific type of decision (i.e. country selection, entry mode or foreign market

exit) is left for the dedicated sections forming the remaining part of the chapter.

Table 6.1 (page 212) represents a cross-case comparison of the very first internationalisation decisions made by the entrepreneurs and the heuristics on which they were based.

There are two approaches to making the first internationalisation decisions. Two decision makers (A and D) use the *anchoring and adjustment heuristic*, with the anchor consisting of *vicariously acquired information* [VFMI].

Two decision makers (B and C) use the *availability heuristic*, which is based on *positive critical incidents* [PCI].

In the two instances based on the *anchoring and adjustment heuristic*, the decision maker acquires information vicariously [VFMI] (CSA-ID1 and CSD-ID1). Based on the information acquired (being either foreign market information or industry information), which highlight opportunities in certain foreign markets, the decision makers decide that their firms too, could be taking a share of the opportunities for value adding activities in those markets.

One of those entrepreneurs (D) has no previous experience of international markets. Thus, it makes intuitive sense that he is relying on industry information [VFMI] since this is the only information available to him. Entrepreneur A, on the other hand, does have previous international work experience. Nevertheless, there is no indication that he relies on it in this first internationalisation decision, as he claims to have sourced information vicariously through market research [VFMI].

The decision makers basing the decisions on the *availability heuristic* take a completely different approach to their first internationalisation decision in comparison to the two cases discussed above.

By using the *availability heuristic*, entrepreneurs B and C are relying solely on readily available information. In particular, they recall successful experiences that they are keen to repeat [PCI].

In the case of entrepreneur B, the critical incident stems from his life experience pre-firm foundation [PCI], namely, his use of public relations and industry press in a political election bringing him success. Thus, he is eager to use the same technique in the internationalisation of his firm.

Table 6.1: Cross-case Analysis of First Internationalisation Events/Decisions

1 st Internationalisation Events / Decisions					
Firm	Decision Code*	Internat. Decision / Event	Time from firm Inception (years)	Heuristic Used	Heuristic Based on
A	CSA-ID1	Direct Exports in USA Market	0	Anchoring and Adjustment	Foreign Market Information (vicarious)
B	CSB-ID1	Direct Exports in 32 Countries using PR	<1	Availability	Positive critical incident (politics, with PR)
C	CSC-ID1	Indirect Export of Services (Piggy Backing on larger MNE)	0<x<2	Availability	Previous positive critical incidents (indirect provision of services through Piggy Backing on MNEs)
D	CSD-ID1	Wholly-owned Subsidiaries into Russian Market	>11	Anchoring and Adjustment (Overconfidence bias)	Industry Information (Vicarious - Russia promoted as "place to be")
<p>Note: This table is intended for the discussion of heuristics in early internationalisation decisions by the entrepreneur. Consequently, it only includes case studies where early entry decisions are available. Case studies where the entrepreneur was not involved in early entry decisions are not included in the table.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>					

In the case of C, the successful experience stems from the firm's experience in the industry. C has had had previous experience of providing services to large MNEs [PCI]. He finds the experience positive and is keen to use the same approach to take his firm's services across national borders. That is, he intends to service foreign markets indirectly by piggy-backing on the MNE.

Let us now turn to the second internationalisation decisions made by the same entrepreneurs and the heuristics that are used (Table 6.2). A comparison in the heuristics used in the second decisions by comparison with those used in the first decisions gives a first insight as to whether heuristic based internationalisation decision processes change over time.

Table 6.2: Cross-case Analysis of Second Internationalisation Events / Decisions

2nd Internationalisation Events / Decisions					
Firm	Decision Code*	Internat. Decision / Event	Time from 1st Internat. Event (years)	Heuristic Used	Heuristic Based on
A	CSA-ID2	Wholly-Owned Subsidiary in Italian Market	≈2	Availability + Availability	International Work Experience (Europe + Network contact in Italy)
B	CSB-ID2	Wholly-Owned Subsidiary in Irish Market	1<x<3	Availability + Availability + Representativeness	Negative Critical Incident (Multilingual staff costly) + Internationalisation Experience (Many customers are English speaking + they save costs + Cultural and Geographical proximity)
C	CSC-ID2	No wholly-owned subsidiaries in USA Market	<4	Availability	Negative critical incident (9/11 Events in USA)
D	CSD-ID2	Exit Russian Market	<3	Availability	Negative Critical Incidents (in Russian Market)
<p>Note: This table is intended for the discussion of heuristics in early internationalisation decisions by the entrepreneur. Consequently, it only includes case studies where early entry decisions are available. Case studies where the entrepreneur was not involved in early entry decisions are not included in the table.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>					

In their second internationalisation decisions, the two entrepreneurs that previously used an anchoring and adjustment heuristic switch to using an *availability heuristic* (CSA-ID2 and CSD-ID2). The latter is based either on past *international work experience* [IWE] (CSA-ID2) or a *negative critical incident* [NCI] (CSD-ID2) experienced by the entrepreneur.

In both cases, the decision makers move away from a vicarious-information-based decision and towards a direct-experience-based decision. These cases suggest that, as soon as it is available, direct experience forms the bases of decision making processes in the very early stages of firm's internationalisation.

Entrepreneurs B and C, who used a experience based availability heuristic in their first decision, keep using the *availability heuristic* in their second decisions⁷. Their use of the availability heuristic is based on either *critical incidents* [NCI] or *internationalisation experience* [IntE]. Thus, their second internationalisation decisions are still *direct-experience based*.

Taken together, the four cases displayed in table 6.2 above lend support to the idea that in very early internationalisation decisions, entrepreneurs use a *direct-experience based* heuristic such as the *availability heuristic*.

The third internationalisation decisions made and the heuristics that they are based on are summarised in table 6.3.

Three in four of those decision processes make use of the *availability heuristic*. One decision is made using the *anchoring and adjustment heuristic*. Both heuristics used in these decision making processes draw on *experience* and *critical incidents*.

⁷ the use of the Representativeness heuristic in decision CSB-ID2 is deemed to bear a stronger link to the type of decision, namely the foreign market selection, than to the change in reasoning processes over time and will therefore be discussed in the dedicated section on foreign market selection below.

Table 6.3: Cross-case Analysis of Third Internationalisation Events / Decisions

3 rd Internationalisation Events / Decisions					
Firm	Decision Code*	Internat. Decision / Event	Time from 2 nd Internat. Decision / Event (years)	Heuristic Used	Heuristic Based on
A	CSA-ID3	Exit Italian Market	≈1	Availability	Previous Work Experience + Negative Critical Incident (in Italian market)
B	CSB-ID3	Wholly-owned Subsidiary in French Market	<2	Anchoring and Adjustment (overconfidence bias)	Internationalisation Experience (functionality of business model in UK)
C	CSC-ID3	Equity Joint Venture in Dutch Market	5	Availability + Availability	Industry Experience + Previous Negative Critical Incident
D	CSD-ID3	Wholly-owned Subsidiaries in Azerbaijan Market	<1	Availability (multiple use) + Representativeness	Negative critical incidents (in Russia) + Perceived cultural and geographical distance from previous market (Russia)
<p>Note: This table is intended for the discussion of heuristics in early internationalisation decisions by the entrepreneur. Consequently, it only includes case studies where early entry decisions are available. Case studies where the entrepreneur was not involved in early entry decisions are not included in the table.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>					

The three decisions using the *availability heuristic* are based on either general past *work experience* [WE] (CSA-ID3) or *industry experience* [IE&K] (CSC-ID3). Each of those decisions is also basing the use of the availability heuristic on a *negative critical incident* [NCI] (CSA-ID3, CSC-ID3 and CSD-ID3). Only one of

those critical incidents stems from a pre-firm foundation event (CSC-ID3), whilst the other two critical incidents stem from recent internationalisation events (CSD-ID3 and CSA-ID3).

One decision maker is using the *anchoring and adjustment heuristic* (CSB-ID3). However, the reasoning process based on this heuristic is still based on experience, namely *internationalisation experience* [IntE].

Comparing the third set of decisions to the decisions taken previously by the entrepreneurs, the heuristics used and the elements on which these heuristics are based on do not change substantially. Aside from entrepreneur B, all other decision makers *keep using the availability heuristic*. Therefore, over a time period lasting from a minimum of one to a maximum of five years from the previous decisions made, the reasoning process used to make internationalisation decisions has not changed substantially. Not only all decision makers - with the exception of one - are still using the availability heuristic, but the use of this heuristic is based on much the same experiences and critical incidents as the previous decisions.

Of note is the fact that whenever a new critical incident has taken place, it is added to the factors taken into consideration through the use of the availability heuristic.

Taken together the findings above suggest that the *heuristic based reasoning processes involved in internationalisation decisions do not change substantially over the first few years of international involvement* of the firm. Those reasoning processes are and remain mainly based on the entrepreneur's *own experience* stemming from events that are either *recent* or *salient* in the mind of the decision maker.

The next table (6.4) summarises the decision making processes that follow the third internationalisation decision in each firm. For each firm, all the decisions are presented in the chronological order of occurrence.

The purpose here, once again, is to check whether the use of heuristic processes in decision making have changed since the previous decisions. Thus, it makes sense to make the comparison with the previous table taking into consideration each entrepreneur in turn.

Entrepreneur A continues to use the Availability heuristic in the three decisions (CSA-ID4⁸, CSA-ID5 and CSA-ID6) following decision number three seen above (CSA-ID3). In so doing, the decision maker is still drawing on *critical incidents* that are easily retrievable during the decision making process. He continues to assess the likely decisional outcome by comparing the present scenario with that of the incident retrieved. If the latter is positive [PCI], A is inclined to view the prospective internationalisation outcome favourably and decides to take advantage of the opportunities that have arisen (CSA-ID4 and CSA-ID6). If the critical incident recalled is negative [NCI], A is inclined to view the prospective internationalisation outcome negatively and decides to avoid a repeat of the previously experienced scenario (CSA-ID5).

The case of entrepreneur B is richer in that it allows for the observation of a larger number of decisions (up to decision number 10) and, consequently, of the changes in the decision making processes.

Up to his sixth decision, B alternates the use of the Availability heuristic to that of the Anchoring and Adjustment heuristic.

The use of the availability heuristic is based on critical incidents experienced. That means that he makes a “repeat” or “avoid” decision based on an event that is easily retrievable.

The use of the anchoring and adjustment is based on B’s stocks of internationalisation experience [IntE]. That means that he takes his accumulated internationalisation experience as a baseline from which he makes adjustments to estimate the likely outcome of the internationalisation event he is considering.

⁸ The use of the Representativeness heuristic in decision CSA-ID4 is deemed to bear a stronger link to the type of decision, namely the foreign market selection, than to the change in reasoning processes over time and will therefore be discussed in the dedicated section on foreign market selection below.

However, after the sixth decision, B starts to use the availability heuristic in conjunction with the anchoring and adjustment heuristic in the internationalisation decisions he makes. More importantly, the use of the anchoring and adjustment heuristic becomes based on the vicarious acquisition of foreign market information [VFMI] (through market research), as opposed to being based solely on the direct experience of the entrepreneur. Thus, although the decision maker is still relying on the same reasoning processes, he no longer bases those solely on his experience but feels the need to corroborate his understanding of the situation with vicariously acquired information.

This signals that, through experience, the decision maker has become aware of the evidence he needs and recognises when he does not have it. In other words, he becomes aware of his gaps in knowledge (in line with Petersen et al., 2008).

However, the type of information he seeks to collect is biased by his previous experience and the collection of critical incidents (as evident by the use of the availability heuristic as the starting point for the decision making process). In other words, he seeks to collect information on specific issues that he has had direct experience of because he understands how those can affect the outcome of the decision. Consequently, he will not deliberately search for information that his experience has not proven to be relevant to date.

This case suggests that the reasoning processes used in decision making do not change over time. Rather, what changes is the stock of experiences (Reuber and Fischer, 1999) on which the decision making processes (i.e. the heuristics) draw. In fact, although the starting point for the reasoning process is still the availability heuristic, the information this process retrieves becomes more sophisticated over time and with the accumulation of experiential knowledge (based on Cohen and Levinthal, 1990; Gavetti and Levinthal, 2000). Consequently, the decision maker is more aware of the complexity of the decision facing him and realises he needs supporting information.

In his final decision, B no longer seeks vicarious information in addition to his own international experience. This may be explained by the fact that this decision represents a new entry mode for the firm (i.e. licensing agreement) and therefore the decision maker is still not sure of the type of information he may

require for this particular entry decision. If true, this observation would point towards the finding that the sophistication of the information retrieved is specific to the type of decision.

Nevertheless, in his final decision, B is still using a combination of the availability and the anchoring and adjustment heuristic. This combination of reasoning processes seems to have become a feature of B's reasoning regardless of the information it draws on.

Of note is the fact that the use of the anchoring and adjustment heuristic over and above the availability heuristic, may be considered an *increment in the sophistication of the reasoning process* leading to internationalisation decisions. The reason for this consideration is the following. The sole use of the availability heuristic involves a simple "repeat" or "avoid" of the situation retrieved. The addition of the anchoring and adjustment heuristic involves a more elaborated system of adjustment from the baseline information available, being it experiential or vicarious.

Thus, although the reasoning processes do not change dramatically, there is evidence of an incremental change in their sophistication.

Entrepreneurs C and D, who up to their third decision rely mainly on the availability heuristic, in later decisions alternate the use of the availability heuristic to the use of the anchoring and adjustment. The latter may rely on experiential knowledge whenever available [IntE] (CSC-ID4) or on vicarious knowledge [VFMI] (CSD-ID4).

Since the use of the availability and the anchoring and adjustment heuristics are alternated and are not stable in these decisions, no conclusions can be drawn from them in terms of the changes to heuristic reasoning over time for those two entrepreneurs.

Up to the sixth decision taken within the space of five to six years from firm foundation, no significant changes can be observed in any of the case studies reported here. Although only incremental, changes to the reasoning processes used in decision making can only be observed after the sixth internationalisation decision made, which can be observed in the case of entrepreneur B. The latter

decisions are made almost simultaneously by B after the first seven to eight years from firm foundation.

In conclusion, there is no decisive evidence suggesting that the heuristics based processes used by entrepreneurs to make internationalisation decisions changes in the first six to seven years from firm foundation and following the first five to six internationalisation decisions.

There is some evidence suggesting that reasoning processes increase in sophistication after the first seven to eight years from firm inception and after the first six to seven internationalisation decisions made.

There is evidence suggesting that, although the reasoning processes do not change substantially in the first few years from firm inception, the complexity of the information on which those processes are based increases. Consequently, decision makers reason on increasingly more articulated and multifaceted information, though using the same reasoning processes.

The sophistication and multifaceted aspect of the items retrieved is largely due to accumulated critical incidents, resulting in stocks of experience.

Finally, some variations in reasoning processes appear to be linked to the type of decision at hand more than they can be linked to time-and-experience based changes in reasoning processes.

Table 6.4: Cross-case Analysis of Following Internationalisation Events / Decisions

Following Internationalisation Decisions / Events					
Firm	Decision Code*	Internat. Decision / Event	Time from previous Internationalisation Decision / Event (years)	Heuristic Used	Heuristic Based on
A	CSA-ID4	Wholly-owned Subsidiaries in Eastern Europe	<1	Representativeness + Availability	Perceived cultural distance from previous market (Italy) + Previous Work Experience and Critical Incidents (in Italy)
A	CSA-ID5	Exit Eastern Europe	<2	Availability	Negative Critical Incidents (in Eastern Europe)
A	CSA-ID6	Wholly-owned Subsidiary in China	≈2	Availability	Positive Critical Incident (visit to China)
B	CSB-ID4	Exit French Market	<2	Availability	Negative Critical Incidents (in France)
B	CSB-ID5	Wholly-owned Subsidiaries in American Market	1	Anchoring and Adjustment	Internationalisation experience (functionality of business model and possible fit with US)
B	CSB-ID6	Exit American Market	<2	Availability	Negative Critical Incident (in USA)

B	CSB-ID7	Entering Italian Market	0	Availability + Anchoring and Adjustment	Internationalisation experience (multiple negative critical incidents) + Foreign market information (Vicarious)
B	CSB-ID9	Entering Dutch Market	0	Availability + Anchoring and Adjustment	Internationalisation experience (multiple negative critical incidents) + Foreign market information (Vicarious)
B	CSB-ID10	International Licensing	<1	Availability + Anchoring and Adjustment	Negative Critical Incidents (margins contraction on product) + Internationalisation Experience (Transfer of Business Model Across countries)
C	CSC-ID4	Direct International Export of Services	≈2	Availability + Anchoring and Adjustment	Internationalisation experience (multiple positive critical incidents, piggy backing and reputation)
C	CSC-ID5	Wholly-owned Subsidiaries in Swedish Market	<1	Availability	Industry Experience + Learning from Previous Negative Critical Incident
D	CSD-ID4	Wholly-owned Subsidiaries in Houston	<3	Anchoring and Adjustment	Industry Experience (All main industry companies have WOS in Houston)

Note: This table is intended for the discussion of heuristics in early internationalisation decisions by the entrepreneur. Consequently, it only includes case studies where early entry decisions are available. Case studies where the entrepreneur was not involved in early entry decisions are not included in the table. Also not included are decisions where the respondent did not provide sufficient details allowing for the reconstruction of the reasoning processes leading to the final outcome.

* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.

6.2. Heuristics in Entry Mode Decisions

This section discusses the role of heuristics in entry mode decisions. For the purpose analysing entry mode decisions, and following Jones and Young (2009), the latter have been clustered in three main categories⁹. Those include *export decisions* (either direct or indirect, of products or services), *contractual arrangement* (including licensing) and *foreign direct investment* modes (equity joint ventures and wholly-owned subsidiaries, including acquisitions and Greenfield investments - see Young et al., 1989).

The first table discussing the role of heuristics on *entry mode* decisions is a table on export decisions (table 6.5, below).

Table 6.5: Cross-case Analysis of Export Decisions

Export Decisions				
Export Type	Firm	Decision Code*	Heuristic Used	Heuristic Based on
Direct (PR and industry publications)	B	CSB-ID1	Availability	Previous negative critical incident (politics, no PR) + positive critical incident (politics, with PR)
Indirect (Piggy backing on larger MNE)	C	CSC-ID1	Availability	Positive critical incidents (indirect provision of services through Piggy backing on MNEs)
Direct (Exports if training services)	C	CSC-ID4	Availability + Anchoring and Adjustment	Internationalisation experience (Piggy backing and reputation)
<p>Note: This table is intended for the discussion of the role of heuristics in the entry mode decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the entry mode. Decisions where the reasoning process is not centred on the entry mode (i.e. where the reasoning process is centred on foreign market selection, with the mode not being explicitly discussed) are excluded.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

⁹ Despite the simplified classification of entry modes used here, it is acknowledged that different internationalisation scholars have clustered foreign market entry modes into various typological categories (e.g. Anderson and Gatignon, 1986, Erramilli and Rao, 1990, Hennart, 1988 - see Jones and Young, 2009 for a recent review).

In order to make foreign markets *export* (Young et al., 1989) decisions, entrepreneurs rely mainly on the *availability heuristic* (Tversky and Kahneman, 1974). In one instance only, the use of the availability heuristic is coupled with the *anchoring and adjustment heuristic* (Tversky and Kahneman, 1974)

Entrepreneur B reasons on the mode of foreign market entry for his recycling firm. His decision to enter through direct exports is based on the recollection of a positive critical incident [PCI] from his political life, where the use of public relations and industry publications had brought him success (following previous failure, when no PR was used). Consequently, his entry mode decision is biased by this positive memory and he decides to use industry publications internationally as a means to communicate the existence of his firm's services and export those services across national borders.

Entrepreneur C's prior positive incidents [PCI] with providing services domestically to a multinational enterprise (MNE) operating in the industry has been successful. Therefore, when reasoning on the mode to be used for his firm's cross border value adding activities, he recalls the positive experience with the MNE. This recollection primes the intention to repeat the successful behaviour by servicing international markets through piggy-backing on the back of the MNE. Therefore, he decides to use the same mode of indirect export (Young et al., 1989).

In a later decision, entrepreneur C relies on accumulated positive instances forming his internationalisation experience [IntE], based on piggy backing on larger multinationals. However, rather than repeating the exact same behaviour, he uses the experience as a baseline to make a leap into a different form of export and offering a different service. Namely, he decides upon direct exports (Young et al., 1989) of training services. This leap into a direct export mode is based on the reputation that the firm has established through previous international export of services via piggy backing on larger multinationals. Adjusting from this, C expects to export his training services directly to firms that know his firm by its reputation.

Of note is the fact that in using the *availability heuristic*, the entrepreneurs' decisions to use exports are based either on previous *positive* critical incidents [PCI] or on different kinds of *successful* internationalisation experience [IntE]. Thus, evidence from this study suggests that decisions to export either directly or indirectly (See Young et al., 1989) are based on the decision maker's inclination to repeat successful behaviour stemming from previous decisions (Levitt and March, 1988).

The critical incident observed in case study B is of particular interest because it stems from entrepreneur B's *life experience* that is neither linked to his work, industry or international experience. Thus, the latter is quite a departure from extant theory in terms of typologies of experience (e.g. Chetty et al., 2006) impacting on internationalisation behaviour. This instance hints at the fact that other general life experiences can significantly impact on the entry mode decisions of the entrepreneur. The impact of those experiences is due to their criticality and, consequently, their vividness in the memory of the decision maker.

By considering these export decisions and the heuristics involved against time references, different heuristic uses emerge.

In fact, the two decisions (CSB-ID1 and CSC-ID1) which make use of the *availability heuristic* alone are early internationalisation decisions. Those decisions are made within the first 2 years from firm foundation.

The decision that makes a joint use of the *availability and anchoring and adjustment heuristics* (CDC-ID4) is taken at a later stage of the firm's international development. In fact, it is taken roughly 11 years from firm inception (see tables above on internationalisation decisions against time references).

Thus, the data suggests that *early international export decisions* rely solely on the availability heuristic, whereas *later international export decisions* rely on the joint use of the availability heuristic and the anchoring and adjustment heuristic.

It must be pointed out that all *export decisions* observed in this study are taken within *service* firms. The study found no instances of firm discussing the use of the availability heuristic in the decision to export products. Therefore, a comparison in the use of the heuristic between exports of services and products is not possible.

The next table discusses *contractual arrangement* decisions (Table 6.6 below).

Table 6.6: Cross-case Analysis of Contractual Arrangement Decisions

Contractual Arrangement Decisions				
Arrangement Type	Firm	Decision Code*	Heuristic Used	Heuristic Based on
International Licensing	B	CSB-ID10	Availability + Anchoring and Adjustment	Negative Critical Incidents (margins contraction on product) + Internationalisation Experience (Transfer of Business Model Across countries)
<p>Note: This table is intended for the discussion of the role of heuristics in the entry mode decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the entry mode. Decisions where the reasoning process is not centred on the entry mode (i.e. where the reasoning process is centred on foreign market selection, with the mode not being explicitly discussed) are excluded.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

A single instance of contractual arrangement is found among the case studies investigated. In this instance a combination of the *availability heuristic* and the *anchoring and adjustment heuristic* (Tversky and Kahneman, 1974) is used to decide upon a series of international licensing agreements (Young et al., 1989).

The case is that of entrepreneur B, whom decides to license his business model internationally (CSB-ID10). The decision is triggered by the negative critical incident [NCI] of the contraction of the margins on the products that the firm collects and resells. The critical incident is primed through the use of the *availability heuristic*.

The anchoring and adjustment heuristic is used in B's reasoning that the business model of the firm can be transferred across countries. This thought stems from B's repeated experiences of transferring the business model in other countries (see decisions CSB-ID2, CSB-ID3, CSB-ID5, CSB-ID7, CSB-ID9).

Thus, ultimately, the decision making process behind the use of international licensing as an entry mode is triggered by a *negative critical incident* [NCI] and is based on an assumption about the firm's expected outcome of the decision based on past *internationalisation experience* [IntE].

The next table discusses *foreign direct investment* decisions (Table 6.7 below).

Table 6.7: Cross-case Analysis of Foreign Direct Investment (FDI) Decisions

Foreign Direct Investment (FDI) Decisions				
FDI Type	Firm	Decision Code*	Heuristic Used	Heuristic Based on
Equity Joint Venture (Dutch Market)	C	CSC-ID3	Availability	Previous Negative Critical Incident (No equity offered in previous job - entrepreneur C feeling undervalued)
Wholly-owned Subsidiary (Canada, competitor buyout)	F	CSF-ID3	Anchoring and Adjustment	Foreign Market Experience and Knowledge + Foreign Market Information (vicarious, market research)
Wholly-owned Subsidiary (Greenfield Investment in USA)	F	CSF-ID4	Anchoring and Adjustment	Experiential Foreign Market Knowledge and Foreign Market Information (market research)
<p>Note: This table is intended for the discussion of the role of heuristics in the entry mode decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the entry mode. Decisions where the reasoning process is not centred on the entry mode (i.e. where the reasoning process is centred on foreign market selection, with the mode not being explicitly discussed) are excluded.</p> <p>Note 2: One FDI decision has been excluded due to the reasoning processes not being sufficiently articulated by the respondent (CSD-ID4)</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

Two instances of foreign direct investment (FDI) entry mode decisions are available from the case studies.

The first is the case of entrepreneur C, who decides upon an *equity joint venture* (equity JV), basing his reasoning process on the *availability heuristic* (CSC-ID3).

The second is the case of entrepreneur F, who decides upon two *wholly-owned subsidiaries* (WOS) basing his reasoning processes on the *anchoring and adjustment heuristic* (CSF-ID3 and CSF-ID4).

Thus, each of the two decision makers is using different reasoning processes to reach different FDI decisions.

C's decision to establish a JV is based on a single *negative critical incident* [NCI] from his pre-firm foundation work experience [WE]. Working for his former employer, C was never offered the equity he was promised. C had found the experience disappointing and decided that he would offer equity to foreign partners in his own firm.

The rationale behind the shares of the equity JV is that C would hold 60% to retain control, whilst offering 40% to the foreign partner to make him feel valued and give him ownership over the JV. Thus, the shareholding arrangements follow the principles of control retention that extant theory on entry modes supports (Young et al., 1989).

F's two WOSs decisions are both based on *foreign market knowledge* [FME&K] acquired through his experience of those markets. However, F does not rely solely on foreign market experiential knowledge. Rather, he corroborates his experiential knowledge with *vicarious foreign market information* acquired through market research [VFMI]. He then uses the experiential foreign market knowledge and the foreign market information as a base from which to establish that there is concrete potential for market growth. Also based on the information is the decision that to exploit the growth potential of the two foreign markets he needs WOSs there.

The discussion above implies that the different heuristics used by the two entrepreneurs are linked to different degrees of rationality in arriving to FDI decisions. Entrepreneur C bases his decision on the availability heuristic stemming from a single, emotionally charged event. Entrepreneur F bases his decisions on an anchoring and adjustment heuristic stemming from knowledge acquired through long term experience and corroborated with market information.

Thus, the former entrepreneur can be considered to make FDI decisions using a *more boundedly rational* cognitive process by comparison with F, who uses a *less boundedly rational* process.

The difference in the use of heuristics in making FDI decisions of the two entrepreneurs may depend on two factors.

A possible factor in the use of certain heuristics, and the associated levels of bounded rationality found here, may be considered individual character. However, in order to ascertain that character is the discriminating factor, one would need to hold constant other relevant factors. One such factor is the level of experience.

The second factor impacting on the different heuristics used and the associated levels of bounded rationality is, in fact, experience.

In this instance, F has significantly more years of direct foreign market experience and associated knowledge (roughly fourteen years, see case study F from pattern-matching chapter) as well as an equal amount of general internationalisation experiential knowledge, when making the decision. Also, he has vicarious experiential knowledge acquired through other firm members that were involved in the internationalisation of firm F prior to entrepreneur F joining.

By comparison, C has less years of internationalisation experience in general (roughly ten years) and no prior experiential knowledge of the specific foreign market in particular.

Thus, although the *sequence* of the decision is comparable across the two cases (for both cases it is the third / fourth decision made by the entrepreneurs), the

duration of the cross border activities (Jones and Coviello, 2005) differs significantly. This finding points towards the idea that decision makers require a certain lead time to learn from the outcomes of their previous internationalisation decisions and adjust their decision making processes.

Of note is the fact that F, although more internationally experienced, does not rely solely on his experiential knowledge but seeks corroboration through market research, whilst C, less experienced, tends to trust his limited knowledge. This finding recalls the idea that increased experience makes one aware of the limitations of his knowledge, of the “knowing what one does not know” (in line with Petersen et al., 2008), in line with the international business literature.

6.3. Heuristics in Foreign Market Selection Decisions

This section discusses the use of heuristics based reasoning processes in foreign market selection decisions.

For the purpose of initial categorisation, foreign market selection decisions are divided into three groups, each corresponding to a table in the discussion below. The first table includes entry decisions in English speaking countries. The second table includes European countries that are not English speaking. The third table covers entry decisions in non-European, non-English speaking countries (i.e. other countries worldwide).

Table 6.8: Cross-case Analysis of English Speaking Country Entry Decisions

English Speaking Country Entry Decisions				
Country of Entry	Firm	Decision Code*	Heuristic Used	Heuristic Based on
Ireland (Europe)	B	CSB-ID2	Availability + Availability + Representativeness	Negative Critical Incident (Multilingual staff costly) + Internationalisation Experience (Many customers are English speaking + they save costs) + English Speaking, Cultural and Geographical proximity)
USA	B	CSB-ID5	Anchoring and Adjustment	Foreign Market Information (Vicarious /market research: US recycling industry not sophisticated + Experiential: US is firm's largest export market) + Internationalisation Experience (functionality of business model and possible fit with US)
Texas (USA, city of Houston)	D	CSD-ID5	Anchoring and Adjustment	Industry experience and knowledge (All main industry companies have WOS in Houston)
USA	E	CSE-ID2	Representativeness + Anchoring and Adjustment	Foreign Market Information (Vicarious, Industry structure and retailing strategies in USA + Perceived industry cultural distance from USA)
Canada	F	CSF-ID3	Anchoring and Adjustment	Foreign Market Experiential Information (Large sales in Canada and market's demand for products)
<p>Note: This table is intended for the discussion of the role of heuristics in the foreign market entry decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the foreign market. Decisions where the reasoning process is not centred on the foreign market (i.e. where the reasoning process is centred on the entry mode, with the foreign market not being explicitly discussed) are excluded.</p> <p>Note 2: One foreign market entry decision has been excluded due to the reasoning processes not being sufficiently articulated by the respondent (CSA-ID1)</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

In the decisions to enter English speaking countries, the heuristic mostly used is the *anchoring and adjustment*. The latter is used by all decision makers entering

English speaking countries in the sample of firms (namely, entrepreneurs B, D, E and F).

In one instance the decision maker uses a combination of the *availability* and *representativeness heuristics* (B in decision CSB-ID2).

In another instance, the decision maker bases his country selection on a combination of the *representativeness* and *anchoring and adjustment heuristic* (CSE-ID2).

As for the sole use of the *anchoring and adjustment heuristic* in the decisions to enter English speaking foreign countries, it means that the decision maker is using a specific type of information available to him as a baseline from which he estimates the suitability of the foreign market for the value adding activities of the firms.

The *information* used as the baseline in the anchoring and adjustment heuristic for the decision to enter specific English speaking countries may be *acquired experientially, vicariously acquired, or a combination of both.*

When the “anchor” information is experientially acquired, it either stems from *internationalisation experience* [IntE] (CSB-ID5), or *foreign market experience* [FME&K] (CSF-ID3).

When the information is acquired vicariously, it is *industry specific* foreign market information [VFMI].

Entrepreneur B makes his foreign market entry decision reasoning on a combination of vicariously acquired foreign market information [VFMI] specific to industry (industry sophistication), foreign market experiential information [FME&K] (foreign market is the biggest export market for his firm) and general internationalisation experience [IntE] (transferability of business model across countries).

Entrepreneur D bases his reasoning solely on vicariously acquired foreign market information that is industry-specific (that strategic industry decisions are made in Houston).

Entrepreneur F bases his decision on foreign market experiential information [FME&K] (large firm sales in the market and potential for sales growth in the market).

The obvious difference between the two entrepreneurs using foreign market experiential information (B and F) and the entrepreneur using solely vicarious information (D) is that the former have direct experience of the market and the latter doesn't.

The reason why entrepreneurs B and F have foreign market experience is that both their firms have been exporting in the foreign market before deciding to "enter" the foreign market with a WOS (see entry mode section in this chapter). In the case of F, the firm has been involved in exports in the foreign market before F joined. In the case of B, exports in the country fall into the international export decision outlined in the previous section (see CSB-ID1).

In both cases, the decision makers consider setting up WOS in the foreign country as the "real" foreign market entry. This is probably due to the higher investment involved in terms of resource commitment. This in itself is an interesting finding, as it conflicts with the idea, widely accepted in the literature, that foreign country entry is represented by the first cross border activity in that country (i.e. exports, in the instances of B and F).

Also, in terms of the dimensions of cross border firm behaviour, these two decisions demonstrate that foreign country and entry mode decisions are intimately connected and cannot be separated, even for analytical purposes, if the overall logic of the decision maker is to be understood.

Let's now turn to the decision using a combination of *availability* and *representativeness heuristics* (CSB-ID2).

In this decision the availability heuristic stems from a *negative critical incident* [NCI] (the high cost of multilingual staff), which triggers the decision to enter a foreign market in the first place.

The use of the *representativeness heuristic* is manifest from the choice the foreign market because it has the groups of characteristics (namely, English speaking and culturally similarity to the UK) that the entrepreneurs has outlined in order to rectify the negative critical incident experienced.

The use of the representativeness heuristic in this early foreign market selection (it is the 2nd internationalisation decision made by B and the first foreign market

selection decision he makes) in this particular instance follows the principles of close psychic distance (Johanson and Wiedersheim-Paul, 1975) outlined by internationalisation literature.

The decision using a combination of the *representativeness* and the *anchoring and adjustment* heuristics (CSE-ID2) is based on *vicarious foreign market specific industry information*.

E uses industry information (industry structure and retailing strategies) relative to the foreign market to establish whether the country is representative of the group of countries he has experience of in terms of industry culture and retailing strategies. He perceives the industry culture of the foreign market not representative of the markets he has experienced so he adjusts the entry strategy based on the information available. Only once this has been accomplished E feels confident in entering the foreign market.

This case adds a dimension to the concept of country distance which does not fall within the concept of psychic distance (Johanson and Wiedersheim-Paul, 1975). Entrepreneur E is in fact evaluating the *industry specific cultural distance* between the countries he has experienced and the country he intends to enter.

The three instances of decision making using solely the anchoring and adjustment heuristic represent later decisions in the decision making sequence of the firms over time (as evident by the decision sequence numbers 3 or 5 in the decision code). Conversely, the two instances of decision making not using solely (or at all) the anchoring and adjustment heuristic represent earlier decisions in the decision making sequence of the firms (as evident by the decision sequence number 2 in the decision code).

This evidence suggests that as decision makers progress in the *international involvement* of their firms, their reasoning processes surrounding English speaking foreign market selection tend to gravitate towards the use of the *anchoring and adjustment heuristic*. This finding makes intuitive sense, since the anchoring and adjustment heuristic is based on information (either vicarious or experientially acquired), and more internationally experienced entrepreneurs

are likely to have more information at their disposal (or knowing where to source it) in making foreign country selection decisions.

Next, table 6.9 summarises the use of heuristics in European countries (non-English speaking) entry decisions.

Different heuristics are used on different European country entry decisions.

The *availability heuristic* is used alone in three decisions (CSA-ID2, CSC-ID3 and CSC-ID5). The *anchoring and adjustment* is used alone in one instance (CSB-ID3). The rest of the decisions make *joint use of more than one type of heuristic* in making European countries entry decisions. The representativeness heuristic is used in conjunction with the availability heuristic in one instance (CSA-ID4). The availability and anchoring and adjustment heuristics are used together in two instances (CSB-ID7 and CSB-ID9). The representativeness and anchoring and adjustment heuristics are used in conjunction with one another in yet another instance (CSE-ID1).

The use of the *availability heuristic* is based on different types of *experience* of the decision maker. Those include *international work experience* [IWE] and *industry experience* [IE&K].

In one instance the decision is based on the entrepreneur's previous *international work experience* [IWE] and a network contact developed through that experience (CSA-ID2). In the other two instances the use of the availability heuristic is based on the *industry experience* of the decision maker [IE&K] (CSC-ID3 and CSC-ID5).

Table 6.9: Cross-case Analysis of European Country Entry Decisions (non English speaking)

European Country Entry Decisions (non English speaking)				
Country of Entry	Firm	Decision Code*	Heuristic Used	Heuristic Based on
Italy (Europe)	A	CSA-ID2	Availability	International Work Experience (Europe) + Network contact in Italy
Eastern Europe (Multiple countries)	A	CSA-ID4	Representativeness + Availability	Internationalisation Experience and Negative Critical Incidents (in Italy + Perceived cultural distance from previous market, Italy)
France (Europe)	B	CSB-ID3	Anchoring and Adjustment (overconfidence bias)	Internationalisation Experience (functionality of business model in UK and Ireland)
Italy (Europe)	B	CSB-ID7	Availability + Anchoring and Adjustment	Internationalisation Experience (negative critical incidents) + Foreign Market Information (Vicarious)
Netherlands (Europe)	B	CSB-ID9	Availability + Anchoring and Adjustment	Internationalisation experience (multiple negative critical incidents) + Foreign market information (Vicarious)
Holland / Netherlands (Europe)	C	CSC-ID3	Availability	Industry Experiential Knowledge (Highly skilled engineers in Holland)
Sweden (Europe)	C	CSC-ID5	Availability	Industry Experiential Knowledge (Highly skilled engineers in Sweden)
Holland / Netherlands (Europe)	E	CSE-ID1	Representativeness + Anchoring and Adjustment	Industry experience (Perceived industry cultural distance among EU countries - All EU countries operate similarly in the industry)
<p>Note: This table is intended for the discussion of the role of heuristics in the foreign market entry decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the foreign market. Decisions where the reasoning process is not centred on the foreign market (i.e. where the reasoning process is centred on the entry mode, with the foreign market not being explicitly discussed) are excluded.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

The use of the *anchoring and adjustment heuristic* in the decision to enter European countries is still based on the decision maker's experience (CSB-ID3). However, differently from the decision makers using the availability heuristic, this decision is made on the basis of the decision maker's *internationalisation experience* [IntE] (as opposed to the international work experience or the industry experience that formed the basis for the use of the availability heuristic). The latter is used as a base from which to establish that the business may fit other countries, including the country considered for entry.

Other decisions make a joint use of more than one heuristic.

Entrepreneur A uses the *availability heuristic* in conjunction with the *representativeness heuristic* in his second foreign market entry decision (CSA-ID4). The second foreign market entry decisions A makes is based on his *foreign market experience* [FME&K] and the *negative critical incidents* [NCI] experienced in it. In order to assess whether he may expect to encounter the same issues in the foreign market he is currently considering for entry (following a serendipitous opportunity), A estimates how culturally close (i.e. representative) the foreign market he is considering for entry is relative to the foreign market previously experienced. He bases this estimate on his perception as opposed to searching for information on the similarities between these two markets in terms of culture.

This finding suggests that the cultural distance of a new foreign market considered for entry may be perceived differently depending on the estimated similarity of this market to a market previously experienced. Consequently, the perceived cultural distance can be said to be affected by previous experience of similar markets and, because of that, it is an idiosyncratic and dynamic concept (e.g. Cohen and Levinthal, 1990).

The joint use of the *availability* and *anchoring and adjustment* heuristics is found in two decisions (CSB-ID7 and CSB-ID9), both by the same entrepreneur (B). The rationale for the joint use of these two heuristics can be explained against the historical backdrop of B's firm. In fact, following negative critical incidents in previously entered countries (see case study B in previous chapter

for a full account), B wants to check the aspects that caused the failures into previous markets (see foreign market exit section below) in the market that he is considering for entry. Consequently, he acquires *vicarious knowledge* on the foreign countries considered for entry [VFMI] and uses the knowledge as the anchor from which to establish whether the firm should enter the market.

Of note is the fact that in foreign market entry decisions based the availability and the anchoring and adjustment heuristics, the type of information that forms the “*anchor*” is *biased* by previous critical incidents. That is, the decision maker only collects *foreign market information falling within the category of items that he has experience of*, as opposed to all foreign market information available.

Finally is the decision making a joint use of the *representativeness* and *anchoring and adjustment* heuristics (CSE-ID1). The use of the two heuristics in the decision to enter the European country market (i.e. Holland, following serendipitous opportunity) is based on the entrepreneur’s *industry experience* [IE&K]. Based on the latter, E estimates how similar (i.e. representative) the country considered for entry is to the group of countries he has experience of in terms of industry culture and retailing strategies. He perceives the industry culture of the foreign market representative of the markets he has experienced. He uses this reasoning as a base to decide that the country is suitable for entry. This European market entry decision follows the same pattern of another foreign market entry decision by the same entrepreneur discusses in the context of English speaking country selection (see CSB-ID5). Once again, the heuristic lens used to discuss the data highlights the role of a new dimension in the concept of country distance, here named *industry specific cultural distance*. As mentioned earlier, this dimension does not fall within the psychic distance (Johanson and Wiedersheim-Paul, 1975) currently considered in the literature.

The next table (Table 6.10 below) discusses entry decisions on overseas countries that are non English speaking. These markets are considered both psychically (Dow, 2000; Johanson and Wiedersheim-Paul, 1975) and geographically distant (Carlson, 1974).

Table 6.10: Cross-case Analysis of Other World Country Entry Decisions

Other World Country Entry Decisions				
Country of Entry	Firm	Decision Code*	Heuristic Used	Heuristic Based on
China (Asia)	A	CSA-ID6	Availability	Positive Critical Incident (visit to China)
Russia (Eurasia)	D	CSD-ID1	Anchoring and Adjustment (Overconfidence bias)	Foreign Market Information (Vicarious - Russia promoted as “place to be”)
Azerbaijan (Eurasia)	D	CSD-ID3	Availability + Representativeness	Previous negative critical incidents (in Russia + Perceived cultural and geographical distance from previous market, Russia)
<p>Note: This table is intended for the discussion of the role of heuristics in the foreign market entry decision. Consequently, it only includes decisions where the reasoning and decision making processes surround the foreign market. Decisions where the reasoning process is not centred on the foreign market (i.e. where the reasoning process is centred on the entry mode, with the foreign market not being explicitly discussed) are excluded.</p> <p>* The decision code is composed as follows: CS= Case Study; the third letter indicates the case study (A, B, C, D, E, F); ID=Internationalisation Decision; the final number indicates the sequential order of the decision in the specified case study.</p>				

In each of the instances of distant country entry decision uses a different heuristic or combination of heuristic. The *availability heuristic* is used in two of the decisions, once on its own (CSA-ID6) and another time *in conjunction with the representativeness heuristic* (CSD-ID3). The *anchoring and adjustment heuristic* is used on one decision (CSD-ID1).

The use of the availability heuristic in A’s decision to enter China (CSA-ID6) is based on a single *positive critical incident* [PCI], namely a trade show in the foreign country. The use of a single critical incident to make the decision to enter a distant country is interesting. Entrepreneur A does not include considerations of either psychic or domestic distance in entering the country. Rather, the positive impression he is left with following his first visit in the country is sufficient to convince him to enter the country.

This particular instance suggests that considerations of psychic and geographic distance do not necessarily apply to all decision makers. In this particular instance (by the entrepreneur's own account), novelty and change motivate the decision maker to enter a geographically and culturally distant country.

Another aspect worthy of note in this decision is that it follows a number of negative critical incidents in a culturally distant country previously entered and (CSA-ID4) leading to a country exit decision by the same entrepreneur (CSA-ID5, see dedicated section below). Despite the issues with specific foreign markets, the decision maker is not avoiding the possibility of new challenges associated with entries in foreign countries that are culturally distant from those previously experienced. This raises questions in terms of the type of lessons decision makers learn from previous internationalisation. Avoid challenging culturally distant markets or embrace the challenge? And, if the challenge is embraced, what lessons from previous failures are applied in order to improve on the management of culturally distant markets?

In this case study (A), entry into the Chinese market takes place roughly seven years after firm foundation and two years from the failure and exit from the previous distant market. Would a longer lead time between foreign market entry decisions have changed the entrepreneur's attitude to entering culturally distant markets? Or the attitude towards entering distant markets depends on individual personality (therefore being a stable trait), as opposed to being determined by experiential learning?

Moving on, the decision made by D to enter a distant market (Russia) makes use of the *anchoring and adjustment heuristic* (CSD-ID1). The use of this heuristic is based on a single piece of industry specific *vicarious foreign market information* [VFMI], namely that the country promises to be a profitable place for the firms in the industry.

Since this is the first internationalisation decision (as by the number 1 at the end of the decision code) made by entrepreneur D, he does not have experiential knowledge of the country. Consequently, he relies on vicarious information only. Given the later evidence on the negative outcome of the foreign market entry decision, questions may be posed in terms of the limitations of the vicarious information on which the decision was based. Could the entrepreneur have

relied on information more tailored to his own firm before entering the market? And, if that is the case, what information should he have been looking for? In other words, how do non-internationally experienced entrepreneurs know what it is that they do not know and would need to know to make successful entry market decisions?

Questions aside, this instance hints at the fact that, when relying on vicarious information to make foreign market entry decisions, entrepreneurs should be aware of their knowledge gaps that are relevant to the specific market (Petersen et al., 2008) in order to improve their chances of successful decision making in entry decisions.

The decision made using a combination of the *availability* and *representativeness* heuristics is based on a *negative critical incident* [NCI] (in the foreign market previously entered). The latter is used as a benchmark in order to establish the issues relative to culturally distant markets that the entrepreneur has already experienced and that, consequently, is prepared to deal with. Therefore, in making the next foreign market selection decision, D assesses whether he may expect to encounter those issues in the foreign market he is currently considering for entry. To this end, D estimates how culturally close (i.e. representative) the foreign market he is considering for entry is relative to the foreign market previously experienced. His estimate is based on his perception, as he does not search for information on the similarities between these two markets in terms of culture.

This finding mirrors the finding discussed above in relation to an European country entry decision (CSA-ID4) by another entrepreneur (A). Both decisions suggest that the cultural distance of a new foreign market considered for entry may be perceived differently depending on the estimated similarity of this market to a market previously experienced. Consequently, the perceived cultural distance is increasingly proving to be affected by previous experience and, because of that, it is an idiosyncratic and dynamic concept.

The fact that two different entrepreneurs make foreign market entry decisions in countries of different geographic distance (one in and European country, the other in a non-European country), yet both based on the joint use of the

availability and representativeness heuristic, is taken as a corroboration of this finding.

Furthermore, this finding suggests that the perception of close cultural distance of a market, based on previous experience of a market from the same cultural block, matters more than the geographical proximity of the market.

6.4. Heuristics in Foreign Market Exit Decisions

Table 6.11 below discusses the use of heuristics in foreign market exit decisions.

Table 6.11: Cross-case Analysis of Foreign Market Exit Decisions

Foreign Market Exit Decisions				
Retrenchment / Exit Decision	Firm	Decision Code*	Heuristic Used	Heuristic Based on
Exit Italian Market	A	CSA-ID3	Availability	Previous Work Experience + Critical Incident (in Italian market)
Exit Eastern Europe	A	CSA-ID5	Availability	Negative Critical Incidents (in Eastern Europe)
Exit French Market	B	CSB-ID4	Availability	Negative Critical Incidents (in France)
Exit American Market	B	CSB-ID6	Availability	Negative Critical Incident (in USA)
Exit Russian Market	D	CSD-ID2	Availability	Negative Critical Incidents (in Russian Market)

The cross-case analysis of foreign market exit decisions displays a consistent use of the *availability heuristic* (Tversky and Kahneman, 1974). Also consistent across-cases is the finding that the use of the availability heuristic is based on *critical incidents* (Cope and Watts, 2000; Cope, 2005), and that the latter are predominantly *negative incidents* [NCI].

The use of the availability heuristic in the decision to exit foreign markets signifies that the decision is solely and consistently based on items that are

easily retrievable from memory. With the exception of one instance (CSA-ID3), all the foreign market exit decisions are based on the ease of recollection of unfavourable events taking place in the market itself.

So what does this mean? Put quite simply, when firms experience difficulties in the foreign market, the thought of the challenges encountered takes over and the entrepreneur cannot see any other solution except that of exiting the market.

With the exception of one instance (CSB-ID6), all the negative critical incidents result from entering markets that fall within the culturally distant category (based on Hofstede, 1980, 1984). The latter include Eastern Europe (CSA-ID5), France (CSB-ID4) and Russia (CSD-ID2).

Although those decision makers are quick to exit culturally distant markets when encountering difficulties in them, the negative experiences do not deter them from entering equally distant markets soon after exiting from the previous ones. Entrepreneur A decides to exit the Eastern European market and then to enter the Chinese market (CSA-ID6) two years later. Following the exit from the French market, entrepreneur B goes on to entering the Italian market (CSB-ID7) with a time lag of two years later in between the two. Entrepreneur D exits the Russian market to then decide to enter the Azeri market (CSD-ID3) immediately afterwards.

What these dynamics suggest is that the decision maker does not exit culturally distant foreign markets with a view to avoid them thereafter. Rather, there seem to be a need on the side of the decision maker to pause and *learn from the critical incidents* experienced in the foreign market in order to be better prepared and acquire more confidence in entering other culturally distant markets.

The fact that there is a short lead time between the exit and later entry decisions supports the idea of higher learning from critical incidents (Cope and Watts, 2000; Cope, 2003), which triggers a faster learning cycle. This is due to

the need to adjust one's current understanding of a phenomenon in the face of evidence disproving such understanding.

In two instances, the decisions to enter culturally distant markets following the exit decisions discussed here are based on the perceived closeness of those markets to the previously experienced ones (CSB-ID7 and CSD-ID3, see foreign market selection decisions above). This is taken as further corroboration that higher learning has taken place following the negative critical experience leading to previous market exits.

In one instance the use of the *availability heuristic* in the market exit decision is based on a critical incident that does not stem from the experience in the foreign market itself (CSA-ID3). In this instance, the *critical incident* stems from the *work experience* of the entrepreneur pre-firm foundation. The learning that follows from the experience - namely, that in order to manage a firm efficiently, the employees' headcount should not exceed a certain number - is at the forefront of the entrepreneur's mind and determines the decision to exit the foreign market when the wholly-owned subsidiary there grows beyond the maximum employees' numbers that the entrepreneur has established.

This particular case highlights the significance of past critical incidents in shaping the current market exit decisions of the entrepreneur.

6.5. Conclusions and Implications

In this chapter, the decisions originally analysed in Chapter 5 have been cross-compared by time sequence and by typology (entry mode, country selection and market exit). Tables are used for each type of decision in order to give a snapshot of the heuristic/s on which the decision process draws and the items (both experiential and vicarious) that are used. Patterns start to emerge with respect to which heuristics are more likely to be used at different stages of the international development of the firm and in different types of decisions. The next chapter further elaborates on patterns that may be generalisable to theory, developing initial propositions.

Chapter 7

Discussion and Conclusions

This chapter represents the culmination of the work presented in the previous chapters. It concludes the thesis by summarising its key findings and using them as a base to derive initial propositions. The chapter also outlines how findings from the thesis shed new light on how internationalisation decisions are made.

The chapter is structured in the following manner.

Firstly, it returns to the original research questions posed at the beginning of the thesis (Chapter 1) and articulates answers based on key research findings (stemming from the data analysis discussed in Chapters 5 and 6). Propositions are presented as part of the discussion of findings. The latter is further aided by some illustrative quotations from the case studies.

Secondly, this chapter articulates how the aforementioned findings and the application of a cognitive, heuristics reasoning lens contribute to extant understanding of internationalisation decision making.

7.1. Research Findings: Questions and Answers

The research presented in this thesis has been driven by the specific intent to understand how firm leaders truly reason and make decisions resulting in the internationalisation behaviour of their firms.

The research presented in this thesis has been driven by the following questions:

- *How do the cognitive reasoning processes used by firm leaders affect their internationalisation decisions?*

- *How do those processes change over time?*

In order to answer those questions, the longitudinal data collected and analysed inductively (as outlined in Chapter 4) has then been pattern matched to the

theory of Heuristics and Biases developed by Tversky and Kahneman (1974 - see chapters 5 and 6). Heuristics are reasoning processes used as shortcuts in situations of choice under uncertainty (Tversky and Kahneman, 1974). In such situations, the boundedly rational individual does not have access to perfect information of all alternative courses of action, and neither does he have the ability to compute all the possible outcomes of each plausible course of action (Simon, 1961 - see Chapter 3 for a full literature review).

In light of the above, the research questions can be refined based on the theoretical framework applied (Tversky and Kahneman, 1974):

- III. *How do heuristics (and associated biases) drive the reasoning processes leading to internationalisation decisions?*
- IV. *Do the heuristic based reasoning processes of internationalising firm leaders change over time? If so, how do they change?*

Answers to each of those questions are provided in dedicated sections below.

7.1.1. How do heuristics (and associated biases) drive the reasoning processes leading to internationalisation decisions?

This thesis found evidence of the use of each of the three heuristics originally developed by Kahneman and colleagues. Those include the *Availability Heuristic* (Tversky and Kahneman, 1973, 1974, 2000; Kahneman et al., 2001; Braisby and Gellatly, 2005), the *Representativeness Heuristic* (Kahneman and Tversky, 1973; Tversky and Kahneman, 1974, 2000; Kahneman et al., 2001; Grether, 1980, 1992) and the *Anchoring and Adjustment Heuristic* (Tversky and Kahneman, 1974, 2000; Kahneman et al., 2001; Epley and Gilovich, 2006).

In some instances, the reasoning processes leading to each internationalisation decision draw on multiple heuristics. There is evidence of the *availability* heuristic used in conjunction with the *representativeness* heuristic in a multiple line of reasoning leading to the decision.

“It’s a hard combination to get someone who’s multi-lingual, a good sales person, and understands the business. It’s much easier to get someone with one of those qualities, rather than all three [...] [Ireland is easy] because of the proximity, they speak English, so there’s a lot of commonality. There were a lot of similar things. [...]Ireland was an easy market for us to enter, so we did that.”

(Entrepreneur B, explanatory interview)

In this example, entrepreneur B is recalling a negative experience, namely the high cost of multilingual staff through the availability heuristic. Then he is solving the problem by focusing on English speaking staff and identifying a country that is representative of the features he benefits from in the United Kingdom (English speaking, cultural similarity, close geographic distance). In doing so he uses the representativeness heuristic, which leads to entry into the Irish market.

Similarly to the example given above, entrepreneurial reasoning processes draw on other combinations of heuristics. The representativeness heuristic is used in conjunction with the anchoring and adjustment heuristic. Therefore, there is evidence that the use of heuristics is not mutually exclusive. That is, the use of one heuristic does not select out the possibility of using other heuristics in the same decision making process.

Availability Heuristic in Internationalisation Decisions

Using the Availability heuristic in an internationalisation decision equates to saying that the decision maker estimates the likely outcome of an internationalisation decision based on a similar instance from the past that he can easily retrieve (Schwarz et al., 1991). The ease of recollection of information from memory is due to recency, vividness and / or saliency of items in the memory of the decision maker (Shedler and Manis, 1986; Bazerman, 2002). The latter represents the main bias associated with the use of the availability heuristic. In fact, by reasoning solely on recent or vivid information,

other information relevant to the decision making process may be neglected (Tversky and Kahneman, 1973, 1974, 2000; Bazerman, 2002).

In this study, reasoning according to the mechanics of the availability heuristic (AH) is encountered predominantly in a number of *very early internationalisation decisions* of the International New Venture (INV). Each is discussed below.

Reasoning by availability is used by firm leaders in this study in order to establish the most suitable *mode of entry* into a foreign market, or in order to select an early *foreign market for entry*, or, in yet other instances, *to decide to exit a foreign market*.

In the cases observable, when the availability heuristic is used in the very first choice of *entry mode*, the latter is a direct consequence of vivid single instances from the pre-firm foundation experience of the decision maker. Those events are defined in this thesis as *critical incidents* (Cope and Watts, 2000; Cope, 2005). The latter are so emotionally charged that stay at the forefront of the decision maker's mind. In the instances of very first entry mode selection reported in this thesis, the critical incidents recalled are both positive and negative. When positive, the decision maker resolves that by repeating those events through the mode of entry abroad, the outcome of the foreign market entry is also likely to be successful. When negative, the decision maker seeks to avoid a repeat of the past and decides on a mode accordingly.

An example is that of entrepreneur B, who, following the defeat at his first political election during his pre-firm foundation life (critical negative incident), later wins another election by using publicity and other public relations techniques (critical positive incident). This approach is then adopted in his very first international entry mode choice, where he decides to use industry magazines (a form of public relations) to attract direct sales (exports) internationally. He comments:

“So I would always make sure that whatever we did got publicity in some shape or form. So we used [a dedicated industry magazine] quite extensively. We would advertise in it regularly, we had regular editorials in it, always keep things up to date, in fact within the first year of opening the company, we had a website, which, in 2000, was quite unusual. And we had a dedicated PR, external consultant that I used, just to get press coverage. [...] So a lot of people came to us, through our website and through our editorials, that's how we got a lot of our customers, but since then we've worked really hard to develop markets.”

(Entrepreneur B, exploratory interview)

Another example is that of the first entry mode of entrepreneur D, who's positive experience with “piggy backing” on the back of larger multinational has proved so successful that he is keen to repeat the experience:

“We have a number of clients who have assets overseas that'll come to us and ask us to help them sort those assets out, for whatever reason. [...] I guess if you're working with a client and they like what you do, they'll come back to you.”

(Entrepreneur C, exploratory interview)

In successive entry mode decisions taking place within the early years of the internationalisation of the firm, the availability heuristic is still used in the decisional process. However, it tends to be used in conjunction with another heuristic (mainly with the anchoring and adjustment, discussed separately in the chapter). In those cases the availability heuristic serves the purpose of retrieving experiences that are then used as a baseline for the reasoning processes involved in the other heuristic (an example is that of entrepreneurs B in his reasoning decision on the Irish market entry - above).

Following the aforementioned discussion, propositions surrounding the use of the availability heuristic in early entry mode decisions may be formulated as follows:

Proposition 1: Leaders of internationalising SMEs will make *early entry mode decisions* based on the intent of repeating previous positive critical incidents (thus, using an availability heuristic).

Proposition 2: Leaders of internationalising SMEs will make *early entry mode decisions* based on the intent of avoiding previous negative critical incidents (thus, using an availability heuristic).

The *availability heuristic* is seldom used on its own to select a *foreign market* for entry. It is used with this purpose by two decision makers (entrepreneurs A and C) looking for a foreign market that has potential for expanding their value adding activities (see decisions CSA-ID2, CSC-ID3 and CSC-ID5 in Chapter 5). In those cases, the use of the availability heuristic only is based either on the decision makers' *industry experience* or on *their international work experience* and leads to entries in non-English-speaking countries. However, overall, the availability heuristic cannot be considered the reasoning process of choice in the foreign market selection decision. Thus, no propositions may be derived from the above discussion.

A very powerful example of the use of the availability heuristic, based solely on critical incidents, is that of *foreign market exit decisions*. Every instance of foreign market exit decision available from the data in this thesis is driven by reasoning according to the availability heuristic and, in the majority of cases, is based on *negative critical events* taking place in the market that the firm decides to exit. This finding clearly shows that, during the early years of INV's cross domestic borders activity, when experiencing difficulties in the foreign market, the vividness of the challenges encountered dominates the reasoning of the decision maker. The result is that the latter cannot see any other solution except that of exiting the market.

A few examples may serve as an illustration of the discussion above. Below is a quote by entrepreneur A, related to the firm's experience in the Eastern European Market which is later exited.

“There are certain practices that some cultures have. Basically, there were fictitious employees and all this kind of stuff. [...] So the remote management is something that we did from an early stage, and it's always developing, and it depends on the situation. [...] Command and control is very important in an organisation, in any organisation.”

(Entrepreneur a, exploratory interview)

Eventually, keeping up command and control proves challenging for the entrepreneur, who decides to exit the market.

“Eastern Europe was very much command and control, because of the issues of Eastern Europe. The issues were to do with lack of control, there were fiscal issues, and so it very much needed someone in place on site, in control. [...] I was travelling back and forth there, and I'd go a week to Prague and I spend a week in a hotel room in Prague working there night and day [...] So at that point we said, look, let's do something different here. So we split the company.”

(Entrepreneur A, exploratory interview)

Another example is that of entrepreneur B, who decides to exit the market following a series of negative experiences (critical incidents) there. He comments:

“The very first barrier we had was opening a bank account in France, a very simple thing, you would think. [...] We then had an issue with La Poste. [...] La Poste put a price of €1.30 per envelope, which was reasonable, but when we got our first bill it was €4.40 they were charging.[...] In France one of the biggest

problems we had with mobile phones was that Nokia, who are the worldwide market leader, are not in France. The market leaders in France are Serjen and Alcatel, which are brands that have no real value in our marketplaces, [...] When you employ someone there, you employ them for life, more or less. I can't work like that. If I don't like someone or they're not delivering the goods, they have to go. [...] We sold that operation last August."

(Entrepreneur B, exploratory and explanatory interviews)

A final example is that of entrepreneur D, who decides to exit the Russian market following initial entry.

"The people we employed were employees of ours, so that wasn't an issue to [the Russian governmental body for oil and gas]. But some of them thought it was quite okay to work for two companies because that's just the Russian way of doing it then. They didn't think that we employed them to work fulltime for us. But one of the guys there actually thought he could work for two companies; it was a problem. Not a problem in his eyes. [...] Part of the problems in Russia was [that there was] lots and lots of business, but no money to pay you with."

(Entrepreneur D, exploratory and explanatory interviews)

Notably, those firms that base their foreign market exit decision on critical experiences are firms in their early stages of internationalisation. In fact, those decisions are taken within the first five to six years from the start of their international involvement. This is taken into consideration in the development of the propositions below:

Proposition 3: Leaders of internationalising SMEs will make *early foreign market exit decisions* based on the intent of avoiding previous negative critical incidents (thus, using an availability heuristic).

Representativeness Heuristic in Internationalisation Decisions

The use of the representativeness heuristic in the reasoning processes leading to internationalisation decisions means that the decision maker estimates whether the situation at hand is a member of a certain category by reasoning how similar or typical it is of that category based on few characteristics (based on Kahneman and Tversky, 1973).

In this study, the *representativeness heuristic* is found solely in reasoning processes surrounding *foreign market selection decisions* (although the representativeness heuristic is not used in all instances of foreign market selection decisions observed in this thesis). When reasoning on the foreign market for entry, the decision maker evaluates whether the prospective market is a member of a certain category of markets based on few of its attributes.

In one instance only (that of entrepreneur B's choice of entering the Irish market presented earlier - decision code CSB-ID2) the representativeness heuristic is used when there is no prospective market in the mind of the decision maker. In this case, a number of desirable market characteristics are identified before the decision maker establishes how representative each country he can think of is of the category of countries carrying the desirable characteristics.

More often, however, there is a prospective foreign market in the mind of the decision maker (e.g. emerging from a serendipitous opportunity in a specific country). In this case, he judges (based on few stereotypical characteristics of the prospective market) whether the market belongs to a category of markets previously experienced. The previously-experienced market is then used as a term of comparison for the market that is currently being considered for entry.

An example of the discussion outlined above is that of entrepreneur E.

When the opportunity to enter the Dutch market presents itself serendipitously, he reasons that the market is representative of the European markets previously experienced. Thus, he feels prepared to operate in it and decides to enter it. In his own words:

“[European markets] operate in much the same way with people going in and buying. You sell a pattern book to a shop, and the shop has the pattern book, and people go into the shop. It’s quite different in the States. [...] We started working in Holland [...] I met somebody who wanted to carry my products in Holland.”

(Entrepreneur E, exploratory interview)

However, the same entrepreneur, when faced with the prospect of entering the United States market, following some market research, reasons that the market is not representative of those that he has previously experienced, so at first he decides not to enter.

“We were always being asked by American companies to sell to them, and luckily I didn’t do that. I avoided that potential mistake. And I resisted going into that market until I knew the best way of going into it. All of [the American retailers] will have similar buildings, where the interior decorators go and they take their clients in and they can go and visit 15 showrooms in a day if they want. That’s quite a different way of dealing than we do in Europe. In Europe, if you want fabric, you’ll tend to go to a retail outlet, or to a shop.”

(Entrepreneur E, exploratory and explanatory interviews)

Another example of the use of the Representativeness heuristic in foreign market selection decisions is that of entrepreneur D in his decision to enter Azerbaijan.

“There were two prime reasons [Azerbaijan] was different from Russia, and one was western oil companies had established offices there, and two, there was hard currency available. Two very good reasons to try and do business are because people have got business to give you, but more importantly have got money to pay you with. They had foreign oil companies investing there, as

opposed to Russian ones, so that meant there was hard currency available.”

(Entrepreneur D, exploratory and explanatory interviews)

Of note is the fact that the characteristics according to which a foreign market is deemed representative of a certain category or another, or of none at all, depends on how the decision maker frames the process of representativeness. That is, it depends on the characteristics along which the decision maker decides to categorise the foreign market. In this study, those characteristics are found to depend on relevant previous experience of the decision maker. For instance, some firm leaders may have established that some features are desirable in foreign markets as they would avoid problems previously experienced domestically or in other markets. Others may judge that by entering a foreign market carrying cultural characteristics of previously-experienced markets their firm will be better prepared to cope. Others yet may reason that by entering countries with an industrial structure similar to that of countries within which the firm has already operated they won't need to change their strategy or business model. Thus, previous experience determines the framing of foreign market selection decisions (see discussion on framing effects in Kahneman et al., 2001) in the representativeness heuristic.

Also of note is the fact that perceived similarity of the market considered for entry at any given time with markets previously-experienced changes as more foreign markets are experienced. A foreign market may be perceived as unfamiliar (that is, as having no common features with markets previously experienced) at a point in time but it may be perceived more familiar as the decision maker experiences other new markets. Because of this, the categorisation of foreign markets in internationalisation decisions based on the representativeness heuristic is dynamic and path dependent.

Finally, I note that the instances of the use of the representativeness heuristics in foreign market selection decisions occur within the early phases of firm internationalisation. That is, those decisions take place within the first five to six years from firms' initial involvement in the international arena.

Taken together, the points of discussion above lead to posit the following:

Proposition 4: Leaders of internationalising SMEs will make *early foreign market entry decisions* based on the perceived similarity/dissimilarity of the foreign market considered for entry with respect to a foreign market previously experienced (thus, using a representativeness heuristic).

Anchoring and Adjustment Heuristic in Internationalisation Decisions

The decision maker uses the *anchoring and adjustment heuristic* in internationalisation decisions when he makes judgements on the course of action to take by making incremental adjustments from a baseline (based on Tversky and Kahneman, 1974).

In this study, the baseline (or anchor) from which the decision maker adjusts to make decisions is found to consist of *vicariously-acquired information*, *experiential information* or a *combination of both*.

Evidence of the use of the anchoring and adjustment heuristic is found in most decision makers and in both *foreign market entry* decisions (e.g. Johanson and Vahlne, 1977, 1990) and *entry mode* (Young et al., 1989) decisions. Likewise, the anchoring and adjustment heuristic is found to be used in *early internationalisation decisions* (i.e. up to the first six years from first international involvement) as well as in *later internationalisation decisions* made by firm leaders. However, firm leaders with more years of international involvement with the firm use the anchoring and adjustment heuristic differently from firm leaders in the early phases of internationalisation.

In fact, during the first few years of international involvement of the firm, decision makers tend to use less sophisticated baseline information (whether it is experiential or vicarious) and tend to make lesser adjustments from it in order to reach a decision.

In order to illustrate the points above, I shall start with an example of the use of the *anchoring and adjustment heuristic in early foreign market selection decisions*. The example below is that if entrepreneur B's decision to enter the United States market.

“After a lot of research I discovered and looked at the programmes and systems [the United States] have for collection, and they're not very sophisticated. [...] we then made a decision that we would open a business there. [...] Our business model's fairly unique. Our relationship with non-profit organisations, major charities, allows us an avenue of approach that's not available to our competitors.”

(Entrepreneur B, exploratory and explanatory interviews)

This relatively early decision (the fourth internationalisation decision made by B, made within the first six years from firm inception) is based on *vicariously acquired information* (i.e. market research). Later, this decision will prove to have been based on insufficient adjustment from the baseline information (overconfidence bias), as highlighted by the poor performance of the firm in the US market. In B's own words:

“It's a big country and it costs a great deal to get any real return on your investment. You've got to invest very heavily because it's so big and the logistics are more expensive. [...] And the cost of client acquisition in the United States was very high so it was ten times more expensive for us to get one client in the United States than it is in the UK. The staff costs were reasonable, but staff productivity was very low; they weren't very good. They talk an awful lot, but they didn't deliver. And then the actual business model didn't work nearly as well in the United States as it did in other European countries.”

(Entrepreneur B, exploratory and explanatory interviews)

In another example, that of entrepreneur D, an early foreign market selection decision, using the anchoring and adjustment heuristic, is based on industry experiential knowledge.

“Houston is really because it’s the global centre of the oil and gas industry, so a lot of the decision making processes are there, and in terms of our aspirations for international work, we needed to be closer to where the decision making process is. And for some companies, for some provinces, that’s Houston. [A governmental organisation] have a good facility in Houston, which we’ve used several times”

(Entrepreneur D, explanatory interview)

Taken together, the aforementioned observations lead to the following proposition:

Proposition 5: Leaders of internationalising SMEs will make early *foreign market selection decisions* by adjusting from experiential and vicariously acquired information (thus, using an anchoring and adjustment heuristic).

Let us now turn to the use of the *anchoring and adjustment heuristic in early entry mode decisions*. The anchoring and adjustment heuristic is used to a lesser extent in early entry mode decisions and does not seem to suffer from the overconfidence bias. However, this may be due to the fact that, in this study, the only observable case of the use of this heuristic is a case of export decision. Export decisions require less commitment (e.g. Johanson and Vahlne, 1977, 1990) and consequently involve a lesser degree of failure if the mode is unsuccessful.

The case mentioned above is that of entrepreneur C, who decides to use indirect exports (“piggy backing” on large multinationals) for a new service. This decision is made by adjusting from the idea that the firm has successfully exported other

services using the same entry mode (thus, the decision is based on C's internationalisation experience).

“We've always wanted to do training, so we now have a training business. Again, our strategy tends to be to sell to existing clients, just more. So we have the reputation and the track record. It's stretching the brand.”

(Entrepreneur C, exploratory interview)

From the limited evidence available from this thesis on early entry mode decisions using the anchoring and adjustment heuristic, the following tentative proposition may be derived:

Proposition 6: Leaders of internationalising SMEs will make *early entry mode decisions* adjusting from experientially acquired information (thus, using an anchoring and adjustment heuristic).

So far I have outlined the main findings on the use of the anchoring and adjustment heuristic in early internationalisation decisions. I shall now turn to the use of this heuristic in *later internationalisation decisions*, that is, decisions taking place at a later stage since the first international involvement of the firm. In this thesis, later internationalisation decisions are those taking place *after the first six years of the firm's international involvement* (based on Coviello and Jones, 2004). Decisions of this type are observable in two of the six case studies that this thesis draws on, namely the firms led by entrepreneurs B and F.

In those firms, the anchor (i.e. the baseline information from which the firm leader adjusts to make decisions) tends to be composed of more multifaceted experiential knowledge (thus supporting the idea of absorptive capacity by Cohen and Levinthal, 1990). Moreover, there is some evidence that once the decision maker has reached a decision by adjusting from the anchor, the latter may also corroborate the decision with vicarious information from market research. This appears to result in more tailored decisions.

A few examples illustrate those points. The first example below is one of later foreign market selection by entrepreneur F.

“We had been going to trade shows, we had been going to highland games across [Canada] and we had seen them. And at the time some of our customers [...] were very big players in Canada, and they had succession problems in the sense that they got to certain ages and nobody else came through to take it over, so we did. And then we had all their knowledge and history they had built over the last 30 or 40 years, all the bands there. So, they had that clientele and customer base. We were aware of how big it was. I looked at various companies that had succession problems. They were coming to the end of their... there was no family coming forward. [...] They were a successful company, they were doing well. I'd rather not buy companies that have gone bust, because they've gone bust for a reason. I'd rather buy something doing well, but which has a genuine reason to want to sell. So at the time, that's what we did [...]; hence we bought the company in Canada.”

(Entrepreneur F, exploratory interview)

In this case, the decision to acquire the competitor in Canada, thus entering the Canadian market, is based on more than one type of experiential information. A number of items are considered (the fitness of the firm to acquire, the demand for the products in the market, the potential for acquisition of vicarious market experience through the acquired firm). Moreover, the continuous visits to the country suggest some sort of refinement of the acquisition idea through a better understanding of the market (thus, this may be considered market research). Furthermore, there is a degree of consideration of how the state of the foreign market compares with that of the firm (i.e. information tailoring).

The evidence on foreign market selection based on the anchoring and adjustment heuristic is limited in this thesis. Nevertheless, the contrast of this

evidence with that from early foreign market selection decisions using the same heuristics is clear. Thus, I would still advance the following propositions:

Proposition 7: Leaders of internationalising SMEs will make *later foreign market selection decisions* by adjusting from experiential and vicariously acquired information (thus, using an anchoring and adjustment heuristic).

In terms of entry mode decisions, two illustrations are presented below. The first is that of entrepreneur B's decision to licence his business model internationally.

“Our focus now as a business is very much on growing mobile phones and the recovery of mobile phones, not just in the UK or Ireland or Italy, but worldwide. So we’re just finalising a new licensing agreement to license [firm B]’s credentials and business model in different countries, so at the moment we have one that’s going to go live in September in Turkey and one in October in Sweden. And we have another interest from Portugal as well. They get access to me, to some of our key staff; we work with them in their country. We’ll develop [firm B] Turkey or [firm B] Portugal or [firm B] Sweden. They will get the use of the brand and all of our devices, all of our systems. They will get all of this stuff and format. And what they have to do is invest an upfront amount of money and then they pay us a licence fee, and the licence fee is 10% of all of the sales.”

(Entrepreneur B, explanatory interview)

This example illustrates how the approach taken to the entry mode decision is now more tailored to the firm's current position. That is, the decision maker is adjusting more from the baseline experiential information, namely that the firm requires large volumes of recyclables of a certain type. Moreover, the decision is made on the basis of ascertained market interest in the new mode that the firm

intends to pursue. In fact, the entrepreneur knows that there are potential franchisees already lined up.

Another example from entrepreneur F also illustrated the use the anchoring and adjustment heuristic in later entry mode decision (a wholly-owned subsidiary in the United States).

“We were very aware, because we used to travel three or four times a year to the States, there was an awful lot of what I call Mr and Mrs Smith accounts, small businesses, run by the husband and wife, the Old Scottish Shop or the Wee Celtic Shop or whatever, and we thought okay, if we would supply in dollars, landed, would these people buy more from us. If you are just a small business do you want the hassle of importing from Scotland, do you want to go through all the rigmarole of exchange rates and duties? So, we thought if we open up a distribution in the States and say to you it is \$10 and we do all the work will we get more business. And on top of that there was a big customer, we had identified a mail order catalogue customer, who could take an awful lot more of our products, but didn’t. [...] Like everything else, people are loyal to suppliers. [...] We said if we open up our warehouse beside you will you buy from us. They said yes, so effectively they were a quarter of a million dollar account, so that paid for everything.”

(Entrepreneur F, exploratory interview)

Again, this instance illustrates that the decision is based on a combination of experiential market knowledge and vicariously acquired information through market research. The latter consists of an informal survey on potential customers in the foreign market (i.e. “will you buy from us?”). The decision maker adjusts from this information to arrive to the entry mode decision (a wholly-owned subsidiary resulting from a Greenfield investment, see Young et al., 1989).

Following from the discussion thus far, a further set of two propositions may be made:

Proposition 8: Leaders of internationalising SMEs will make *later entry mode decisions* by adjusting from experiential and vicariously acquired information (thus, using an anchoring and adjustment heuristic).

Proposition 9: The use of an anchoring and adjustment heuristic in *later entry mode decisions* will lead to adequately tailored decisions due to sufficient adjustment from the baseline information (thus, there will be no overconfidence bias).

7.1.2. Do the heuristic based reasoning processes of internationalising firm leaders change over time? If so, how do they change?

This thesis found no evidence that the actual heuristics used by decision makers change over time. The evidence suggests the heuristics used in the reasoning processes of the decision makers do not change following the first six to ten decisions, taken over the first six to seven years from the inception of the International New Venture (Oviatt and McDougall, 1994). As for firms in later stages of internationalisation (that is, firms that have been involved in the international arena for seven years or more), the limited evidence available does not suggest substantial changes in reasoning strategies surrounding internationalisation decisions.

An explanation for this lack of changes in the reasoning processes in internationalisation decisions could be the time intensity of the internationalisation activities of the firm (Jones and Coviello, 2005). The fact that a number of internationalisation decisions (and consequently international activities) take place over a relatively short period of time may mean that the

decision maker does not have the lead time to adjust his reasoning processes (thus supporting Dierickx and Cool, 1989).

Another explanation could reside in the intuitive nature of heuristic reasoning. Since intuitive reasoning is non-conscious (Dane and Pratt, 2007), the decision maker is not aware of the reasoning processes he uses. Since he is not aware of them, the chances of consciously modifying them are slim (Busenitz and Barney, 1997 based on Tversky and Kahneman, 1981).

The fact remains that this thesis found no evidence of changes in the reasoning processes (that is, heuristics) of decision makers over time.

Thus, the following proposition may be derived:

Proposition 10: The reasoning processes (heuristics) used by leaders of SMEs in internationalisation decisions will NOT change over time.

Although the heuristics used by decision makers do not change in time, there is evidence that the information retrieved and on which the heuristics are based do change. As time goes past and more experience is accumulated, the information retrieved from the mental schema of the decision maker and used in his reasoning processes becomes more sophisticated and multifaceted (thus supporting Walsh, 1995; Cohen and Levinthal, 1990; Gavetti and Levinthal, 2000). This increase in sophistication due to accumulated stocks of experiential knowledge (Reuber and Fischer, 1997) paradoxically makes the decision maker more aware of his current gaps in knowledge and less subject to overconfidence (in line with findings on gaps in foreign market knowledge by Petersen et al., 2008). This is demonstrated by the fact that more internationally experienced decision makers search for more information and of a more tailored type (often acquired vicariously) when making internationalisation decisions (in line with the findings on entrepreneurial information search by Cooper et al., 1995).

Following this line of reasoning, a final proposition is advanced:

Proposition 11: The longer the international involvement of the SME, the more complex and multifaceted the cognitive schema content on which the decision makers draws to make internationalisation decisions.

In relation to the above, complexity refers to the *number* of items in the cognitive schema, whereas the multifaceted aspect refers to the *diversity* in the types of items in the schema (based on Walsh, 1995; Cohen and Levinthal, 1990; Gavetti and Levinthal, 2000).

7.1.3. Comparing Current Findings to Previous Work on Heuristics

As mentioned in chapter 3, previous work in both entrepreneurship and internationalisation has focused specifically on heuristics. This section compares this relevant previous work with the findings of this thesis.

In the entrepreneurship literature, Busenitz and Barney (1997) find that entrepreneurs do make more extensive use of heuristics by comparison with managers. In keeping with the entrepreneurship domain of research, Busenitz and Barney (1997)'s intent is to investigate whether entrepreneurs differ from non entrepreneurs. In line with this, the experimental design of their study uses managers as a control group against which to evaluate the cognitive reasoning of entrepreneurs. Differently from Busenitz and Barney (1997), and in keeping with the emerging domain of internationalisation of firms, this study does not seek to investigate whether leaders of smaller firms use heuristics differently than other people. Rather, it starts from the assumption that, as cognising human beings, leaders of SMEs use heuristics (based on Tversky and Kahneman, 1974) and focuses on how the biases resulting from those heuristics drive different internationalisation decisions (namely, foreign market selection, entry mode and foreign market exit). Furthermore, this study differs from that by Busenitz and Barney (1997) in that it also investigates how the use of heuristics in

internationalisation decision-making processes changes over time, as opposed to appraising the use of heuristics and biases at a point in time.

The evolution of heuristics over time, resulting from the accumulation of experience is central to the work of Bingham, Eisenhardt and Furr (2007). The study views heuristics as a capability that enables the firms to successfully identify and exploit opportunities for internationalisation. It finds that the more heuristics are constructed over time and with the accumulation of experience, the more they impact positively on firm performance (Bingham et al., 2007). Findings from this thesis differ from those by Bingham et al. (2007) in a number of respects. Firstly, this study does not address the impact of heuristics in decision making processes on performance. Rather, it merely investigates which processes are used in different internationalisation decisions and how they change over time. Secondly, differently from Bingham et al. (2007), this thesis does not frame heuristics as a firm capability, which would imply a positive impact on the performance of the firm (Teece et al., 1997). Heuristics here are viewed as a cognitive process that, a priori, has neither positive or negative connotations for the firm. In fact, findings from this thesis suggest that the biases stemming from the use of heuristics in certain decisions may even be detrimental to the firm in that they highlight that the reasoning process may be inaccurate and poorly-judged (notably the use of the availability heuristics in early decision making).

Findings from this thesis also differ from those by Bingham et al. (2007) in that it doesn't find that heuristics *per se* change over time, or that new heuristics are created following experience. However, this study does find that the cognitive schema content on which the heuristic reasoning draws changes over time becoming more sophisticated and multifaceted (Walsh, 1995).

The differences between the findings from this study and those by Bingham et al. (2007) may, in my view, be reconciled by considering two key factors. These are the theoretical and operational definition of heuristics on the one hand and the distinction between cognitive *processes* and cognitive *schema content* on the other.

The theoretical and operational definition of heuristics used are different across the two studies. This study defines and operationalises heuristics according to

the three heuristics forming the seminal work of Tversky and Kahneman (1974). In keeping with this definition and operationalisation, three heuristics are conceivable in the study, namely the availability, the representativeness and the anchoring and adjustment. Bingham et al. (2007) define heuristics as “informal rules-of-thumb that center on the capture of opportunities within flows of process-specific opportunities”, further distinguishing between *higher* and *lower* order heuristics. However, within this definition and classification, Bingham and colleagues retain the freedom to enumerate a new heuristic each time a new procedural protocol is articulated by more than one respondent within the firm. In this respect, therefore, the different findings may not be compared directly as, although both studies use the term “heuristic”, they define and operationalises the concept quite differently.

In terms of the distinction between cognitive reasoning process (the heuristic) and the cognitive schema content on which heuristics draw, the two studies differ. This study adopts this distinction, which was first introduced in the entrepreneurship literature by Busenitz and Lau (1996). The study by Bingham and colleagues does not explicitly make this distinction. This difference may go some way in explaining the reason why this study finds that the heuristics used do not change per se but the cognitive schema content does, whereas the study by Bingham et al. (2007) finds that the number of heuristics developed by the firm changes over time.

This section has provided a discussion of the similarities and differences of the findings from this study as compared to previous studies directly addressing heuristics in entrepreneurship and internationalisation. As demonstrated above, mostly the differences in the finds are rooted in differences linked to either epistemological stances, definitions and operationalisations of the concept of heuristic-based reasoning.

7.1.4. Final Remarks on the Findings: Do Decision Makers “Drive Blind?”

“Driving Blind: Strategic Decision-making in Small Companies”

(Brouthers et al., 1998)

This statement - the title of a study by Brouthers et al. (1998) - introduced the research problem investigated in the current thesis. From it, the thesis developed into an exploratory enquiry of the reasoning processes that decision makers employ across a number of internationalisation decisions, and how those processes change over time, as discussed thus far in this chapter.

At the end of this journey, it is pertinent to return to the original statement and ask the question:

Do managers of smaller firms “drive blind” when it comes to internationalisation decisions?

Taken together, findings from this study would suggest that the statement “driving blind” is not sufficiently accurate. Rather, decision making by leaders of smaller firms may better be described as “driving with partial sightedness”, especially during the early stages of internationalisation. I use the term ‘partial sightedness’ to refer to the selective attention paid to the elements relevant to each internationalisation decisions. This selective attention is a mechanism built into the nature of human reasoning under uncertainty, according to heuristic theory.

Nevertheless, as time goes on, this partial sightedness seems to improve, thanks to the accumulation of multiple elements from experience that give the decision maker a richer and more complex cognitive schema to draw information from.

To summarise, the statement by Brouthers et al. (1998) may be fine tuned to the theory in practice of decision making in internationalisation in the iteration that follows:

“Driving with partial sightedness to begin with, and improving along the internationalisation journey”.

7.2. Contributions of the Study: Theory and Practice

The research findings outlined above shed new light on both the theory and the practice of internationalising firms. The heuristic “lens” adopted brings novel contributions to extant understanding of internationalisation in general and of how internationalisation decisions are made in particular. Those contributions are identified and outlined below.

7.2.1. Discussion of Findings and Contributions to Theory

Discussion and Contribution to Decision Making in Internationalisation

The main contribution that this study makes to the literature on internationalisation of the firm consists of outlining how internationalisation decisions are made. The importance of this contribution lays in the fact that in order to understand the internationalisation behaviour of firms (Jones and Coviello, 2005), scholars should understand the decision making processes underpinning this behaviour (e.g. Buckley et al., 2007).

The study has demonstrated that a narrow set of heuristics, based on a experiential or vicarious information, drive the reasoning involved in the internationalisation decisions of leaders of small firms. In doing so, the study supports recent findings by internationalisation scholars reporting that internationalisation decisions are made by boundedly rational decision makers (Buckley et al., 2007), are based on a narrower set of criteria than previously thought and that those criteria follow a heuristic type of reasoning (Grégoire et al., 2008). In line with those new developments in the understanding of internationalisation decision making, this study proves that economic approaches to internationalisations, and particularly the Transaction Cost Approach (e.g. Buckley and Casson, 1976) suffer from limitations in that they assume that decision making is deliberate and rational and that it is based on principles of maximisation of rents, protection of rents and asset seeking behaviour (Buckley et al., 2007).

Not only does this study support recent developments in internationalisation decision making (Buckley et al., 2007; Grégoire et al., 2008), but it extends these in the following ways.

Firstly, it extends findings by Buckley et al. (2007) by showing that boundedly rational decision making applies to a wider set of internationalisation decisions than the decision on Foreign Direct Investment (FDI) location. In fact, this study finds that heuristic-based, boundedly rational decision making applies to different modes of entry (Young et al., 1989) and foreign market selection (e.g. Brouthers and Nakos, 2005) decisions.

Secondly, this study builds on and extends findings by Grégoire, Williams and Oviatt (2008), who found that a heuristic type of reasoning applies to early internationalisation decisions in International New Ventures (INVs, based on McDougall et al., 1994; Oviatt & McDougall, 1994). The contribution that this study makes to the work of Grégoire and colleagues consist of applying a specific set of heuristics (based on seminal work by Tversky and Kahneman, 1974), namely the Availability, the Representativeness and the Anchoring and Adjustment, to internationalisation decisions in small firms. Furthermore, this study uncovers how heuristic based reasoning changes in later stages of the internationalisation of the firm, as observed in the leaders of more internationally established firms.

Discussion and Contribution to the Cognitive Approach in Internationalisation

A second contribution of this study is to the emerging cognitive approach in the internationalisation of the firm (as advocated by Zahra et al., 2005). It has been argued that the value of a cognitive approach resides in its ability to shed light on how entrepreneurs driving internationalising firms recognise and exploit international opportunities (Zahra et al., 2005). Indeed, from International New Venture scholars (Oviatt and McDougall, 2005; Bell et al., 2003) to advocates of the Upper Echelons view (Hambrick and Mason, 1984; Hambrick, 2007) a message emerges that we must understand how firm leaders perceive and interpret the environment within which they operate if we are to understand firms' behaviour. Since perception, interpretation and the associated reasoning

and decision making are part of the realm of cognitive psychology (e.g. Braisby and Gellatly, 2005), it follows that the latter has a lot to contribute to extant understanding of the international behaviour of firms.

This study adds to the small body of literature on internationalisation cognition by introducing the concept of cognitive reasoning *processes* (as identified in the functioning of each of the three heuristics used on this study), alongside the more static entrepreneurial cognitive orientations, perceptions (Acedo and Florin, 2006; Acedo and Jones, 2007) and mindset (e.g. Nummela et al., 2004) approaches explored thus far in the literature on the internationalisation of the smaller firm. These studies can be said to relate to the content of entrepreneurial cognition, as opposed to entrepreneurial cognitive processes (for a distinction between cognitive schema content and cognitive processes, see Busenitz and Lau, 1996). By exploring how heuristic based reasoning processes drive internationalisation decisions, this study shows how the content of individuals' cognition is leveraged and used in decision making (based on Grégoire et al., 2010).

In particular, this study has demonstrated how the reasoning processes involved in internationalisation decision making draw upon cognitive content formed through idiosyncratic experience. In so doing, the study lends support to scholarly work which has identified the role of experience in shaping both the cognitive maps (Collinson and Houlden, 2005) as well as the cognitive biases (Thomas et al., 2007) of firm leaders in foreign market entry decisions. In addition to the aforementioned studies, this thesis shows that the reason why previous experience affects internationalisation decisions is that vivid and/or recent experience will be readily available in the minds of decision makers. Consequently, it is among the first items to be retrieved and reasoned upon when making internationalisation decisions. Depending on both the experience retrieved and the heuristic used in the reasoning process, the decision may consist of a simple repeat/avoid of the experience (in accordance with the availability heuristic), a more sophisticated process of predicting the outcome of the decision by using the experience as a benchmark and adjusting from it (anchoring and adjustment heuristic), or by judging whether the situation at

hand belongs to the same category of the situation whose experience has been retrieved based on few characteristics of the latter (representativeness heuristic).

Discussion and Contribution to the Role of Entrepreneurial Experience in International New Ventures

Findings from this thesis are also relevant to a core concept in International New Venture theory, namely the experience of the entrepreneur and the role of the latter in the rapid internationalisation of the firm (McDougall et al., 1994; Reuber and Fischer, 1997).

The literature claims that the founders of INVs bring different sets of experience to the internationalisation process of the firm. Those consist mainly of *International Experience* and *Industry Experience* (McDougall et al., 2003; Evangelista, 2005).

Generally, the literature considers entrepreneurial experience to have a positive effect on the rapid international growth of the firm (based on Belso-Martinez, 2006; Blodgood et al., 1996; Crick and Jones, 2000; Evangelista, 2005; Johnson, 2004; Kuemmerle, 2002; Madsen and Servais, 1997; Reuber and Fischer, 1997; Sapienza et al., 2006; Weerawardena et al., 2007; Zhang et al., 2009).

Findings from this study generally support the literature in terms of the types of experience that decision makers bring to the early internationalisation process of the firm. Indeed, previous international and industry experience are found to be involved in the heuristic based reasoning surrounding internationalisation decisions. The contribution of this study lays in its articulation of the reasoning processes (based on the three heuristics) by which those types of experiential knowledge are leveraged and used in the reasoning leading to internationalisation decisions. Those processes are outlined earlier in this chapter.

Findings from this study also point in the direction of new dimensions to be added to the conversation on the role of entrepreneur's experience on international new ventures.

Firstly, along with *stocks of experience* acquired over time (based on Reuber and Fischer, 1999), this study finds that single instances and event, known in the entrepreneurial literature as *critical incidents* (Cope and Watts, 2000; Cope, 2003, 2005), may affect entrepreneurial higher learning and, consequently, the internationalisation decisions of these. Critical incidents are characterised by high emotional charge and by their ability to challenge the existing frames of reference of the decision maker. Consequently, once those incidents occur, they stay vivid in the mind of the decision maker. Since vividness forms the basis of the availability heuristic, it follows that that critical incidents are likely to be retrieved easily in decision making situations. In accordance with the functioning principles of the availability heuristic, the decision maker judges the likely outcome of a decision based on the possibility of repeating or avoiding the critical incident. Of course, the decision made depends on whether the critical incident recalled is judged to be positive or negative.

In summary, critical incidents from the pre-firm foundation experience of the decision maker are found to play a role in the early internationalisation decisions of the firm.

Secondly, the aforementioned critical incidents were found not to necessarily take place within the realms of industry and international experience, but could also stem from other kinds of *life experiences* of the decision maker (e.g. political life).

Thirdly, by unveiling the powerful effects that critical incidents may have on internationalisation decisions, and by pointing out that they may be positive or negative (thus triggering “repeat” or “avoid” types of decisions), this study suggests that it is perhaps worth challenging the implicit assumption that the experience entrepreneurs bring to the INV has solely a positive effect on the international growth of the firm.

In summary, this study contributes to the literature on the role of entrepreneurial experience in International New Ventures in several ways. Firstly, it contributes by introducing the reasoning processes that make use of the experience of the firm leader in the early internationalisation decisions of

firms. Secondly, it contributes by introducing the concept of criticality of experiences and critical incidents in internationalisation decisions, as based on the availability heuristic. Thirdly, and following from the previous contribution, it points out that critical incidents may stem from other types of life experiences of the decision maker, other than those considered in the literature and that those experiences may be negative as well as positive, thus hindering as well as promoting international expansion decisions.

Discussion and Contribution to the Concept of Psychic Distance in the Uppsala Model of Internationalisation

This thesis sheds new light on our current understanding of the concept of psychic distance and its role in foreign market entry decisions. Findings from the study presented here support the idea that the international experience of decision makers reduces the psychic distance from the foreign market considered for entry. These findings are in accordance with those by Dow (2000), whilst they diverge from other empirical investigations which found weak or no links between international experience and psychic distance (Evans et al., 2008; Benito and Gripsrud 1992; Davidson 1983).

Specifically, this study contributes to the literature on psychic distance by showing that in some foreign market entry decisions, the previous international experience of the decision maker is leveraged through a cognitive reasoning process involving the Representativeness heuristic (Tversky and Kahneman, 1974). That is, the decision maker judges how representative the prospective market is of markets previously experienced based on few characteristics of the latter.

Since the international experience of the decision maker changes over time as more markets are entered, so does his *perception* of distance¹⁰ from yet other foreign markets. The more markets the decision maker is familiar with, the more likely it is that a new market will be considered representative of one already

¹⁰ Psychic distance is equated with the concept of decision makers' *perception* of foreign market distance (following Evans et al., 2000)

experienced. This suggests that the concept of psychic distance is dynamic and path dependent.

Furthermore, the framing of the process of representativeness is based on few characteristics that are arbitrarily selected by the decision maker. It follows that foreign market entry decisions based on the representativeness heuristic operate in a rather subjective fashion.

Both these considerations have implications for the concept of psychic distance in its application to foreign market entry decisions. The latter is found to be rather more subjective, dynamic and path dependent than objective psychic distance indexes recognise (Dow and Karunaratna, 2006; Brewer, 2007). This study suggests that there are avenues for rethinking the measures of psychic distance, moving away from objective indexes and towards operationalisations that take into account the experience based perceptions of market distance in decision makers.

In this respect, the study also supports and adds to recent developments in the concept of psychic distance which highlight the need to take decision makers' cognition into account (Child et al., 2009). The contribution that this study makes to these latest developments consist of specifying that decision makers' cognition in relation to psychic distance is contingent upon idiosyncratic international experience.

Contribution to Current understanding of Foreign Market Exits Decisions

Another contribution of this thesis is to our current understanding of foreign market exit decisions (e.g. Crick, 2003, 2004). Findings from the thesis clearly show that foreign market exit decisions are driven by reasoning processes based on the availability heuristic. The functioning of the availability heuristic in foreign market exit decisions is discussed earlier in this chapter. Here, however, it will be worth pointing out once again that the use of the Availability heuristic (Tversky and Kahneman, 1974) in foreign market exit decisions is generally underpinned by negative critical incidents (Cope and Watts, 2000; Cope, 2003, 2005) in the foreign market that is exited. That is, when faced with challenging

situations in the foreign market, the thought of those challenges is the first and possibly the sole information that the decision maker retrieves and reasons upon. This implies that other information that may be relevant to the decision at hand but that are not so vivid, recent and emotionally charged in the mind of the decision maker are neglected.

These findings confirm the suggestion that foreign market exit decisions can be driven by critical incidents, as advanced by Crick (2004). In addition, findings from this study explain the mechanisms by which critical incidents drive foreign market exit decisions (namely through their ease of retrieval in the Availability heuristic).

Furthermore, this thesis contributes to current understanding of foreign market exit decisions by showing how the availability heuristic, as based on critical incidents, drives decisions on wholly-owned subsidiaries in the foreign markets. This is an addition to previous studies which focus on exit decisions of exporting firms (Crick, 2003, 2004; Requena-Silvente, 2005).

7.2.2. Contributions to Policymakers

The findings of this study bear particular relevance for policymakers. Governmental bodies, at both national and international level (e.g. Scottish Development International (SDI), Scottish Enterprise (SE), and the OECD) have placed the international growth of firms at the centre of their agenda (e.g. OECD, 1997). Consequently, a great deal of emphasis is placed on the design and delivery of programmes aimed at supporting internationalising SMEs. The need for attention to the design and delivery of those programmes has also been echoed by internationalisation scholars (e.g. Fischer and Reuber, 2003; Crick, 2004). One such programme is the International Strategy Development Programme (ISDP, formerly Global Companies development programme), whose participating firms formed the empirical context of the study presented in this thesis. According to the findings from this thesis, if those programmes are to succeed and maximise the added value of the taxpayers' contribution to such governmental actions, then those designing the programmes cannot avoid addressing the issue of how decisions are really made by the leaders of

internationalising firms. Still more important is addressing what the consequences of those decisional processes may be for the international growth and survival of the firm. In fact, by demonstrating that decision makers use heuristic reasoning in internationalisation decisions, this thesis has highlighted the fact that decision making is not as rational as theory suggests (following Buckley et al., 2007) and that it may be subject to bias. An instance of such biases that has become evident from this study is the overconfidence bias (e.g. Busenitz and Barney, 1997), displayed by decision makers during the very early internationalisation decisions of the firm. Generally, although heuristics reasoning in internationalisation decisions may provide a good trade-off between the speed and the appropriateness of decision making, there is no guarantee that the decision made will be an optimum one, as it would be the case if firms used more rational decision-making strategies such as the transaction cost approach (Brouthers and Nakos, 2004).

Consequently, programmes such as the ISDP should include an appraisal of the decisional processes of the leaders of small firms. Following initial appraisal, the rationale and rationality of those decisional processes should be challenged, making firm leader aware of the limitations of their thinking surrounding internationalisation decisions and addressing those limitations.

The role of governmental programmes in highlighting the limitations and biases associated with heuristic based decision making is made yet more important by the fact that firm leaders are unlikely to be aware of such limitations. This is because heuristic reasoning is intuitive, and intuition is non-conscious (Dane and Pratt, 2007).

A successful programme may be one that includes two steps: a first step of elicitation of the decision making processes of the firm leader and a second step of training aimed at counteracting the biases stemming from heuristic reasoning. In the first step, the consultant (or governmental programme manager) should invite decision makers to construct the causal-cognitive maps of their international decision making processes. This approach would be different from that taken in this thesis in that the decision maker would be directly involved in the elicitation of his own causal-cognitive map. Seeing one's own decision-making rationale on paper has been found help subjects realise the less-than-

rational logic used and urge them to correct it (based on e.g. Eden, 1988; Eden, 1992, Fiol and Huff, 1992; Cosette and Audet, 1992).

In the second step, training in logical reasoning should be used to correct the potential biases stemming from the use of heuristic reasoning. Studies in heuristic reasoning have indeed found that training can counteract biases (e.g. Agnoli, 1991). Logical training in the context of internationalising firms may perhaps be based on classical rationality in decision making, such as the transaction cost approach (based on Brouthers and Nakos, 2004) or general managerial theory (notably Mintzberg et al., 1976, following Buckley et al., 2007).

7.2.3. Contributions to Practitioners

The contribution that this thesis makes to practitioners is intended for leaders of small firms. This contribution is complementary to the contribution that the thesis makes to policymakers, which has been detailed in the section above. The reason for calling the contribution to practitioners complementary to that of policymakers is that, if the latter are encouraged to unveil and rectify the decision making processes of firm leaders, the former are encouraged to turn to policymakers for support. In fact, as mentioned earlier in the chapter, small firm leaders are unlikely to be aware of the biases of their boundedly rational, heuristics based decision making processes due to the intuitive nature of the latter (based on Dane and Pratt, 2007). This is likely to be particularly the case for firm leaders new to the internationalisation process of their firms, since they may be biased by overconfidence and may not be aware of the limitations of both their reasoning processes and the information that those processes are based on (based on Petersen et al., 2008 and Cooper et al., 1995, and confirmed by the findings of this thesis). Consequently, those decision makers are not likely to actively seek the support of their economic development agencies, or equivalent governmental bodies, in challenging their decisional processes.

This thesis signals that firm leaders are most likely to need to challenge their reasoning in internationalisation decisions exactly when they least realise it (based on the finding that decision makers are more subject to the

overconfidence bias during their early internationalisation decisions). Consequently, they should take a leap of faith into the value of having their internationalisation decisions challenged through tailored governmental programmes such as that described above (see ‘Contributions to Policymakers’ section above).

Furthermore, the simple act of taking time out from the busy schedule associated with managing a small firm could counteract the intuitive nature of heuristic-based decision making, leading to more sound and thought-through decisions. This may not only be achieved through taking part in dedicated governmental programmes (as above), but also through peer-meetings with fellow leaders of small firms operating across national borders or through more collaborative decision making involving employees within the firm.

7.3. Limitations and Avenues for Future Research

The limitations of the study presented in this thesis that are associated with its methodological design have already been discussed in a dedicated section of the methodology chapter.

Other limitations of the study are mainly associated with its exploratory nature. In fact, due to the exploratory nature of this study, the use of heuristic reasoning in internationalisation decisions is more descriptive than prescriptive. Indeed, the purpose of an exploratory study is mainly to describe a phenomenon. Nevertheless, this translates in the difficulty in determining causal links, for instance, between the type of decision and the specific heuristic. In this respect, more research on a larger scale is required to establish whether certain decisions are driven by certain heuristics. Likewise, this exploratory study could not ascertain with any degree of certainty whether certain decisional processes lead to more successful decisional outcomes than others (as the Transaction Cost Approach estimates - e.g. Brighthouse and Nakos, 2004) in terms of both growth and survival (for a discussion of the role of firm leaders on international growth and survival of firms see Sapienza et al., 2006). Future empirical studies are

required to establish causal links between heuristic-based processes of decision makers and firms' cross border expansion and long term profitability.

Finally, further empirical work on heuristics in the domain of the internationalisation of the firm is encouraged in order to further refine the classification of heuristics so that the latter can better reflect the nuances in decision making processes that this study has identified. In fact, although most of the decision-making processes in this thesis could comfortably be pattern-matched with one or more of the three heuristics, each heuristic was at times used slightly differently depending on the framing of the situation requiring the decisions. Moreover, the same heuristic could be based on different types of experiential or vicarious information. Consequently, there is room to further develop the "three heuristics" theory within the context of internationalising firms. Perhaps this could be achieved by creating sub-categories of heuristics that capture differences in decisional frames (e.g. serendipitous opportunities versus opportunities actively searched for in foreign markets) as well as differences in the type of information on which the heuristics draw.

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Appendix

Appendix 1:

Letter of invitation to prospective participants (sent via e-mail)

Dear ***

Research Project:

Scottish Enterprise has recently informed you that the University of Glasgow (School of Business and Management) would be visiting companies that entered the Global Companies Development Programme in 2004. The purpose of the visit is to evaluate the GCDP, exploring your views about the impact that the programme has had on the international expansion of your firm.

The evaluation project is longitudinal, lasting three years. The interview itself will last about one hour and will be entirely anonymous and confidential.

It is important to Scottish Enterprise that they monitor the impact of this programme, and the findings of the research will be used by SE to put more resources into support for internationalising Scottish firms.

I appreciate that you have a busy schedule, and that it is not always possible to reach you by phone in order to arrange an appointment. Therefore, I would be obliged if you could indicate to me via e-mail one or two suitable dates in the month of **June** when you would be available for interview.

I look forward to hearing from you and meeting you soon.

Best regards,

Lucrezia Casulli

Doctoral Researcher
School of Business & Management
University of Glasgow
Glasgow G12 8QQ
Tel: 0141 330 2000 (ext. 0061)
Mobile: 0770 8386511

Appendix 2:

Follow up letter of invitation to prospective participants (sent via e-mail)

Dear ***

Following up from my previous e-mail (*see below), I would now like to inform you that the first phase of the GCDP Evaluation process is coming to an end, with a report to be submitted to Scottish Enterprise within a few weeks.

The report will address all companies that joined the Global Companies Development Programme in 2003/2004. According to Scottish Enterprise's records, your company is to be included in the forthcoming report.

GCDP evaluation interviews will be carried out for a further three weeks period. Companies unable to undergo an evaluation interview within this time will appear in the report as non-participant.

I would like to take this new opportunity to arrange an interview at a date and time of your convenience.

Should you wish to get in touch, please refer to my contact details below. Alternatively, I will follow up with a phone call over the next few days.

Best Regards,

Lucrezia Casulli

Doctoral Researcher
School of Business & Management
University of Glasgow
Glasgow G12 8QQ
Tel: 0141 330 2000 (ext. 0061)
Mobile: 0770 8386511

(*Previous Email)

Dear

Scottish Enterprise has recently informed you that the University of Glasgow (School of Business and Management) would be visiting companies that entered the Global Companies Development Programme in 2004. The purpose of the visit is to evaluate the GCDP, exploring your views about the impact that the programme has had on your firm and its international expansion.

The evaluation project is longitudinal, lasting four years. The interview itself will last about one hour and will be entirely anonymous and confidential.

It is important to Scottish Enterprise that they monitor the impact of this programme, and the findings of the research will be used by SE to put more resources into support for internationalising Scottish firms.

I appreciate that you have a busy schedule, and that it is not always possible to reach you by phone in order to arrange an appointment. Therefore, I would be obliged if you could indicate to me via e-mail one or two suitable dates in the month of **June** when you would be available for interview.

I look forward to hearing from you and meeting you soon.

Best regards,

Lucrezia Casulli

Doctoral Researcher
School of Business & Management
University of Glasgow
Glasgow G12 8QQ
Tel: 0141 330 2000 (ext. 0061)
Mobile: 0770 8386511

Appendix 3:

Participants Consent Form

(Signed by the participant following a debrief on the principles of ethical research given by the researcher)



University of Glasgow, School of Business and Management

Consent to Participate in Academic Research

I - name of managing director -

Of (address) - name of firm -
- address of firm -

Post Code:

Telephone:

(This information is only needed to obtain consent to the research and will not be used in any results or publications resulting from this research)

Have read and understood the attached Principles of Ethical Research and agree to participate in the under noted research:

Title: **The Internationalisation Process of Scottish SMEs**

in which the researcher: **Lucrezia Casulli**

is supervised by: **Prof. Marian Jones**

Supervisor's telephone: **0141 330 2000 (ext. 3316)**

I understand that I have the right to refuse to continue to support the research at any stage, to require the return and no subsequent use of any data provided and that special issues of

confidentiality or the like listed below will be subject to agreement between myself and the department before any research begins.

Signed:.....

Date:

If you require further information about the research please contact the supervisor in the first instance.

If there are any unresolved problems please call the Department and ask for the Chair of the Research Ethics Committee.

Appendix 4:

Principles of Ethical Research of the University of Glasgow

(Given to the participant in print and forming the basis for the researcher's debriefing on principles of ethical research)

Principles of Ethical Research

1. In all forms of research conducted in the Department we will operate with as full a consideration as possible of the consequences of our work for society at large and groups within it.
2. We will handle all confidential information with appropriate levels of discretion and compliance with the law and with due diligence as to the security of that data. We will normally prevent the publication or use of data in any way that could compromise the subject's confidentiality or identity.
3. Any material being prepared for publication both inside and outside of examination purposes will be produced in such a way as to reduce the possibility of breaches of confidentiality and / or identification. If necessary, this process will be subject to a written statement as to agreed process between any sponsors of research, research subjects and the Department.
4. We will try to avoid overburdening subjects, causing them inconvenience and intruding into their private and personal domains.
5. Subjects will be informed as to the purpose and nature of any inquiry in which they are being asked to participate.
6. We will avoid misleading subjects or withholding material facts about the research of which they should be aware.
7. Where the research methodology allows for it, a research subject will be expected to be provided with a copy of these Statements of Principles along with a consent form which will also indicate a subject's right of referral and appeal to a higher authority in the Department and through Faculty to the University Ethics Committee.
8. Where the research methodology suggests that a different kind of consent is the only one possible this will be made clear in the ethical approval form but subjects will be referred to departmental web pages or made aware of these principles by the researcher in order to understand the issues as at paragraph 7 above.
9. All staff, researchers and their supervisors are required, before the project begins, to submit

to the chair of the departmental ethics committee, either a short-form or a long form ethical approval form. Only on formal approval by the ethics committee will the project be permitted to begin.

10. In the situations listed in the following subsections, staff, researchers and their supervisors must produce a justified case using a standard Application Form for Ethical Approval.

a. When the research methods employed might be regarded by the lay public to have delicate or controversial elements or when the research might be considered to give rise to adverse publicity for the University.

b. When the research involves the use of individual medical records

c. Where there might be difficulties in obtaining the subject's informed consent. This to include but not be limited to the following examples: with vulnerable people, including children; and those with learning difficulties; when proposing to use covert observation; or when employing a methodology in which the practicalities of obtaining signed consent forms are infeasible.

Only if and when the Departmental or subsequently the Faculty Ethics Committee has approved the research can it commence.

11. All members of staff and all student at all levels are required to read and agree to comply with these statements and to operate them in the full spirit in which they are written. Failure to comply with these statements will be regarded as a disciplinary offence.

12. All researchers and all supervisory staff at all levels must sign an agreement on an annual basis, indicating their acceptance of these Principles.

Appendix 5:

Exploratory Interview Form

(Completed by the researcher both during the interview and after the interview, based on digital recording of the interview)



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:
Address:
Contact Details:
Name of Interviewee and Position:
Interview Date:

Section 1. Firm's Current Position

(Please describe this firm to me, the business it does, the nature of its products, its role within the industry and its competitors in the domestic and foreign markets)

Prompts (for guidance)	(Notes on respondent's answer)
<ul style="list-style-type: none">• Products - Manufacturing - Services • Firm's role in its industry • Suppliers – Buyers – Substitute Products • Domestic Market – Customers	

- Domestic Market - Competitors
- Overseas Markets – How many and where?
- Overseas Market - Competitors

Section 2. Firm's Foundation Process

(Please tell me about the foundation of this firm, who was involved, how they founded it, why they founded it and the aspirations and objectives of founding members)

Prompts (for guidance)	(Notes on respondent's answer)
<ul style="list-style-type: none">• Specific Reason for firm creation? (e.g. new technology, identified gap) • Any pre-foundation history? (e.g. spin-off? Management Buyout?) • Founders – their role and description • Firm's international connections / access at foundation.	

- | | |
|---|--|
| <ul style="list-style-type: none">• Role of those connections in firm growth and development.• Resources at venture creation stage (financial, physical, human, etc.)• Where did resources come from at foundation stage? | |
|---|--|

Section 3. Human and Social Capital of Founders

	Founder 1	Founder 2	Founder 3	Founder 4	Founder 5
Name					
Age					
Gender					
Nationality					
Current Role / Position					
Previous Entrepreneur? (Y/N)					
Family History of Entrepreneurship? (Y/N)					
Level of Education					
Overseas Education? Where?					

Overseas Work Experience? Where? SME or MNE? Role?					
Work Experience in a domestic internationalising firm?					
Foreign Languages? (Level, written and spoken)					

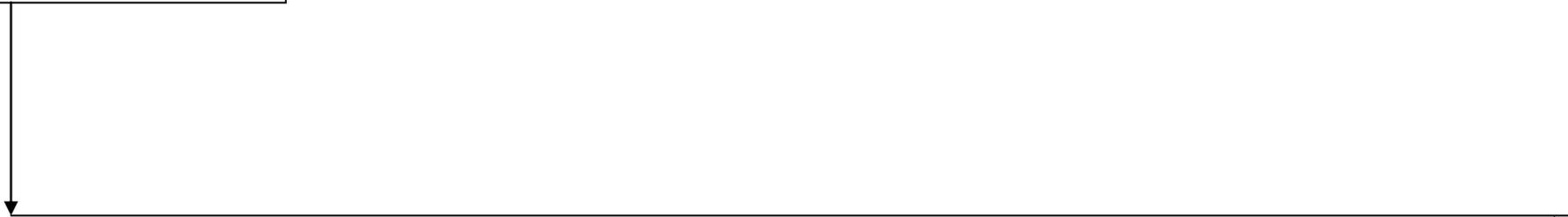
Section 4. Firm Development - Critical Events and Milestones (Timeline)

(Please tell me about what you consider to be the main milestones – or critical events – in the development of the firm. Things that happened, both internally and externally, that determined changes in the firm’s development progress)

<p>1. Record date and nature of event on timeline below</p> <p>2. Write details of the story surrounding the event on following page</p>



Foundation Date:



Study Date: 2006

Section 4.1 Description of Critical Events and Milestones

Prompts (for guidance)	Event 1 (describe:.....)	Event 2 (describe:.....)
<ul style="list-style-type: none"> • What triggered the event? • Implications of the event for firm growth? • Implications for functional areas? (R&D, manufacture, marketing, distribution, new product development, funding, etc) • Implications for internationalisation and international aspects of firm. • New strategies or processes developed? • Any aspect dropped? • Short term effects on profitability, financing, sales, revenues, etc. • Long term effects and implications? 		

Section 5. The Internationalisation Process (Timeline)

(Please tell me about the internationalisation process of the firm, from its first international links and contacts, to its first international agreement and investment, to its current situation in relation to its international business)

1. Record date and nature of event on timeline below

2. Write details of the story surrounding the event on following page

Foundation Date:

Study Date:

Section 5.1. Description of the Internationalisation Process

Prompts (for guidance)	
<ul style="list-style-type: none"><li data-bbox="174 387 761 475">• Evolution of Firm's Involvement in international business.<li data-bbox="174 611 761 810">• Nature of early Cross Border arrangements. (Export? Import? Licensing? Overseas manufacturing? Etc.)<li data-bbox="174 946 761 1145">• Purpose of early cross border activity. (Increase knowledge, expand sales, exploit opportunities, avoid unfavourable home market conditions?)	

- Implications for functional areas? (R&D, manufacturing, marketing, distribution, commercialisation, funding, etc.
- Importance of international activity to firm growth and development?

Section 6. Learning from Internationalisation and International Activities

(Please tell me what the firm has learned following its international involvement, from a technical perspective, a market perspective, and about the international expansion process itself, and the impact of that knowledge)

Prompts (for guidance)	
<ul style="list-style-type: none">• Technical knowledge acquired thanks to involvement in international activities. (From overseas partners, from overseas competitors, from overseas competitors in home market, etc) Implications? New product development?• Foreign market knowledge acquired (Country? How was it acquired?) and implications of such knowledge. (E.g. changed approach? Opportunities spotted?)• Internationalisation know-how. (How to approach a new foreign market? How to conduct international business?)	

Section 7: Research and Development

(Please describe the role of Research and Development in your firm, how it is organised, its relation to your innovation and to new product creation)

Prompts (for guidance)	
<ul style="list-style-type: none">• In-house R&D department? (Y/N)• Importance of R&D Department: Number of Employees? Annual Investment?• When was the R&D department established?• International contracts, connections, involvement related to R&D. (R&D joined venture? Etc.)• Internal communication and co-ordination between R& D and other functional areas? (Informal, formal meetings, written proposal, etc.)	

Section 8. GCDP and Impact on Firm (Closed questions)

8.1. When did you join the GCDP? Month _____ Year _____

8.2. Reason/s for Joining the GCDP

8.3. What Expectations did you have and have they been met?

8.4. What was the most influential aspect of the program to the internationalisation of the firm? Why?

8.5. What was the least influential aspect of the program to the internationalisation of the firm? Why?

8.6. Was the programme specifically tailored to the needs of your firm? Please give details.

8.7. If more customisation of the GCDP is required, what form would you expect that customisation to take?

8.8. If the GCDP required participating firms to make a contribution towards the costs of the programme (e.g. 30%, 50%), would you still have entered it?

8.9. Please indicate the extent to which the following aspects of the programme have enabled the internationalisation of the company

(Please rank from 1 'not at all' to 5 'very much')					
	1	2	3	4	5
• Meetings with GCDP executives	<input type="checkbox"/>				
• Consultants strategic review	<input type="checkbox"/>				
• Development of strategy	<input type="checkbox"/>				
• Development of business plan	<input type="checkbox"/>				
• Developed management capabilities	<input type="checkbox"/>				
• Products and production know how	<input type="checkbox"/>				
• Innovation and entrepreneurial capability	<input type="checkbox"/>				

• Foreign market orientation and servicing	<input type="checkbox"/>				
• Capabilities in alliances/networking	<input type="checkbox"/>				
• Systems and ICT	<input type="checkbox"/>				
• Staff development and recruitment	<input type="checkbox"/>				
• Preparation of action plan	<input type="checkbox"/>				
• Implementation of action plan	<input type="checkbox"/>				
• Peer group events	<input type="checkbox"/>				
• Input and advice from consultants	<input type="checkbox"/>				

8.10. Please specify the changes which have occurred in the firm as a consequence of participating to the GCDP.

Changes in :	Yes/No	Comments / Rating
<ul style="list-style-type: none"> • Firm structure 	Y / N	Details:
<ul style="list-style-type: none"> • Number of employees 	Y / N	Details:
<ul style="list-style-type: none"> • Turnover 	Y / N	Increase <input type="checkbox"/> Decrease <input type="checkbox"/> Please give a percentage: _____%
<ul style="list-style-type: none"> • Profitability 	Y / N	Increase <input type="checkbox"/> Decrease <input type="checkbox"/> Please give a percentage: _____%
<ul style="list-style-type: none"> • Joined Stock Market 	Y / N	Details:
<ul style="list-style-type: none"> • Assets 	Y / N	Details:

8.11. Please give details of forms of internationalisation that have occurred as a direct consequence of the GCDP

Internationalisation Form:	Yes/No	Comments / Rating
<ul style="list-style-type: none"> • International contacts 	Y / N	How many? ___ Which countries?
<ul style="list-style-type: none"> • Foreign offices 	Y / N	Details:
<ul style="list-style-type: none"> • Foreign suppliers 	Y / N	How many? ___ Which countries?
<ul style="list-style-type: none"> • Foreign customers 	Y / N	How many? ___ Which countries?
<ul style="list-style-type: none"> • International joint ventures 	Y / N	Details:
<ul style="list-style-type: none"> • Foreign competitor buyout 	Y / N	Details:
<ul style="list-style-type: none"> • International licensing 	Y / N	Details:
<ul style="list-style-type: none"> • Any other form of internationalisation: 	Y / N	Details:

Thank You

Interviewer Notes:

Appendix 6:

Explanatory Interview Forms

(Note that each form is tailored to the specific case study. Hence, six Exploratory Interview Forms are included in this appendix. Those forms were completed by the researcher both during the interview and after the interview, based on the digital recording of the interview)



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm A
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur A – Managing Director
Interview Date:	16th June 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in Italics) to remind the interviewee of his own words and then further explore the issue with probing questions (below quotes).

(1) *“So I’m from the electronics industry, have worked in the electronics industry a number of years, always for multinationals. Also I met the multinationals, working for big companies, worldwide global ethos, all that kind of thing.”*

How many years in the electronic industry? How long in each company? In what capacity? What do you mean by “met multinationals”?

(2) *“And for a number of years in the industry, every company has excess inventory. Regardless of what measures have been put in place, whether it be just in time and or whatever the latest ethos is in manufacture, there’s always excess inventory.”*

Give me examples of companies where you observed this?

(3) *“We had always worked for multinationals and coming out is very different. You do gain a lot of skills, but some of the fundamental skills you don’t have, like how do you start a business? How do you do this? How do you do that? We managed and we went to the support organisations and, to be fair, because what we were doing was so unusual, we got no support. People didn’t understand us.”*

Tell me more about this? How did you feel? What impression were you left with? What did you learn from it?

(4) *“No formal overseas education, but working for multinationals, it was commonplace to be sent to any country. [...] Work experience abroad, yes, very important.”*

You described work experience abroad as “very important”. Could you elaborate on that?

(5) *“They were American companies”*

(6) Does working for US companies mean that you worked in US only? Or elsewhere on their behalf? What was your experience of it?

(7) *“From day one, we still really haven’t got any real Scottish companies that we deal with. The thing that made a difference with us was that we instantly thought global.”*

What difference did that make exactly?

(8) *“[IVR] So you went global at inception? [IVE] Yes. But I hesitate at that because in terms of global, global attitude, but maybe not global ability.”*

“Global attitude though no global ability”. Where did the global attitude come from? And why no global ability?

(9) *“We did more international work, looking at bigger opportunities. [...] Because I’ve always worked internationally and got international friends, we thought there’s a huge European market on our doorstep that wasn’t being touched. So we decided we were going to move into Europe.”*

How did your international experience and international friends bring you to think of Europe? Can you recall your thinking at the time?

(10) *“Language and culture is a big thing. And that still today is a thing we carry forward, language and culture.”*

How and why have you come to consider culture “a big thing”, very important?

(10) *“We are very good at working different cultures. We are very good at working remotely.”*

Where did this confidence come from? Why do you feel you were good culturally and at managing remotely?

(11) *“I love learning about culture and I love sitting with someone and saying, actually why do you do this? And people are very open when you’re open with them.”*

What makes you love learning about different cultures? Have you always been like that or you acquired this?

(12) You also emphasise the role of history a lot. When did you start seeing the importance of history and why?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

7. _____

8. _____

The columns in the grid below represent the *elements* on which the *constructs* are elicited (Easterby-Smith et al, 1996). For the purpose of the current research, the elements consist of the foreign market entries of the firm. Those were extracted from the previous interview with the same respondent. Constructs were elicited by considering triplets of elements from the four below and asking the respondent how two of them were similar to each-other and different from the third (Easterby-Smith et al, 1996). The procedure was continued using different combinations of elements, always in triplets, and asking the respondent the same question. The process was considered completed when no more constructs could be elicited from the respondent (i.e. when the respondent could not think of any other characteristic of the elements).

	Entry in US	Entry in ITALY	Entry in EASTERN EUROPE	Entry in CHINA	

Thank You

Interviewer Notes:



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm B
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur B, Managing Director
Interview Date:	30th June 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in Italics) to remind the interviewer of his own words and then further explore the issue with probing questions (below quotes).

1. *“ I spent far too much time involved in my political carder, and ignored the business, and you can't have two masters, unfortunately, so the property business got into financial trouble, and I ended up bankrupt. That was in 1996, and you can't be a bankrupt and an elected official, so I had to resign from politics, and the company that I was in got in a lot of trouble and it was a mess, so the whole thing was very messy, so I lost everything I had, and had to start again.”*

How did you feel? What did you learn from that experience? Has that experience impacted in the way you do business today in any way?

2. *“So I phoned companies back again, but this time, the call was very different. I explained that I was calling on behalf of [charity name] we had a new, ongoing initiative to help raise funds for the hospice, by collecting used print cartridges, what did they do with theirs? Could then help? And over 80% of them said, yes, they'd like to help. So a different approach got a different result.”*

You decided to collect the cartridges “on behalf” of the charity, and not ask them to collect those for you. This turned out to be the single strongest point of your business model, giving you a competitive advantage over the competition. Why did you do it like this? Where did you get the idea of doing it this way from?

3. *“We introduced mobile phones five years ago into the business”.*

Why did you add mobile phones? Can you talk me through your thinking leading this decision?

4. *“We sell them to refurbishers in different countries, who refurbish them there, because the labour market is cheaper, and they will then sell them into places like sub-Saharan Africa, Nigeria, Malawi, places like that.”*

How did you discover this chain of “refurbishers”? How did you enter this loop?

5. *“We’ve all the warehousing function, the processing; it’s all in this building. Marketing, web design, print design, is all in house. We have staff to do that. Our customer care team in the Call Centre.”*

Why is the firm organised as it is today in terms of divisional structure? How have you come to see the need of each division as the firm was growing?

6. *“We have an office in Dublin, in the Republic of Ireland, and for four years we had an office in Perpignan in France, which covered France and Spain for us, but we sold that operation last August, and we have an operation in Atlanta, in the United States.”*

Why those countries? What was the rationale behind the opening the Dublin office? What was the rationale behind the opening the Perpignan office? What was the rationale behind the opening the Atlanta office? How did you go about setting each of those offices up?

7. *“It was very difficult to operate in the French market; it was very expensive.”*

Last time you told me about your difficulties in the French market. Any stories from it that you recall from your experience with the French office? Any lessons learned from the experience that you apply now? Was there anything positive about the French market? In which case, why did you decide to exit?

8. *“Lots of research, regular visits to the country, understanding the culture, working with the local economic development team.”*

What do you research about the country? What do you want to know? Where do you get the information from? Why do you value working with the local economic development team?

9. *“The United States is a simple market in some respects, but very complex in others. The sheer scale of the United States is hard to comprehend, and although they’re culturally similar, they’re also very different.”*

Could you talk me through your experience in US? Any stories or events you recall? What have you learned from operating there?

10. *“We’re looking at the Netherlands just now, we’ve done a lot of this research, we know that logistics are cheap, everyone speaks English, and the business model with charities will work fairly well. We know people are doing it; we want to do it differently.”*

How have your plans to enter the Netherlands progressed since last time we spoke?

11. *“I had six ice cream vans, did all of that, and I think I was probably around 21, 22, and I sold that business at the age of 23. It lost a lot of money. When you’re dealing with cash, and you’re young, it’s easy to spend it, and you make a lot of mistakes, so I lost money on that business.”*

Any lessons you learned from that experience? Anything you would do differently now in business?

12. *“I joined the [name of political party] because I believed people should do things for themselves. I worked hard in politics.”*

Has your extensive experience in politics affected you somehow? Has it affected the way you do business?

13. *“I do enjoy seeing different places, and just different experiences. I like to meet different people, and learn from them. A lot of the ideas I have in this business have come from travel. Seeing how different people do things.”*

Could you give me some examples of that? Of things you saw somewhere and applied to your firm?

14. *“In France, we didn’t understand nearly enough. We didn’t understand the market. I don’t regret France at all, although we lost money, I learned a lot. I also learned a lot about remote management and reporting. And these are things that I didn’t have the experience of doing.”*

What do you do differently now in terms of remote management and reporting?

15. During our last interview, you seemed to place a lot of emphasis on customer care, on the importance of customer care. How do you implement this in your business, especially in doing business abroad?

16. You also emphasised the importance of PR, which you claimed to have learned from politics. How does that translate into the daily practice of your firm?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____

The columns in the grid below represent the *elements* on which the *constructs* are elicited (Easterby-Smith et al, 1996). For the purpose of the current research, the elements consist of the foreign market entries of the firm. Those were extracted from the previous interview with the same respondent. Constructs were elicited by considering triplets of elements from the four below and asking the respondent how two of them were similar to each-other and different from the third (Easterby-Smith et al, 1996). The procedure was continued using different combinations of elements, always in triplets, and asking the respondent the same question. The process was considered completed when no more constructs could be elicited from the respondent (i.e. when the respondent could not think of any other characteristic of the elements).

	Operation in Ireland	Operation in France	Operation in US	Operation in	Operation in	

Section 3. Longitudinal evaluation of GCDP: Update on firm’s developments since first interview.

1. What has been happening since last time we met?

2. *“I went through this process and I picked Stratagem, but I wanted it to be led by the principal, a guy called [name of consultant], and I was very glad I got [him], I work very well with him.”*

Do you still work with [consultant name]? What is his involvement in the business today?

3. *“Probably identifying that our sales were woefully inadequate. Our sales process, our selling product, and the exposure to the market. At that time we only sold to three customers.”*

As a consequence of that you made changes to your sales team, which resulted in an expansion of your foreign customer base. Am I correct? Any changes to your sales team since last time? Any changes to your international customer base?

4. *“John then helped us recruit a sales manager, who was very good. [...] Our Sales Manager, [name of sales manager] is now our Sales Director, he leads the team.”*

Is [him] still at [name of firm]?

5. *“I thought it was valuable, most of it, but I think where it fell down is it didn’t have enough follow through.”*

The lack of follow through and the request for it have been reported to Scottish Enterprise. Have you noticed changes? Have they come back to you offering follow through?

6. *“Sales, without a doubt. That was our greatest weakness. And developing and diversifying the market points. [...] Only having three customers in one country was a big mistake.”*

How many countries do you sell to today? How many customers in each country? Has that been achieved through the expertise of [name of sales manager]? How does he identify now countries and new customers? The three customers you had before GCDP, do you still have them? How much would you say they impact on your turnover?

7. *“They helped identify the weaknesses in the team, and a lot of them I replaced, not immediately, but I phased them out, and brought more qualified people in.”*

Have there been staff changes since last time we spoke? Have you acquired new staff? Has anyone left? Have you replaced some staff?

Thank You

Interviewer Notes:



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm C
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur E, Managing Director
Interview Date:	28th August 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in Italics) to remind the interviewer of his own words and then further explore the issue with probing questions (below quotes).

1. How do the businesses that service offshore operate? Why have you chosen to operate them in that way?
2. All together, how many countries do you service? Which ones are they?
3. Of those countries that you service, which ones have you experienced personally? What has been your experience of working in each of them? What have you learned?
4. You mentioned that your Holland offices are a joint venture, with you owning 60% and your partner 40%. Any particular reason for that set-up?
5. *“We’ve looked at a strategy for doing more work overseas and we’ve recognised it’s easier to piggy-back on the back of our clients that are UK-based, than try and go out to the parts of the world where we’ve got no track record.”*

Where does this belief come from? Have you ever attempted going into a new market where you had no track record? What was your experience of that?

6. *“I went to Pakistan and Karachi to see what it was like in a country that I’d probably never go to on holiday. So it was quite an interesting experience, I thoroughly enjoyed it.”*

Why was it such an interesting experience? Anything from that trip that stuck in your mind?

7. *“Since [the firm] been formed, I’ve taken the opportunity to go and see a bit of the world, so I’ve been out to Baku, Venezuela, Malaysia, so I have travelled”.*

Have those trips changed your perspective on doing business abroad in general? Or in any of those countries in particular? Any stories that come to mind?

8. *“I try and think of locations where we think we can get paid on time and there won’t be any problems with taxation or anything else, so first for a small business it’s about safety, it’s about cash flow.”*

Have you ever experienced problems with getting paid on time or with taxation?

9. *“It’s very easy to spend a lot of money chasing overseas markets and never actually delivering anything, so I think for us it’s being more cautious now and not going overseas on sort of holidays, kidding yourself that you’re out there doing work. A holiday is fine, but call it a holiday and don’t call it a business trip!”*

Was that happening at some point? Your phrasing suggests to me it used to happen? Tell me more about it?

10. *“A lot of our regular clients get seconded overseas and when they go they often ask us to come out and help them on the new sites.”*

Could you give me an example of this?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

1. _____

2. _____

3. _____

4. _____
5. _____
6. _____
7. _____
8. _____

The columns in the grid below represent the *elements* on which the *constructs* are elicited (Easterby-Smith et al, 1996). For the purpose of the current research, the elements consist of the foreign market entries of the firm. Those were extracted from the previous interview with the same respondent. Constructs were elicited by considering triplets of elements from the four below and asking the respondent how two of them were similar to each-other and different from the third (Easterby-Smith et al, 1996). The procedure was continued using different combinations of elements, always in triplets, and asking the respondent the same question. The process was considered completed when no more constructs could be elicited from the respondent (i.e. when the respondent could not think of any other characteristic of the elements).

	Servicing in Algeria	Servicing in Alaska	Servicing in Malaysia	JV in Holland	
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Section 3. Longitudinal evaluation of GCDP: Update on firm’s developments since first interview.

1. From our last interview, it emerged that the main outcome of the GCDP was a “fitter” firm, with a proper management team. How has that worked for you over the past two years?

2. *“We now have three new companies that we didn’t have when we started GCDP. We’ve set up the business in Holland, we’ve set up the asset integrity team and we’ve set up the recruitment business.”*

How determinant was the GCDP in establishing those businesses? How are have those businesses progressed over the past 2 years?

3. What “legacy” has the GCDP left in the firm?

Thank You

Interviewer Notes:



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm D
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur E, Managing Director
Interview Date:	9th September 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in Italics) to remind the interviewer of his own words and then further explore the issue with probing questions (below quotes).

1. *“As the company grew, I guess I was making money and didn’t realise how I was making it, and lost money and didn’t really realise how I was losing money, so I decided I needed to be more of a businessman than an engineer.”*

What was actually happening? What was exactly that pushed you to pursue managerial training? Could you recall some instances?

2. *“I think whilst you have saturated your local marketplace, or reached saturation point, you should always try and exploit your domestic market first.”*

Where does this belief come from? Have you always seen it that way? Do you see it that way now? If not, what has changed?

3. *“We had the first oil price drop in the mid-80s, about 86, and that was a bit of a wake up call, because suddenly your single marketplace almost evaporated overnight, but we survived it.*

When did you start noticing that this was happening? What were the warning signs? What was your initial reaction to this?

4. *[...] it was clear that we needed to do two things, basically. One was internationalise and the other was to diversify.”*

Would you have looked into internationalising had your domestic market not disappeared?

5. *“We tried to take some of the skills and knowledge we’d developed in the UK marketplace to international markets, and really learn how to work in the international marketplace”*

From which points of view is it a challenge? And what have you learned about working in the international marketplace?

6. *“[...] that’s quite a challenge, because each market is quite different”*

In what respect are they different? Do you recall any interesting stories from any of the markets you have entered?

7. *“[...] it’s quite a long learning curve, but you can’t do it any other way than trying it”*

What is it about the learning that comes from trying that you cannot acquire differently, for example through second hand experience from your network?

8. *“[...] as long as you’re learning from your difficulties or failures, then that’s a good thing”*

Could you give me one or two specific examples of failures from which you have learned an important lesson?

9. Last time I was here you spoke about your experience in Russia in the early 90s. How much time and resources did you invest there? Why was it a failure? What did not work?

10. *“In about the mid-90s [...] we had been doing our diversification strategy and we had tried to grow the company into other parts of business, but we made mistakes by doing things that were not core to [the firm].”*

What non-core activities did you get involved into? Looking back now, why did it not work out for you?

11. *“For a new market for a small company, and maybe for most companies, you can look at, at least two years from first entering a market, to actually achieving anything like reasonable returns”*

Why is that? What is it that takes up time when entering a new market? Have you found any shortcuts after years of experience?

12. Last time I was here you mentioned that you opened offices in Baku and Houston. What was your reasoning behind the opening of each of them? Is the set up the same for all of them? What do they deal with exactly?

13. Which countries have you serviced without having a permanent presence there? Which of those were you directly involved in servicing?

14. *“Once you win business in some of these places [Venezuela, Azerbaijan], and you get over all the hurdles of employing people, and taxation, there’s the small business of repatriating the profits, if you do actually make any, so there are lots and lots of issues associated with starting a business.”*

Have you become aware of those hurdles through your own experience? If so, what happened exactly?

15. *“I was in the Merchant Navy, as an Electronics Officer, so that gave me a flavour for international activity, and business outside of the close confines of Aberdeen”*

What did you learn from that experience? Did it challenge the views you used to have in any way?

16. *“All our staff in Baku and Azerbaijan now are Azeri, and there’s no ex-pats now”*

Was this a deliberate decision? If so, what was it based on?

17. *“We tend not to try and poach from our competitors, because that’s an unhealthy game, I think, for the industry”*

You mentioned this talking about staff recruitment. Why do you think it is unhealthy for the industry?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

1. _____

2. _____

3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

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	Office in Baku	Office in Houston	Office in Rio de Janeiro		

Section 3. Longitudinal evaluation of GCDP: Update on firm's developments since first interview.

1. What would you say were the core benefits of participating in the GCDP five years on?
2. Do you feel it has had a long lasting impact on the firm? If so, from which points of view?
3. You said that you came out of the GCDP with a one-page action plan. What did it contain? Which parts of it have been implemented so far? With what results in terms of growth, sales and profitability?
4. You had recently bought out a competitor in Brazil last time I was here. How has that acquisition worked out? Have revenues from it increased over the past two years?

Thank You

Interviewer Notes:



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm E
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur E, Managing Director
Interview Date:	6th October 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in Italics) to remind the interviewer of his own words and then further explore the issue with probing questions (below quotes).

1. “We have a brand of [name of brand], which is a range of fabrics that we import from India. However this is one of the good examples of a range that we’ve decided to import, and now we want to make it ourselves in Scotland, because we’re unhappy with the quality and the deliveries, so we’re not very good importers.”

Why aren’t you good importers? And what is happening with this particular import from India?

2. “[...] our biggest market, I think is Italy for where people understand brands, and the name [name of brand] is known”

When did you first enter the Italian market? What was your reasoning for entering it? And how do you sell there?

3. “We have jackets made for us in Eastern Europe, and imported, and we sell socks and all the other bits and pieces. [...] we source out kilt jackets from Bulgaria”

Why Bulgaria? Do you subcontract manufacturing to them or you own the production plant? How did you get that set up?

4. “We buy a lot of yarn from Italy, silk yarns, silk and linen yarns, linen and wool yarns.”

Why from Italy? When did you start buying yarn from there?

5. “I was looking for areas where we could be wholesalers, areas of the market where we did not have to have very fast-moving designs, and areas of the market where, once you’ve a design into the marketplace, it can stay there for a long time”

You seemed to have a very clear idea of the type of market you wanted to serve when you bought this business. What made you so aware of what would and wouldn't work?

6. "I've worked in Germany"

What do you recall now when you think of your work experience in Germany? What has that experience added to your views on the business?

7. "I've worked in Canada"

And what do you recall now when you think of your work experience in Canada? How has that experience affected your thinking, if it has?

8. "In Australia I was seven years. [...] I went down to be a textile designer, and within two years of being there I was running the company I was sent down to be a designer for. So I was in general management.

How did you progress so quickly? Any stories you recall from your Australian experience? Anything you learned from it that you have been able to apply in your own business?

9. "I have no doubt at all that if I had not gone to Australia I'd have been running the company but [...] I wouldn't have had the training of being in other countries."

Could you please elaborate on that? What difference has that made?

10. "So we slowly got going with our interiors. We made a few mistakes of course"

What sort of mistakes? And what have you learned from them, if anything?

11. "The one mistake we didn't make was we didn't start to export for about five or six years"

Why would it have been a mistake?

12. “We have terrible problems getting people to pay us from Italy.”

What is the issue exactly? Is that still the case? How are you tackling that?

13. “In foreign markets we either work with agents or distributors”

Would those agents be exclusive and would they carry other brands? Have you ever considered an alternative ways of doing foreign sales (i.e. sales offices)? If not, why not?

14. How do you organise your sales in Holland? Is this the same way you organise them in Germany? And what about Spain, Portugal and Russia?

15. “In America, funnily enough, just in the last eight weeks I've changed my agent there.”

Why? What happened?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

1. Italiy

2. Spain _____

3. France _____

4. India _____

5. America _____

6. Germany _____

7. Holland _____

8. Norway _____

The columns in the grid below represent the *elements* on which the *constructs* are elicited (Easterby-Smith et al, 1996). For the purpose of the current research, the elements consist of the foreign market entries of the firm. These were extracted from the previous interview with the same respondent. Constructs were elicited by considering triplets of elements from the four below and asking the respondent how two of them were similar to each-other and different from the third (Easterby-Smith et al, 1996). The procedure was continued using different combinations of elements, always in triplets, and asking the respondent the same question. The process was considered complete when no more constructs could be elicited from the respondent (i.e. when the respondent could not think of any other characteristic of the elements).

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Section 3. Longitudinal evaluation of GCDP: Update on firm's developments since first interview.

1. "One of the main strategies that we identified with the Global Programme was to do a meaningful...to do a takeover, to expand our business by bringing in another company, which we've done just within the last two months."

How has that acquisition progressed since we spoke last?

2. You mentioned that part of the proposed strategy emerging from the GCDP was to go into the furniture business. You said you did that and it wasn't successful. Why was it not successful? Where did you sell? And how?

3. What impression of the GCDP have you been left with, 4 years on?

4. What has been happening since I last saw you last year?

Thank You

Interviewer Notes:



Internationalisation of Scottish SMEs & Global Companies Development Programme

Firm Details:

Company:	Firm F
Address:	***
Contact Details:	***
Name of Interviewee and Position:	Entrepreneur F , Managing Director
Interview Date:	8th October 2008

Section 1. Corroboration of data from Exploratory Interview

Use quotes/extracts from previous interview (in *Italics*) to remind the interviewer of his own words and then further explore the issue with probing questions (below quotes).

1. “We identified quite some time ago that there's no point trying to compete with price”

Could you explain to me how you came to this conclusion? What was happening at the time both inside and outside the business?

2. You opened your American warehouse about 7 years ago. Why a warehouse and why did you decide to open at that particular point in time? How did you choose your location there? How was the set up of that? Has it changed since? If so, why?

3. You were brought round about the time of the issue with the drop in sales in Japan. Last time we spoke, you said that had highlighted a number of faults in the strategy of the firm. Can you remember how you experienced entering this firm during those troublesome events? What are your memories of that time?

4. “We put a lot of effort into our fashion side. We won export awards”

Could you tell me more about your export awards? (Prompts: Where? When? How?)

5. “We focused on Japan, France and Italy at the time”

Why did you choose each of those countries? What did you know about them at the time?

6. “People are coming to you now saying, can I represent you in... Lebanon. And you go, well, yes or no”

How do you make that decision? Any recent examples of a situation where you were approached and had to make that yes or no decision? What happened?

7. “There would be missions to Korea [...]we went on these missions, a textile mission to wherever”

Which missions do you remember best, if any? What was your experience of them? What did you get out of them?

8. “I went on a sort of acquisition trip, because if it's not going to grow naturally, say the buingy part of it, hence we bought the company in Canada seven years ago.”

What is the story here? Why that specific company? Where else did you look?

9. “The biggest markets coming up are China and Russia”

Based on what information do you say that? Have you built a presence in those markets? How? Why have you chosen to do it this way?

10. “We have offices in Tokyo”

Since when have you had this? How is the set-up of it? Why is it set up the way it is?

11. “[...] at that stage we'd already opened up a manufacturing base in Holland and opened one up, actually, in Nigeria, where I was brought up.”

What sort of knowledge / experience did this give you? Do you recall any interesting stories from that time?

12. “Two years ago I went to Harvard for four weeks”

What did you gain from that experience? How have you applied it to your business?

Section 2. Repertory Grid (Based on Easterby-Smith et al, 1996)

Note below the constructs generated during the application of the technique in the interview

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

The columns in the grid below represent the *elements* on which the *constructs* are elicited (Easterby-Smith et al, 1996). For the purpose of the current research, the elements consist of the foreign market entries of the firm. Those were extracted from the previous interview with the same respondent. Constructs were elicited by considering triplets of elements from the four below and asking the respondent how two of them were similar to each-other and different from the third (Easterby-Smith et al, 1996). The procedure was continued using different combinations of elements, always in triplets, and asking the respondent the same question. The process was considered completed when no more constructs could be elicited from the respondent (i.e. when the respondent could not think of any other characteristic of the elements).

	America	Canada	Japan	Italy	France

Section 3. Longitudinal evaluation of GCDP: Update on firm's developments since first interview.

1. "I needed help to bring the whole team together"

What difference did you expect that would make to the business? Has the GCDP helped you accomplish that? With what results?

2. You said you came out of the GCDP with a focused plan. Was the content being implemented? How successfully?
3. Looking back now, where would you be had you not participated to the GCDP?
4. What has been happening over the past year?

Thank You

Interviewer Notes:
