



Minho University

Department of Economics and Management



University of Aveiro

Department of Economics, Management, Industrial Engineering and Tourism



Beira Interior University Management and Economics Department

2017

**CLÁUDIA
PIRES
RIBAU**

INTERNATIONALISATION AMONG SMEs OF PLASTICS INDUSTRY

**The importance of innovation on export
performance**

A INTERNACIONALIZAÇÃO DAS PME DA INDÚSTRIA DOS PLÁSTICOS

**A importância da inovação no desempenho
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Thesis submitted at the University of Aveiro to fulfill the requirements for the degree in Marketing and Strategy PhD, performed under the scientific supervision of Professor António C. Moreira, Assistant Professor of Department of Economics, Management, Industrial Engineering and Tourism of Aveiro University and Professor Mário Raposo, Full Professor of Management and Economics Department of Beira Interior University.

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To my family and friends who knew so well how to respect my moments of anxiety and distress. They know who they are.

To those who believed, believe and continue to believe it is possible...

Keywords Internationalisation; SMEs; Performance; International strategy; International entrepreneurship.

Abstract The study of internationalisation, especially in small and medium enterprises (SMEs), has been raising generalized interests in several countries, linking the competitiveness of SMEs to the increasing of productivity, flexibility and response capacity and active presence in the global market. The agenda highlights the incentive systems for the qualification and internationalisation of SMEs, to support investments in dynamic factors of firm's competitiveness in several areas of intervention and types of investment, especially the internationalisation.

In this sense, this research has the central objective to identify and understand the factors influencing the export performance of manufacturing SMEs, specifically identifying the key innovation capabilities (firm-related factors) affecting the export performance that may influence SMEs development. This research also aims to develop the knowledge of SMEs' internationalisation and its influence on performance, deepening an academically little explored area and reinforcing the gap on literature when combining performance with internationalisation of SMEs.

This research integrates international entrepreneurship theory and international strategies. This research includes: (a) a schematic and integrative analysis of internationalisation theories; (b) a systematic review of the SME internationalisation research; (c) a conceptual model identifying the key factors affecting the export performance of SMEs; (d) a qualitative study that explores the importance of new product development in multi-stage marketing, involving supplier-customer relationships through seven case studies; (e) and two quantitative studies, one focusing on the impact of a set of internal innovation capabilities on SMEs export performance, with the mediating role of entrepreneurial orientation with proactive and reactive external stimuli, and the other analysing the impact of four specific firms' innovation capabilities on export performance and the mediating role of exploitative and exploratory innovation capabilities.

The empirical study is based not only on a qualitative approach, through seven case studies, but also on a quantitative methodology supported by a cross sectional approach, from structured questionnaires sent to SMEs of the plastics industry, using PLS-SEM.

It is possible to conclude that there is a clear evolution in the literature on internationalisation from a focus on the internationalisation process, from a previous phase, being in this phase more focused on born globals. This research further reveals that the plastics industry is highly characterized by vertical relationships between suppliers and customers. If the results show that entrepreneurship and innovation capabilities are key to internationalised SMEs, the major contribution of this research stems from two important facts: firstly, exploratory and exploitative innovations influence differently the export performance of SMEs and, secondly, SMEs that pro-actively entrepreneurial oriented have a much better export performance than passively internationalized SMEs.

Palavras-chave Internacionalização; PME; Desempenho; Estratégia internacional; Empreendedorismo internacional.

Resumo O estudo da internacionalização, nomeadamente em pequenas e médias empresas (PME), tem vindo a cativar interesses generalizados em vários países, com o intuito de relacionar a competitividade das PME com o aumento da produtividade, flexibilidade, capacidade de resposta e presença ativa no mercado global. Os incentivos à qualificação e internacionalização das PME estão na ordem do dia, com foco nos investimentos em fatores de competitividade das empresas em diversas áreas de intervenção e tipos de investimento, especialmente a internacionalização.

Neste sentido, esta investigação tem como objetivo central identificar e compreender os fatores que influenciam o desempenho exportador das PME da indústria transformadora, especificamente identificar as capacidades-chave de inovação (fatores relacionados com a empresa) que afetam o desempenho exportador e influenciam o desenvolvimento das PME. Esta investigação tem igualmente como objetivo desenvolver o conhecimento sobre a internacionalização das PME e a sua influencia no desempenho, aprofundando uma área pouco explorada academicamente e reforçando o gap patente na literatura quando combinado o desempenho com internacionalização de PME.

Esta investigação integra a teoria do empreendedorismo internacional e estratégias internacionais, incluindo: (a) uma análise esquemática e integrativa das teorias de internacionalização; (b) uma revisão sistemática da literatura existente sobre a internacionalização de PME; (c) um modelo conceptual, identificando os fatores-chave que afetam o desempenho exportador das PME; (d) um estudo qualitativo com base em sete casos de estudo, que explora a importância do desenvolvimento de novos produtos no multi-stage marketing, evidenciando os relacionamentos entre fornecedor-comprador; (e) e dois estudos quantitativos, um evidenciando o impacto de um conjunto de capacidades internas de inovação no desempenho exportador das PME, assumindo a orientação empreendedora o papel de mediador com os estímulos proativo e reativo externos, e o outro analisando o impacto de quatro capacidades de inovação específicas no desempenho exportador das PME e o papel mediador das capacidades exploratórias e exploradoras de inovação.

O estudo empírico desta investigação baseia-se não só numa abordagem qualitativa, através de sete casos de estudo, mas também numa metodologia quantitativa suportada numa abordagem de corte transversal, a partir do envio de questionários estruturados às PME do sector dos plásticos, com base na modelização de equações estruturais (PLS-SEM).

É possível concluir que na investigação sobre internacionalização há uma clara evolução na literatura que numa fase anterior teve um foco amplo no processo de internacionalização, estando atualmente mais centrado nas born globals. Esta investigação revela ainda que a indústria dos plásticos é altamente caracterizada por relacionamentos verticais entre fornecedores e clientes. Se os resultados revelam que o empreendedorismo e as capacidades de inovação são fundamentais para as PME internacionalizadas, a grande contribuição desta investigação está no facto de revelar, por um lado, que a inovações exploratória e exploradora influenciam diferentemente o desempenho exportador das PME e, por outro, que as empresas pró-ativamente orientadas para o empreendedorismo têm um desempenho exportador muito melhor do que as empresas que se internacionalizam passivamente.

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1. INTRODUCTION

The globalization of the economy transformed internationalisation into one of the most important strategies followed by firms focused in achieving business growth (Luo and Beamish, 2005; Sapienza et al., 2006; Xie et al., 2009). For most firms, the 1980s represented a new way of interacting with open markets and free trade, demanding a rapid entry into international markets and adjustments of firms strategies (Verdier and Prange, 2011).

Researchers are aware of the growth of international business (Spyropoulou et al., 2010), based on the increasing globalisation, liberalisation of national policies, intensified competition at domestic markets and the development of communication, transportation and technology (Albaum and Duerr, 2008; Hill, 2005). In fact, technological progress on transports, shipping and communication did facilitate both firms to do business with other countries and consumers to buy products and services from foreign firms (Kotler and Keller, 2012), always searching for consumer satisfaction and higher economic income.

The proliferation of international treaties, the better communications and transport, as well as the creation of economic communities have improved the development of an international climate encouraging inter-country trade. This proximity between countries is increasing, transforming the world into a global village, a ‘new’ paradigm implying significant and progressive changes in the business environment. The barriers to trade and investment gradually disappeared, revealing new markets mainly for small and medium-sized firms (SMEs) and simultaneously intensifying competition in international markets.

We have been witnessing the promotion of supportive policies from the vast majority of governments, essentially towards entrepreneurship, in order to encourage internationalisation markets. This encouragement is visible on the creation of international management courses, incentive to direct commercial relations abroad, financial incentives for firms that do not restrict their business to domestic markets (Harris and Wheeler, 2005). Is the new motto seems to be “think and act global”. The markets are no longer ‘at the doorstep’, instead they have become global. This reality is more important to emergent economies.

In this context of globalisation, internationalisation is a pillar of the research literature in the management, economics, strategy and marketing areas, as well as an important tool for business management. Internationalisation has been the focus of the research community and professionals (Xie et al., 2009). Researchers such as Mariotti and Piscitello (2001), Christophe and Lee (2005), Oviatt and McDougall (2005), Pla-Barber and Escriba-Esteve (2006) and Cort et al. (2007) managed to link strategy, finance and marketing, revealing that firms on developing economies obtain ownership advantages, as a result of their technological superiority and size. However, firms' internationalisation patterns in emergent economies are different (Mockaitis et al., 2006; Zhou et al., 2007), so is the process of internationalisation of SMEs.

In world business, SMEs assume a great importance. Its development is strategic for stimulating economic growth, employment and poverty alleviation (Jasra et al., 2011; World Bank Group, 2016). Due to the great dynamism and flexibility of SMEs – which are exceptionally innovative (more than large firms) –, they play an important role in the future of the economy and public policy (Parker, 2000; Alon et al., 2009). This shift in the economic paradigm is particularly important for Portugal and Europe, whose business fabric is heavily dominated by SMEs (IAPMEI, INE, ANPME, PME Portugal, European Commission, 2016), as internationalisation is one of the most decisive strategy of business competitiveness and a survival condition for SMEs (Alon et al., 2009; Dutot et al., 2014). Moreover, internationalisation requires from them greater efficiency, effectiveness and competitiveness based on innovation and knowledge (Raymond et al., 2005).

Technological, economic, political and social changes have stimulated researchers to raise new questions and offer alternative explanations as to why firms internationalise, including formulating several theories that analyse different internationalisation processes. The last tendencies focused on the 'new' international entrepreneurship with born global firms (Knight and Cavusgil, 1996; Madsen and Servais, 1997; Bell et al., 2001, 2003; Chetty and Campbell-Hunt, 2004) and network theory (Håkansson and Johanson, 1992) that describes the internationalisation of SMEs in business to business (B2B) context (Brito and Costa e Silva, 2009), which is vital to the industrial sector.

The progressive involvement of SMEs in the international marketplace provides an emerging field in the academic community, as such internationalisation of SMEs has been of increasing interest (e.g. Etemad, 2004a, 2004b; Torrès and Julien, 2005; Ruzzier et al., 2006;

Amal and Filho, 2010; Dimitratos et al., 2010; McAuley, 2010; Kuivalainen et al., 2012; Kalinic and Forza, 2012; Child and Hsieh, 2014; Toulova et al., 2015) due to the relationship between SME competitiveness and increased productivity, flexibility and active presence in the global market. In this context, firms (especially SMEs) that do not consider developing their activities at an international level, not only limit their potential, but also their economic survival. Indeed, SMEs cannot avoid the impact of both the globalisation of markets and the growth of emergent markets. With the intensification of competition in global markets, the number of firms opting to compete only in their domestic markets is decreasing (Cateora and Graham, 2007; Alon et al., 2009). However, many SMEs are still not engaging in cross-border activities (Sommer, 2010; Mets, 2015).

Although SME internationalisation is a topic that has been receiving special attention, it is still relatively new. Traditionally, research has extensively focused on large manufacturing firms (Dutot et al., 2014; Toulova et al., 2015), especially on the activities of multinational enterprises (MNEs), using mainly the transaction cost model, the eclectic paradigm and monopolistic advantage theory (Dana et al., 1999; Dana, 2001; Etemad et al., 2001; Wright and Dana, 2003; McAuley, 2010). However, international markets are occupied by firms of several sizes where SMEs have created new opportunities and shown profitable growth (Lin and Chaney, 2007), while playing an important role in the modern global marketplace (Ayyagari et al., 2007; Javalgi et al., 2011; Hessels and Parker, 2013). On the other hand, the studies about the (positive or negative) internationalisation impacts or consequences of SMEs are still few. According to Xie et al. (2009), the studies which analyse the factors affecting firms internationalisation performance in emergent economies are scarce. At the same time, further studies are needed on the effects of internationalisation on SMEs' performance (e.g. Covin and Slevin, 1991; McDougall and Oviatt, 1996; Coviello and McAuley, 1999; Kiss et al., 2012; Kraśnicka and Głód, 2013).

Most empirical studies focus on MNEs rather than on SMEs, which reflects a substantial inadequacy of literature (McDougall and Oviatt, 1996; Dana et al., 1999; O'Cass and Weerawardena, 2009). On one hand, the empirical results about the relationship of internationalisation and performance of large companies are not necessarily applicable to SMEs (Shuman and Seeger, 1986), due to the fact that SMEs are different from MNEs, particularly in terms of management style, independence, scale of operations and specificities of the decision-making process (O'Cass and Weerawardena, 2009). On the other hand, we can measure

performance with objective and subjective measures, however most studies on firm performance tend to focus on the firms' profitability, neglecting other important aspects (e.g. Francis and Collins-Dodd, 2004; Pattnaik and Elango, 2009; Xie et al., 2009).

SMEs play a critical role in development of several countries across the world (Zou and Stan, 1998; Day, 2000; Lages and Montgomery, 2004; Jasra et al., 2011). As SMEs are highly dynamic (more than large firms), their importance in global economy is reflected by their contribution for high-quality employment generation, for being innovative, more flexible in the decision-making process – due to their less complex organizational structures and smaller size – and their responsiveness to the consumers demands (Parker, 2000; Toulova et al., 2015). The flexible and decentralized structure of SMEs enables them to adapt more quickly to changes in consumer habits (Leicht and Stockman, 1993; Lages and Montgomery, 2004) and have employees more motivated and engaged in the success of the firm (Marlow, 1997; Parker, 2000).

SMEs account for 90% of businesses, more than 50% of employment worldwide (IFC, 2012) and are the key drivers of competition, economic growth and job creation, particularly in developing countries (Kushnir et al., 2010; Jasra et al., 2011; IFC, 2012; European Commission, 2016). SMEs stand out as key strategic vehicles in today's global financial crisis especially in emerging markets as a key way to advance development and reduce poverty (IFC, 2012). Linking the micro firms to SMEs (MSMEs) and analysing the density of MSMEs (number of MSMEs per 1000 people) there was a 6% growth per year from 2000 to 2009, in which Europe and Central Asia experienced the largest growth with 15%, possibly due to the continuation of post-Soviet privatization in these economies and accession of the Eastern European economies to the European Union (EU). MSMEs are more common in high-income economies, but in low-middle-income economies the MSMEs density is rising at a higher rate (e.g. Brunei Darussalam, Indonesia, Paraguay, Czech Republic, Ecuador are the top five countries) (Kushnir et al., 2010).

The European economy is dominated by SMEs: they represent 99% of all businesses, and are a key driver of economic growth, innovation, employment and social integration (European Commission, 2016). In Portugal, MSMEs represent about 98% of the whole universe of firms, 55% of the turnover and generate 75% of the employment (IAPMEI, INE, ANPME, PME Portugal, 2016), playing an important role in the future of the Portuguese economy. This role is not only limited to Portugal. The European Commission (2016) considers that the SMEs are the backbone of the European economy.

It is vital for SMEs to internationalise so that the economy knows a sustainable future. Based on the fact that internationalisation is a decisive strategy for both business competitiveness and the growth of economy, the Portuguese government promotes the motto, among SMEs, ‘export to survive and export to compete’ (AICEP, 2016).

Enhance or maintain sustained competitiveness among SMEs through internationalisation, specifically through export activities (Dana and Etemad, 1994; Leonidou and Katsikeas, 1996; Jones 2001; Lages and Montgomery, 2004) is a challenge and an inevitability for SMEs and arises as a natural result of integrated business strategies. Today, SMEs are constantly faced with the challenges and opportunities of foreign markets (Zucchella and Siano, 2014), becoming increasingly globalized. It is a fact that export development features have been on the agendas of both public and private sector policy makers, reinforcing the need to investigate the export activities of SMEs and how to encourage its successful export operations (Crick and Chaudhry, 1997).

SMEs have been progressively improving their flexibility, their customer expectations satisfaction and act in accordance with the international quality standards, as a competitive requirement in their internationalisation process (particularly in the form of exports, with lower risk), which is seen as a way of survival, growth and sustainability (Lages and Montgomery, 2004; Alon et al., 2009; Dutot et al., 2014).

The effort to promote the internationalisation of SMEs is based on strategies that aim a sustainable international entrepreneurial orientation as innovation capability of SMEs (European Commission, 2016; OECD, 2016). Innovation is essential to the competitiveness of the firm and to expand to new markets (Gunday et al., 2011). Business growth and success depend on the joint effect of internationalisation and innovation (Onetti et al., 2010), as such internationalisation and innovation can leverage the firm to success (Onetti et al., 2010; Golovko and Valentini, 2011; European Commission, 2010), especially for SMEs that have to be creative, innovative and entrepreneurial. Moreover, the firms internationalisation process is in itself a process of innovation (Andersen and Kheam, 1998) and a significant entrepreneurial act for SMEs, which have a positive impact on export performance (Beamish and Dhanaraj, 2003).

The use of resources and capabilities based on an entrepreneurial orientation lead firms to superior profitability, taking the strategic opportunities in foreign markets, and sustain their competitive advantages (Jantunen et al., 2005). Firms seek competitive advantage from external

sources or internal resources and capabilities (Gulati et al., 2000). Academics have focused on looking at the firm and its resources and capabilities as the key for innovation (Barney, 1991). Innovation represents today firms' competitive advantage and it is one of the main avenues for building firm-specific advantages (Zucchella and Siano, 2014). Innovative firms are able to use their capabilities, improving their products and adding value to customers (Lawson and Samson, 2001).

SMEs are essential to the world economy. Internationalisation is an inevitability for SMEs. Based on this generic issues we defined our research path, which started with the following research question: (a) How the process of internationalisation of SMEs is outlined on literature? To answer this research question, in chapter two we made an integrative analysis of internationalisation theories, creating a schematic table which gives an overview of the most important contributions to the literature on internationalisation theories.

To better understanding the literature on SME internationalisation, we formulated the second research question: (b) What is the state of the art on research on SME internationalisation? To answer to this research question, in the third chapter we carried out an extensive literature review, seeking to provide an overview of published work focusing on SME internationalisation research. This systematic review of empirical and conceptual published studies, indexed in the main academic search databases, is unique in its depth and length of coverage on SME internationalisation patterns, filling the gap of previous studies (such as Leonidou and Katsikeas, 1996; McAuley 1999; 2010; Coviello and McAuley, 1999; Fillis, 2001; Coviello and Jones, 2004; Etemad 2004a; Rialp et al. 2005; Kontinen and Ojala, 2010; Kuivalainen et al., 2012).

Despite the diversity on SME internationalisation literature and to reinforce the holistic models as the latest trend on internationalisation theories, gathering the most important aspects of the most conventional theories on the literature, we formulated the third research question: (c) What are the factors influencing the export performance of SMEs? In the chapter four we propose a conceptual model to answer to this question. This model brings together the fundamentals of SMEs' internationalisation processes that influence these firms' export performance. The model highlights three important factors: industry-, environment- and firm-related aspects affecting firms' entrepreneurial orientation. We highlight the sustainable international competitive advantages of SMEs through a knowledge-based perspective (as an extension of the resource-

based view), identifying the innovation capabilities affecting export performance that may influence management decisions of entrepreneurs and SMEs development.

Based on the fact that B2B relationships can be one of the sources of competitive advantages for firms, where critical innovation capabilities extend beyond the boundaries of the firm (specifically with suppliers and direct and indirect B2B customers), we addressed to the fourth research question: (d) How downstream customers' customers and suppliers influence the development of new product activities of internationalised firms? In chapter five we argue the importance of innovation and new product development in multi-stage marketing, involving supplier-customer relationships through case studies.

With a focus on the internal sphere of SMEs we discussed the fifth research question in chapter six and seven, through empirical research: (e) How do firm-related innovation capabilities impact export performance of international SMEs? The sixth chapter present the impact of a set of internal innovation capabilities (learning, research and development, manufacturing, marketing, resources exploiting, organizational and strategic capabilities), as strategic elements of international entrepreneurship orientation, on export performance of manufacturing SMEs, with the mediating role of entrepreneurial orientation with proactive or reactive external stimuli. In chapter seven we highlight exploitative and exploratory innovation on SMEs' sustainable competitive advantages. Moreover, we analyse the impact of four specific firms' innovation capabilities (i.e. marketing, strategy, research and development and manufacturing capabilities) on export performance and the mediating role of exploitative and exploratory innovation capabilities on the relationship of the four firms' internal innovation capabilities and export performance.

Taking into account the importance of internationalisation, specially to SMEs, which seek a high level of performance, the many challenges of international activities and the gaps on the literature, the aim of this doctoral study is to identify and understand the factors influencing the export performance of manufacturing SMEs, specifically identifying the key firm-related factors as innovation capabilities affecting the export performance that may influence SMEs development. Specifically, we focus on the plastics industry, which has been given little attention in the research community, in spite of the annual turnover to the economic Portuguese panorama, occupying the ninth position in the ranking of the seventeen groups of exported products (INE, 2016).

This research splits the study into two main parts by setting up an analytical and empirical structure, which has theoretical and practical implications, to determine the relationship between the drivers – as innovation capabilities – of SMEs’ export performance. Thus, the ultimate purpose of this research is to develop the knowledge of SMEs’ internationalisation and its influence on performance, deepening an academically little explored area and reinforcing the gap on literature when combining performance with internationalisation of SMEs. With the schematic and integrative analysis of internationalisation theories we aim to support the academic community in their research on business internationalisation. The systematic review of the SME internationalisation research has the objective of clarifying the current state of knowledge about SME internationalisation. The theoretical model seeks to better understand the key factors affecting the export performance of SMEs, i.e. to clearly identify the nature of the main drivers of internationalisation and their relationship with performance, providing a simple structure that can be strategically used by entrepreneurs when launching their firms into international markets. The qualitative study aims to analyse to what extent the relationship among firms in downstream-customers B2B activities in the supply chain stimulates the relationship in upstream-suppliers B2B activities and its impact on product innovation and internationalisation process of firms. The quantitative perspective of this research aims to identify the impact of internal innovation capabilities on export performance of manufacturing SMEs.

Ultimately, this study aims to improve the decision making-process of the entrepreneur and his/her know-how in the internationalisation process, identifying the firms’ innovation capabilities that influence export performance among internationalise SMEs, which are crucial to the business fabric. Particularly, we seek to understand how the plastics industry players in Portugal behave regarding internationalisation, given the lack of studies on this area.

The interest of this research is strongly underpinned not only by today’s European context, but also to deepen an academically little explored thematic area, reinforcing the gap on the literature, when combining performance with internationalisation of SMEs.

The structure employed in this research is divided in eight chapters. The first chapter is the introduction. The second chapter includes the literature review of internationalisation theories, followed by chapter three that analyses the systematic review of internationalisation of SMEs research. Chapter four proposes a conceptual model, identifying the key drivers of internationalisation on export performance. In chapter five we present a qualitative study (seven

case studies) of the supply chain of plastic industry, identifying the key actors in the plastics supply chain and involving firms from Portugal, Spain and Italy, covering several plastic products (hoses, packaging, sanitary ware). In chapter six and seven we followed a quantitative perspective, applying a questionnaire to collect data from Portuguese manufacturing SMEs within the plastic industry, where we display a set of questions and research hypotheses, as the basis of the empirical study. Chapter eight presents the conclusions of all this research path and the main limitations and future research perspectives.

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2. INTERNATIONALISATION OF THE FIRM THEORIES: A SCHEMATIC SYNTHESIS

ABSTRACT:

This chapter carries out an integrative analysis of internationalisation theories. The most important contributions to the literature on internationalisation theories are used to create a schematic table giving a framework overview. This approach shows the high-level interaction of the literature, covering all internationalisation theories, their focus and basic assumptions, while at the same time showing their historical timeline. We identify the main schools of thought – ranging from economics-based to integrative models – using an analysis that begins in the eighteenth century and ends in the twenty-first century with the most recent trends in internationalisation theories. This schematic and integrative analysis aims to support the academic community in their research on business internationalisation.

KEYWORDS: Internationalisation; Theories; Schematic analysis; Integrative analysis.

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2.1. Introduction

Today the international environment is more complex than ever, as small and medium-sized firms (SMEs) as well as multinationals (MNEs) adopt many forms of internationalisation strategies aimed at serving global markets, rapidly deploying new products across several countries or adapting their brand names to global/multi-domestic environments. Although this is not new, ‘internationalisation’ has been reflected in the literature through a variety of frameworks, theories and basic assumptions that have been changing over time (e.g. Andersson, 2000; Melin, 1992; Dana et al., 1999a; Bell et al., 2004; Moreira, 2009; Bayfield et al., 2009; Ietto-Gillies, 2012).

It is not only globalization of business activity that has evolved over time – scholars’ interpretations have also changed (Dunning, 1994; 1997; 1998; Fletcher, 2001; Bell et al., 2001; Moreira, 2009) as firms adopt complex forms of internationalisation and organization (Czeinkota et al., 2008; Whitelock 2002).

International competition – encompassing multiple countries and markets – has encouraged broad debate and given great impetus to the study of SME internationalisation.

Several models have been proposed explaining how SMEs compete internationally, or how MNEs compete in multiple countries. Clearly, several theories have been put forward to explain how firms internationalize, reflecting different approaches entering foreign markets (Whitelock, 2002; Ietto-Gilies, 2012; Czinkota et al., 2008). All theories, however, conceptualize key information about how firms enter international markets, trying to explain the main factors that affect the internationalisation path. For example, neo-classical and macroeconomic models have focused on the country-level perspective and how it affected international business (Moreira, 2009). However, over time, the research focus has changed from a country perspective to a microeconomic perspective, which has now turned more towards the firm-based perspective (e.g. Fletcher, 2001; Bell et al. 2004).

The literature on business internationalisation is vast and is somewhat fragmented and dispersed. There is clearly a need to summarize the models which use SMEs as the unit of analysis, explaining how firms behave in their internationalisation process, distinct from the

macroeconomic and neo-classical perspective. As such, the aim of this chapter is to interconnect the ontological perspective of the main strands of the literature on internationalisation (economic viewpoint; behavioral viewpoint; ecological viewpoint; new internationalisation; integrative models) with the internationalisation theories and the main constructs.

Building on previous work (e.g., Dana et al., 1999a; Geursen and Dana, 2001; Törnroos, 2002; Moreira, 2009; Fletcher, 2001), this chapter provides a review of the internationalisation theories (albeit mainly focused on SMEs) and presents an integrative analysis in an attempt to identify which theories have been most influential. As Törnroos (2002) acknowledges, an integrative analysis needs some refinement. As such, our goal is to develop a schematic analysis reflecting the different schools of thought, running from the economics-based perspective to the integrative models. This is an analysis that begins in the eighteenth century and ends in the twenty-first century with the latest trends in internationalisation theories.

This conceptual chapter outlines an important area of the international business literature summarizing the development of internationalisation theories. It is organized as follows. Following the introduction, the second section offers a brief overview of the internationalisation theories, focusing on the Uppsala model, the eclectic paradigm, network theory and the born-global firms. The third section follows with a summary and analysis of the main characteristics of the internationalisation theories integrated into a single framework which provides a consistent overview of the internationalisation theories. The fourth section presents the main conclusions.

2.2. The four conventional theories of internationalisation

2.2.1. The Uppsala model

Most researchers analyze internationalisation as a process which takes place over time. This approach has been enriched by several models (Prange and Verdier, 2011), having a considerable impact on the field of international marketing (Moen and Servais, 2002). The intensive study in this area led to two similar research lines emerging in Europe and US: the Uppsala model (from the Nordic school) (Johanson and Vahlne, 1977) and the innovation-related internationalisation models (Cavusgil, 1980). Both research streams, referred to as 'stages models', define the internationalisation process as an incremental process with several stages (i.e., the firms become

international as the result of a slow and incremental process, due to their lack of knowledge of foreign markets, high risk aversion, and high perceived uncertainty). The Uppsala theory stands out as the most prominent model in the literature (Prange and Verdier, 2011).

However, while the Uppsala model analyzes the internationalisation process as a lengthy organizational learning process, the innovation-related internationalisation models analyze the process as an innovative way of acting and the adoption of new approaches to business (Madsen and Servais, 1997).

The gradualistic ('stages model') theory builds on two central articles by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977), later revised by Johanson and Vahlne (1990, 2009) and Vahlne and Nordström (1993). Since the first article published in the 1970s, the literature on the internationalisation process has been consistently growing (Welch and Paavilainen-Mäntymäki, 2014).

The Uppsala model has played an important role in research on internationalisation of the firm, added to with many contributions to the knowledge of internationalisation process of firms from the Nordic school (Ahokangas, 1998; Bjorkman and Forsgren, 2000; Catherine and Matthyssens, 2001). However, this school of thought has been criticized (Hadjikhani, 1997), mainly due to its focus being restricted to risk aversion as a source of incremental steps in the internationalisation process. Although it is one of the most cited studies in the history of international management, the relationship between the main constructs has received insufficient empirical attention. Previous studies often used indirect empirical verification, where the components and mechanisms of the process were not directly tested (Papadopoulos and Martín, 2010).

Some researchers argue that this and other related models are static, since they do not explain or predict the dynamic patterns of the internationalisation process of the firms (Oviatt and McDougall, 1999). On the other hand, these models do not explain how and when the processes of internationalisation starts, as they just focus on what drives the activities of a firm in an internationalisation process already underway (Leonidou and Katsikeas, 1996). Further, most SMEs do not develop into larger firms; therefore the stages models have limited explanation power for these firms (Moen and Servais, 2002).

The Uppsala model is based on the assumption that firms do not try to find international opportunities. Rather, they are available to export when they receive the first foreign request

(Autio and Sapienza, 2000). Hence, the Uppsala model does not explain the use of any entry mode in a foreign country. Following the publication of this model, researchers have suggested that a large number of firms use entry modes which do not fit with the theory based on the internationalisation process (Andersen, 1997).

Although the incremental model of Johanson and Wiedersheim-Paul (1975) focuses on four case studies, it has been tested by several researchers through several empirical studies throughout the world, providing support for the assertion that firms internationalize according to the ‘rings in the water’ principle. The model shows how achievement is phased, based on the gradual build-up of market knowledge, reducing uncertainty and risk over time of the geographic markets, market entry and product policies (Madsen and Servais, 1997). Firms choose the markets sequentially according to their perceived proximity, (i.e., with a low degree of psychic distance) (Child et al., 2009), which helps to control the high risks of internationalisation and build experiential knowledge as a basis for entry into other markets (Etemad, 2004).

Some researchers have identified the ‘stages model’ as a deterministic orientation of limited value (e.g. Reid, 1983). After a theoretical review, Anderson (1993) concluded that the theoretical boundaries of the model, the ability to explain the phenomenon and the implementation of internationalisation needs to be further researched over a longitudinal line, looking at explanatory power, and congruence between the theoretical and operational level.

Forsgren (2002) criticized the behavioral models of the internationalisation process, such as the Uppsala model, where knowledge and learning have a profound impact on how the firm accesses foreign markets. Although since it was first introduced this model has been used by many researchers, its focus has been limited to the knowledge of the firm’s internationalisation process. However, knowledge is a crucial concept in the model, as it affects the prediction of the behavior of the firm when internationalizing. Moreover, a basic conclusion from several studies on entry into foreign markets centers on the lack of knowledge and experience (that is only acquired through current operations abroad). As it is, this is critical to the development of international operations (Hedlund and Kverneland, 1985). Hadjikhani (1997) gives the commitment concept an intangible measure, which is connected to the concept of psychic distance in the internationalisation model.

Process-based internationalisation theory has been examined by several researchers, mainly addressing its suitability in explaining the early stages of SME internationalisation (Welch and

Luostarinen, 1988). This theory, which is a crucial milestone in international business research, has since been revised by Johanson and Vahlne (2003), who proposed an integrative model (drawing on the network model and model-based process).

As the process-based internationalisation model is often interpreted as a risk reduction model, Johanson and Vahlne (2006) articulated a relationship between opportunity and commitment, arguing that this relationship has not been given enough attention in previous research (in the original model opportunity development is an important outcome of commitment).

Johanson and Vahlne (2009) viewed the development of international business as resulting from network-based and web relationships (unlike the neoclassical market with many independent suppliers and customers). Here, the focus is on uncertainty, which is intrinsic to the network reality and more relevant than the physical distance to foreign markets. They reviewed the model, aggregating ‘trust building’ and ‘knowledge creation’ to the ‘change mechanisms’ of the model, advocating that new knowledge is a direct product of the relationships formed.

Based on the Uppsala model, the work of Johanson et al. (2011) developed the risk management perspective and its implication for the analysis of the firms’ internationalisation stages. They showed that, during the internationalisation process, the level of risk changes as a result of uncertainty changes and the level of commitment.

In short, we can say that in the Uppsala stages model of internationalisation, the firm gradually increases its international participation (information and experience). The model basically contemplates the following stages: (1) no regular export activities; (2) export via independent representatives (agents or distributors); (3) establishment of a foreign sales subsidiary; and (4) establishment of foreign production/manufacturing units. Its main rationale is that evolution of the internationalisation process is a consequence of the firm’s increased knowledge and operations in foreign markets, as well as a result of the increasing resource commitment.

2.2.2. The eclectic paradigm

The eclectic paradigm (or OLI: ownership, location, internalization) is an integrative, multi-theoretical proposal developed by Dunning (1977). It synthesizes the transaction cost elements (ownership advantages and internalization), and robust market theories (relationship of the firm

with the market: firm comparative advantage) with macroeconomic approaches to international production (product cycle model: location advantage) (Cantwell and Narula, 2001; Dunning, 2001). It was the predominant analytical tool in international business literature as it accommodated a variety of operational and testable economic theories, foreign direct investment, and international activities of multinational companies (Dunning, 2000).

The eclectic paradigm is a simple, but deep, construct that explains the causes of the firm's international expansion, arguing that the geographic extent and the industrial element of foreign production of MNEs are determined by the interaction between three interdependent variables (three sub-paradigms). The first relates to the firms' competitive advantages – their strategic control of tangible assets (e.g., technology, machinery, physical structure, stocks) and intangible assets (e.g., brand image, management skills, organization) which are ownership (O) specific (Dunning, 2000, 2001). The second sub-paradigm is related to the advantages from locating (L) in a particular country as a way of adding value to the MNEs activities. This location advantage represents the benefits from exploiting the firm's presence in a specific foreign country (e.g., political, economic, social stability, cultural diversity, production costs, salary level and access to the labor force, government benefits for firms or foreign investment, natural resources, infrastructure, tariff barriers and market dynamism). As this sub-paradigm becomes more static, there is a greater potential for firms to export their specific advantages (O), which are interconnected with foreign direct investments (Dunning, 1998, 2000). Location advantages are related to Porter's cluster concept (Porter, 1990; Porter and Kramer, 2002; 2006) reinforcing the role of location in competition and strategy, as a source of the firm's competitive advantage (Porter, 1998). The internalization advantages (I), the third sub-paradigm of OLI framework, are the advantages the firm can benefit from by exploiting its ownership advantages internally rather than through other firms, based on four decision criteria (Dunning, 1998, 2000): risk; control; return; and resources.

The eclectic paradigm has been extensively used to explain the growth of MNEs in various industries and types of activity (Cantwell and Narula, 2001). However, the three variables (OLI) have been contested in the context of economic globalization.

Based on the political and technological changes of the 1990s that led to a knowledge-intensive globalized market in which alliances played an important role, Dunning (1994, 1995,

2000) includes in the ownership concept (O) the advantages of costs and benefits derived from inter-firm relationships and transactions (strategic alliances and networks).

Dunning (1994, 1995, 2000) also considered new variables in the location concept (advantages of countries), for example the encouragement of knowledge generation and sharing, or the role of national and regional authorities in influencing the extent and structure of localized centers of excellence. He also expanded the internalization concept to include dynamic objectives, such as the search for strategic assets (or capabilities, increasing the firm's competitive advantage) and the search for efficiency.

Cantwell and Narula (2001) point out that globalization has increased the dynamic interactivity between the O, the L and I elements, which are analyzed at firm, industry and country level, mainly using two points of view. The first relates to a knowledge-based society, which allows the firm's advantages and needs to be efficiently exploited helping increase and sustain its competitive advantage. This then leads to a complex interdependence between the ownership and location advantages. The second point of view relates to the influence of globalization, which affects the organization of the MNEs cross-border activities.

Based on the OLI paradigm, Guisinger (2001) proposes the OLMA (Ownership, Location, Mode of entry and Adjustment) model as a more complete set of concepts necessary for studying modern MNEs. Assuming that the 'eclectic researchers' are followers of the environmental context, while the 'organizational researchers' focus on the structural context, Guisinger's (2001) study expanded the eclectic paradigm, incorporating the highest levels of environmental and structural complexity through two methods: (1) deconstruction of the multinational company business processes; and (2) development of a more complete definition of the international business environment (geovalent elements).

Dunning and Lundan (2008) incorporated an institutional dimension to the OLI paradigm. They believe that the theories based on ownership advantages of the firm are increasingly being challenged by new forms of organization. Trying to connect the macro and micro analysis and join both formal and informal institutions, the institutional approach seems to be a promising option for improving our understanding of several contemporary multinational companies.

The focus of the eclectic paradigm is on explaining how MNEs internationalize (which are different from SMEs in their essence), their capacity and willingness to internationalize their

production activities, thus becoming a reference in the empirical studies of entry modes. However, it does not clarify the reasons why firms internationalize.

The OLI paradigm appears to be redundant in distinguishing between firm-ownership advantages or firm-specific advantages (competitive advantages or core competences) and internalization advantages (Buckley, 1988, 1990; Piggot and Cook, 2006). Moreover, it is also considered to be static; it explains neither the nature of inter-relationships among the determinant factors (firm-ownership advantages, location advantages within the marketplace, and internalization advantages of integrating transactions), nor the strategic decisions that influence the firms' entry choices, nor the change of the environmental conditions (impact of social and political changes) (Buckley, 1990; Agarwal and Ramaswami, 1992). Moreover, the applicability of OLI or OLMA proposals appears to be poor in the case of SMEs.

2.2.3. Network internationalisation theory

Academics and practitioners have been focused on networks, which are a “*structure where a number of nodes are related to each other by specific threads*” (Håkansson and Ford, 2002, p. 133).

The network theory arises from the work conducted by researchers of the IMP Group (Industrial Marketing and Purchasing) (Brito and Costa e Silva, 2009), but quickly gained popularity in the international business literature (Törnroos, 2000). This theory aims to analyze and understand the industrial systems through three variables: (1) actors (individuals, firms or groups); (2) activities; and (3) resources (physical resources such as materials, equipment, buildings; financial resources; human resources; and intangible resources, e.g., knowledge, brand image). When actors combine, use, consume, develop, exchange or create resources they perform activities (Håkansson and Johanson, 1992).

The network theory of internationalisation is an expansion of the internationalisation process theory (Uppsala model) and describes the industrial markets of SMEs as firms' networks, based on the resource dependence theory. The basic assumption of this theory rests on the assertion that the actors (firms) are dependent on resources controlled by other parties. Accessing resources and building relationships represent the process of resource consumption. Given the firm's goal is to

survive, internationalisation is a way to increase the chance of survival, both in the short and medium term (Johanson and Mattsson, 1988, 1992).

The unit of analysis in network-based theory is no longer the firm. Instead the focus is on the relationship between several actors, such as competitors, suppliers, customers and distributors, which make up the overall network (Johanson and Vahlne, 1993). Network theory is especially used to explain the internationalisation of SMEs and applied in international entrepreneurship research.

There is a clear change in the business world towards a multipolar perspective: classical transactions based on power and control between firms are giving way to cooperative relationships based on multipolar firms (Wright and Dana, 2003). Moreover, as presented by Dana (2001) there is plenty of evidence not only of the growing importance of international networking activities, but also of the fact that networks provide opportunities for internationalisation. The importance of symbiotic business networks between small and large firms is provided by Etemad et al. (2001) who claim that globalization is transforming the competitive environment of small and large firms alike.

In summary, the network approach gives us a better explanation of the internationalisation of SMEs (Ahokangas, 1998), and it is based on the industrial networks theory, which states that firms develop in a relationship-based context. They establish long-term relations among them, which go beyond the mere transaction. The domestic network of the firm and the relationships within it may be a starting point for firms to internationalize. By entering new countries, firms have the opportunity to develop new relationships giving them access to other country's markets. Therefore, internationalisation is a process led by relationships and the evolution of a firm's network. Further, the availability of market information from the network partners may be a potential source of competitive advantage for the internationalized SME (Johanson and Vahlne, 1993; Lin and Chaney, 2007), through the sharing of information, support and assistance (Dana et al., 2000).

2.2.4. The new ventures and born-global

The rapid changes in the business and global economy oblige firms to accelerate international market entry strategies, which are not captured by the incremental and traditional models (Chetty and Campbell-Hunt, 2004; Prange and Verdier, 2011). Despite the efforts to

develop new work, models, theories and evidences in the business internationalisation area, these theoretical developments have not matched up with the fast developing economics (Madsen and Servais, 1997; Dhanaraj and Beamish, 2003; Coviello and Jones, 2004; Dimitratos and Jones, 2005; Wennberg and Holmquist, 2008). And as a research issue, it is still lacking the consensus needed to define it as a key area in need of attention (Rialp et al., 2005; Knight and Cavusgil, 2005; Weerawardena et al., 2007).

The emerging global environment underpinned various studies analyzing SMEs and entrepreneurs as they no longer compete solely in their domestic markets. As such international entrepreneurship research grew dramatically as a result of its multiplicity of alternatives approaches (McDougall and Oviatt, 2000; Young et al., 2003; Wright and Dana, 2003; Dana et al. 2004) that abandoned hierarchical, transactional models to embrace relational, network based models, in which information, knowledge, technology were part of a symbiotic managerial perspective with focus on a multi-polar network world.

The international new ventures – or born globals – are the most recent phenomena in internationalisation. This innovation is based on the early stages of the internationalisation process, reflecting the inadequacy of the established theories of internationalisation to explain the ‘new’ phenomena (Madsen and Servais, 1997; Coviello and Jones, 2004; Dimitratos and Jones, 2005; Wennberg and Holmquist, 2008; Catanzaro et al., 2011). Born globals are firms that expand into foreign markets from or near their birthplace (Knight and Cavusgil, 2004).

The need for new and modern approaches to the internationalisation of firms has been recognized in the literature. This has resulted from strong objections to internationalisation process theory, reflecting the emergence of new types of business, known as ‘international new ventures’ or ‘global start-ups’ (Oviatt and McDougall, 1994), ‘high technology start-ups’ (Jolly et al., 1992), ‘infant multinationals’ (Lindqvist, 1991, 1997), ‘born globals’ (Knight and Cavusgil, 1996; Madsen and Servais, 1997; Bell et al., 2001, 2003; Chetty and Campbell-Hunt, 2004) and ‘born again global’ (Bell et al., 2001) or ‘born again international’ (Catanzaro et al., 2011).

These ‘new’ phenomena, which are marking the beginning of the twenty-first century, have been studied by researchers who require new theories to describe the internationalisation of firms (especially SMEs), reflecting the ineffectiveness of traditional theories of internationalisation. Nevertheless, the research developed so far does not appear to be enough to anchor a new theory and instantaneously forge consensus on the definition of the internationalisation phenomena.

The main characteristics of born globals are the following: a global vision from the outset; previous international experience of the management team (making them aware of international opportunities); access to international networks; technology-based firms, knowledge-intensive industries; and highly-specialized firms with very narrow core capabilities. The technology or innovations of this kind of internationalized firms quickly becomes obsolete; they need to exploit their advantages without delay, forcing them to quickly develop international activities.

2.3. Integrative schematics of the internationalisation theories

Different explanations have been developed over time attempting to analyze and explain the firm's internationalisation process. Such understanding helps provide answers to five important questions – how, why, where, what and when – that identify important key success factors for both professionals and academics.

Based on the main literature in this area, we have constructed a framework (Table 1) of high-level interaction. This provides researchers with the main internationalisation theories, their focus and basic assumptions, showing their historical timeline. Table 1 is an attempt to synthesize the main research streams. Taking into account the theoretical fragmentation in the international business arena, we decided to follow Rask et al. (2008) in providing a pluralist perspective within the international research area.

The internationalisation of firms is a phenomenon that assumes, among other things, an entry into foreign markets, and a growing process of involvement and international exposure. It appears that firms may choose from a range of market penetration formulas (as reflected in Table 1) which implies that there are various levels of commitment, control and risk for the firm. It is noted that theory development in this area reached a high degree of fragmentation, resulting in several streams which focus on the same general issues from several perspectives (Sarkar and Cavusgil, 1996; Papadopoulos and Martín, 2011; Dana et al., 1999b; Young et al., 2003). In this sense, it appears that each of the literature inputs per se does not explain the complex nature of internationalisation of firms. However, all models and theories when analyzed together can complement each other and facilitate the understanding of this phenomenon. Dana et al. (1999b) concluded that there is no single model that best describes the internationalisation process of all

firms, containing all aspects that affect the internationalisation path, a complex phenomenon with multiple drivers (Brydon et al., 2013).

Among the research streams, special relevance has been given mainly to what are known as the incremental models. This group of models includes the Uppsala stages model and latterly the network model – these two models are to some degree related, given that the last evolution of the Uppsala model includes network variables. At a time when the unit of study for internationalisation models is changing from the country (macro) to the firm (micro), the Uppsala model (which despite its standard form being oriented towards firms), was based on case studies of large companies – an approach which in fact is very much aligned with the OLI framework (basically designed to describe the internationalisation of multinationals). SMEs have been gaining visibility in the world economy, and more attention is being paid to the need for them to increase their international outreach, especially by participating in networks to make up for their lack of diverse resources (from knowledge, to funding and technology etc.). The literature has started to reflect this reality in an attempt to describe the internationalisation process of SMEs. This trend can be seen in the latest additions to the Uppsala model (including network variables), networking theory, entrepreneurial trends (with small firms being born global) and the most recent integrative models that try to explain the internationalisation process of companies by integrating fundamental variables. The models explaining the internationalisation of multinationals date back some fifty years, while the models explaining the internationalisation of SMEs only go back some twenty five years. This path is guided by four types of complementary perspectives: rational (or economic), learning (or behavioral), inter-organizational (network) and entrepreneurship, as can be seen in Table 1.

Traditionally, the studies on firm's internationalisation have been based on large multinational companies, while smaller firms restricted their businesses to the national scope (Dana et al., 1999a; 1999b; Dana, Dana and Spence, 2004; Dana, 2001; Etemad et al., 2001; Wright and Dana, 2003; Dana and Wright, 2009). However, although internationalisation has become a synonym for survival, growth and sustainability for SMEs, which have to face globalized markets (Alon et al., 2009), there are yet small firms which concentrate their businesses only on domestic markets, avoiding international opportunities (Ratten et al., 2007). Despite this, SMEs are of increasing importance for the international economy. Wright and Dana (2003) and Dana, Etemad and Wright (2004) defend an emergent competitive paradigm in international

entrepreneurship strategy, based on the importance of international symbiotic network activities between SMEs and large firms, which cooperate voluntarily for enhancing the efficiency and profits of both firms. Moreover, networks facilitate the process of internationalisation of SMEs as networks represent new global opportunities to access foreign markets, as they share with large companies the same competitive space (Dana, 2001).

The several internationalisation theories are present in Table 1. These are based on three main dimensions with five major research streams in this area, linking the ontological perspective, or basic assumptions in which the theoretical streams are based, with theories (relating each ontological assumption) and key constructs (of each theory). Five main perspectives are identified: (1) the economic view; (2) the behavioral view; (3) the ecological view; (4) the ‘new’ international entrepreneurship; and (5) the integrative models.

The economic view is focused on business analysis and international investment, positivism, logical empiricism and a quantitative and nomological view. The first approaches used to analyze business internationalisation are based on the study of international trade among nations (mainly Adam Smith’s and Ricardo’s work). After that, business internationalisation used an economic logic to understand why firms enter international markets based on the theory of firm growth, product life cycle theory and transaction cost theory, among others. Economics-based models are the result of the neoclassical theories of foreign direct investment, the theories of the firm and the macroeconomic approaches to foreign investment, the concept of technological accumulation and the eclectic paradigm (Moreira, 2009; Ietto-Gillies, 2012; Dunning, 1994, 1995). As observed in Table 1, MNEs play a key role in most of the theories of the economics-based models. Internationalisation is analyzed as a multifaceted and complex process in which MNEs were used as a rational economic decision making unit. The eclectic framework (or OLI paradigm) is amongst the main theories of this school of thought.

Different research streams have been developed, which include economic and behavioral approaches, addressing internationalisation as an evolutionary process (e.g. bounded rationality, partially built social reality, etc.), in which the Uppsala model and the decision models of foreign direct investment (FDI) can be found.

Internationalisation as an inter-organizational process (social capital, trust and ‘human variables’ in decision-making) is part of the ecological view, in which the networks approach plays a major role.

Internationalisation can also be seen through the entrepreneurial lens (Lu and Beamish, 2001). Firms managed to overlook the limitations of previous restrictions to internationalisation and they launched onto the world market with rapid internationalisation capability, as ‘new’ ventures in entrepreneurship (Knight and Cavusgil, 1996; Rennie, 1993).

The ‘new’ international entrepreneurship led to born global firms, which are focused on worldwide opportunities. McDougall and Oviatt (2000) defined international entrepreneurship as a combination of innovative, proactive, and risk-seeking behavior that crosses national borders, intending to create value in firms and exploit opportunities.

In fact, discussion of entrepreneurial behavior by SMEs is common in the recent literature. This area of research focuses on opportunities (identification, exploration, exploitation), in which the network, knowledge, the owner, resources and capabilities have an important role, with industry and technology as driving forces. The underlying move from resource-based to knowledge-based economies has led to countries facing several challenges (Porter et al., 2001).

Internationalisation of firms is a complex issue. Several researchers claim a need for a new perspective on internationalisation and a holistic approach – an approach that is transversally accepted, and more integrative, capturing the variety of situations found in business practice (Melin, 1992; Fletcher, 2001; Etemad, 2004; MacAuley, 2010; Rask et al., 2008). The holistic model must be realistic and comprehensive, taking into account the different contributions of internationalisation theories and models that have been proposed over the years; and fit any firm and truly explain the internationalisation of firms (e.g. Leonidou and Katsikeas, 1996; Coviello and McAuley, 1999; Fillis, 2001; Whitelock, 2002; Ruzzier et al., 2006; Mejeri and Umemoto, 2010). This holistic approach has already been studied, for instance by Bell et al. (2003), Etemad (2004) or Mejeri and Umemoto (2010), but none has yet replaced existing models. This holistic view must gather the key elements of the theoretical models of several researchers (embodying the mainstream line of thinking), reflect the important elements of the firm’s decision-making process concerning international activities and may also be used by practitioners. Integrative models are the most recent trend in international research literature and have the ability to capture the most relevant elements and the nature of the interactions in business internationalisation.

Table 1 - Summary of the most important stream theories in the internationalisation of firms' literature

Thought schools		Basic assumptions	Internationalization theories	Main Researchers	Key constructs Focus	Years
Classical theories	Economic-based Positivism/logical empiricism Quantitative Nomological	Explanation of international trade between the nations. Unity of analysis: country. International trade theories based on differences in prices of goods in several countries. Trade as also a reflection of the differences in countries' resources.	Theory of absolute advantage	Adam Smith (1776)	Division of labor. Productive powers of labor.	1700-1920s
			Comparative advantage theory	David Ricardo (1817)	Lower marginal. Opportunity cost.	
			Theory of the resources allocation (Heckscher-Ohlin theory)	Heckscher and Ohlin (1919-1924)	Emphasizes on resource differences as the only trade source. Comparative advantage influenced by: relative factor abundance (refers to countries); relative factor intensity (refers to goods). Factor-proportions theory. Factor price equalization. Commodity-price convergence trends.	
Market theories		Internationalisation is determined by rational perspective with focus on the good results for the firm. Unity of analysis: firm Internationalisation is synonymous of increase firm's profits and performance. Efficiency of multinational enterprise (MNE). Economic rational and well-informed decision-process. Firms do rigorous market research to organize their international activities. Economic efficiency. Institutional-economic perspective.	Product life cycle theory	Vernon (1966)	Product life cycle approach: introduction, growth, maturity and decline. Fallow firm-specific developmental stages as well as external markets at home and abroad as drivers for corporate internationalisation and trade. Production costs. Partial or total delocalization of production. Risk of dissemination of assets such as innovation and strategic know-how.	1960-70s
			Theory of the growth of the firm	Penrose (1959)	Productive opportunities. Factors of firm growth.	
			Transaction cost theory	Williamson (1975)	Transaction characteristics: minimization of transaction costs. Economies of scale. Vertical integration decisions: how firms evaluate whether or not to establish a manufacturing subsidiary in a market abroad. Competitive markets.	
			Theory of competitive advantage	Porter (1985)	Productivity growth. Focus on strategies.	
			Internalization theory (Hymer model)	Buckley and Casson (1976, 1998)	Internalizing and control. Market imperfections. Market-based versus firm-based. Strategic significance in market entry. Exploitation of rent-seeking opportunities.	
			Eclectic framework (OLI paradigm)	Dunning (1977, 1979, 1980, 1981, 1988, 1995, 2000, 2001)	Ownership, location-specific and internalisation advantages are the collective variables which form the reasons for international trade and investments of firms. Exploitation of competitive advantages and alliance capitalism. FDI (foreign direct investments) and MNE.	
			Market-imperfection paradigm	Kindleberger (1969) Calvet (1981)	Control and coordination. Trade-offs between risk and reward.	80s

Thought schools		Basic assumptions	Internationalization theories	Main Researchers	Key constructs Focus	Years
Market theories	Economic-based continuation	Continuation	Resource-based theory	Penrose (1959)	Growth of the firm. Firm internal resources (core competences: skills, reputation): key to the firm's acquisition and maintenance of sustainable competitive advantage (tangible and intangible resources). Productive services available from management with experience (within the firm). Firm-specific advantages (competitive advantage): unusual, valuable, non-substitutable and difficult to imitate by the firm's competitors. Exploitation and development of firm-specific advantages. Technological cycle of the firm.	90s
			Organizational capability	Contractor and Kundu (1998)	Firm's capability. Cultural distance. Trade-offs between value and cost.	
Internationalisation models	Behavioral ontology perspective Managers satisfying decision-making Rationality restricted Social reality partially built	Internationalisation is determined by the firm's learning curve, which helps reduce risks. Decision makers and organizations are subject to limited rationality, lack knowledge about alternative actions and their outcomes, conflicting goals and aspirations and attempts at avoiding uncertainty. Learning curve reduces risks associated with uncertainty. Terms like 'social', 'process', 'relationships' and 'commitment' are some of the key constructs in this models of internationalisation studies and management studies in general. Learning perspective.	Foreign direct investment (FDI) decision models	Hymer, 1971 Aharoni (1966)	Most enduring form of internationalisation. High risk. Risks in the foreign country: economic instability, political, cultural and social risks. MNEs.	1960-70s
			Uppsala model. U model IP (international process) model (Nordic school)	Johanson and Vahlne (1977) Johanson and Wiedersheim-Paul (1975)	Incremental steps process when entering into new markets. Most important obstacles to internationalisation: lack of experiential knowledge. Gradual process of learning and decisions. Psychic distance as a factor preventing or disturbing the information flow between firm and market: e.g. differences in language and culture, level of education, political differences, etc. Uncertainty avoidance. Confined choice. Market knowledge development. Stepwise operations approach to more extended international operations. Market and firm commitment. Cycle of knowledge (learning and commitment process). Trade-offs between growth and risk.	
			Innovation-related models Innovation process models (I-models) (USA)	Roger (1962) Lee and Brasch (1978) Reid (1981) Lim et al. (1991)	Firm-specific market. Knowledge and commitment. Trade-offs between growth and risk. Stepwise, incremental involvement to exporting and new markets: gradual process usually towards a deeper penetration of markets and geographically and culturally more distant markets. Experiential nature and 'innovative' phases. Psychic distances overcome through experiential learning.	80s

	Thought schools	Basic assumptions	Internationalization theories	Main Researchers	Key constructs Focus	Years
Internationalisation models	Behavioral ontology perspective continuation	Continuation	Pre-engagement phase of the firm's export expansion process	Wiedersheim-Paul; Olson and Welch (1978)	Pre-export. Passive and active exporters. Location theory.	80s
			Network models	Johanson and Mattson (1986, 1988)	Knowledge and commitment. Strengthening network position.	2000s
			International entrepreneurship model	Jones and Coviello (2005)	Behavior and performance. Value creating events.	
	Ecological school Social construction The reality is embedded in relationship and networks Social capital, trust and 'human' variables in decision-making process	Internationalisation is determined by external conditions. Internationalisation is a process and takes place through networks of relationships. Foreign market entry modes are different forms of business activity suitable for different types of firms in different circumstances, conditions and areas of competence. Inter-organizational perspective.	Adaptive models	Calof and Beamish (1995)	Adaptability to the environment. Congruence among the structural choices and human resource choices.	1990s
			Network-based perspective	Johanson and Vahlne (1990, 1999)	Internationalisation characteristics of the firm and of the market. Exploitation and development of relationships. Connected exchange of information, capital, products, ideas and services across frontiers to explain why internationalisation takes place. Relationships and networks approach in management. Interdependence. Connections take firms abroad. Vertical (along the manufacturing and distribution channel) and horizontal (among competitors) relationships.	
			Institutional theory	Davis et al. (2000)	Institutional constraints. Operationality within institutional constraints.	2000s
			Evolutionary theory	Cattani and Tschoegl (2002)	Environmental changes. Environmental fit.	
		New entrepreneurship and strategy line/choices.	Born globals Born again global New ventures	McDougall and Oviatt (1994, 2000)	Global markets. World-wide opportunities. Information technology impacts. 'Borderless' organizations. The 'hollow corporations'. Knowledge as a source of competitive advantage. Manager's characteristics and skills. SME.	2000s

	Thought schools	Basic assumptions	Internationalization theories	Main Researchers	Key constructs Focus	
Internationalisation models	Integrative models	Internationalisation as a complex phenomenon. The essence is based on the need to create a proposal that explains the whole phenomenon and not only part of it.	Inclusion of several modes of internationalisation	Fletcher (2001)	Internal and external environment. Outward (direct export) and Inward (import). Linked outward and inward activities (strategic alliances).	2000s
			Internationalisation pathways	Bell et al. (2003, 2004)	Penetration of foreign markets incrementally ('traditional' firms). Internationalisation in a very fast pace ('born globals'). Entering into foreign markets with some improvements and fast penetration ('born-again global').	
			Push, pull and interaction factors	Etemad (2003, 2004)	Push forces (internal firm-specific factors): entrepreneurial attributes, innovative products (based on the strategic management theories of resource-based view and knowledge-based view). Pull forces (external environmental conditions to the firm): pull the firm to engage in international business: international market opportunities that motivate the entrepreneur to seek out foreign customers and stimulate the business strategy; niche market opportunity. Mediating forces (interactions between push and pull forces): mental model of the founder (entrepreneurial mindset, behavior and alertness). Focus on why, on the reasons of the SME internationalisation.	
			Knowledge-based perspective (as an extension of the resource-based view)	Kuivalainen et al. (2003)	Knowledge management model.	
				Saarenketo et al. (2004)	Evolutionary knowledge management for internationalisation. Entrepreneur's role. Internal and external knowledge. Sustainable international competitive advantage.	
				Prashantham (2005)	Social capital and internet as driving forces of internationalisation. Market knowledge. Knowledge-intensity. Information dissemination, acquisition and sharing.	
				Mejeri and Umemoto (2010)	Knowledge as central for the understanding of SME internationalisation. Market knowledge: objective or explicit information about foreign markets. Experiential knowledge: cultural knowledge (language knowledge, habits, norms, laws, behavior); network knowledge (social and business network, knowledge as the network itself); entrepreneurial knowledge (existence knowledge of opportunities and exploiting them).	

Source: Own preparation based mainly on Leonidou and Katsikeas (1996); Dana et al. (1999a; 1999b); Andersson (2000); Törnroos (2000, 2002); Geursen and Dana (2001); Young et al. (2003); Ruzzier et al. (2006); Rask et al. (2008); Mejeri and Umemoto (2010); Daszkiewicz and Wach (2012) and Thai and Chong (2013).

Over time new patterns emerge. As seen in Table 1, there are several studies integrating the traditional process-based model of internationalisation with a networked approach into a holistic perspective (Coviello and Munro, 1997; Laine and Kock, 2000). The case study presented by Johanson and Vahlne (2003) is another example of an ‘international new venture firm’, in which an integrative model is used to explain the characteristics of the network model and the process-based internationalisation model, combining knowledge and market commitment from the ‘old’ internationalisation process model with the similar mechanism of knowledge and commitment in the business relationship network.

However, it appears that no integrative model has yet reached a consensus in the academic community. Furthermore, to date the main findings from previous studies in the literature have not been collated, nor have the timeliness of international business been compared. Moreover, as seen in Table 1, the outward perspective still prevails whilst the inward perspective is almost absent. Consequently, further research is still required.

As referred to in Table 1, the country was the unit of analysis among the first trade theories. Although those theories are still referred to in the literature (O’Rourke and Williamson, 1994; Aldrich, 2004; Schumacher, 2012), the firm has been used as the main unit of analysis from the 1960s onwards, which depicts a clear change in the international business *modus operandi* (Werner, 2002).

One can identify that the economic view tends to explain why firms internationalize, based on growth, profitability, power, and resources; meanwhile behavioral approaches take learning and organizational commitment as core factors explaining internationalisation. Clearly, the behavioral perspective can be seen as an expansion of the theory of international business, encompassing economic, social, political and cultural approaches. This perspective bridges the entrepreneurship concept leading to an ecological line, integrating the economic and the behavioral perspective.

Although several schools of thought have been put forward in Table 1, its aggregation is not rigid. Each theory has incorporated updates and has been influenced by the natural evolution of international business, internationalisation of business strategies and the global economy. Moreover, each theory arises to countenance gaps identified in the numerous other theories (i.e., concepts of commitment, knowledge and current activities are considered not only inside the firm

but also in connection with its cooperation with other firms). In order to appreciate and enrich our understanding of the firm's internationalisation process, researchers can use more than one theoretical approach (Rask et al., 2008).

From Table 1 one can conclude that although economic theories – which have focused on large multinational firms – have been at the origin of internationalisation theories, only recently have SME-based internationalisation theories stood out. However, it is possible to claim that no single integrated theory can explain the internationalisation of SMEs. Moreover, more than 55 years after the first internationalisation models were published, there is a consensus that internationalisation is no longer a single decision or discreet fact; it is rather a multifaceted, complex process that evolves over time (Welch and Paavilainen-Mäntymäki, 2014).

2.4. Conclusions

Looking at the existing body of literature studying internationalisation of the firm, it is clear that this is an area that has received much attention. Much of the interest in this area has been driven by firms that are looking for a formula for success to be employed when they embark on an international venture. The review carried out here together with the integrative schematic proposed shows how the literature has evolved over a historic timeline. Ultimately it can be seen that there is no one unique perspective for analysing internationalisation, and equally there is no single success formula that can be applied to a firm. The most recent models try to bring together elements that seem essential, trying to gather consensus in the literature and the business world. However, no one model exists that combines plausible explanations for the distinct realities and needs that exist in firms, particularly at a time when the markets and challenges are continuously evolving.

Our intention with this chapter is not so ambitious as to propose a formula for success for firms that wish to internationalize. As stated above, our objective was to bring together under one schematic the internationalisation theories, so as to show the interaction between them, drawing out the different trends that can be seen in the evolution between the eighteenth and the twenty-first centuries. This schematic gives us a quick and objective view of the various phases found in

the literature. Rather than searching for a break with the past, emphasis was placed on the continuity that exists between the past, present and future. In this context, we propose a conceptual model in chapter fourth that aims to reinforce holistic models as the latest trend on internationalisation theories, gathering the most important aspects of the most conventional theories in the literature. We aim to highlight the sustainable international competitive advantages of SMEs through a knowledge-based perspective (as an extension of the resource-based view), identifying the innovation capabilities affecting export performance that may influence management decisions of entrepreneurs and SMEs' development.

Our motivation is the internationalisation of SMEs. Before proposing the conceptual model, it is especially pertinent to analyse the literature on SMEs internationalisation, reviewing empirical and conceptual published studies indexed in the main academic databases, to know what are the main lines of research and tendencies, which is the focus of the third chapter.

For the academic community, the work developed in this second chapter provides a way to try to organise the body of research work, models and theories that try to explain internationalisation of firms and reinforce the interaction between the various theories. Naturally, a work of this nature is never complete, with research constantly changing. However, in the future it will be easier to complete this work given the consistent basis that has been laid down.

As is clear in the literature studied, emphasis was clearly placed on the SME perspective to the detriment of the large multinationals. While this study did not ignore multinationals, this bias can be considered one of the limitations of this study.

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3. SME INTERNATIONALISATION RESEARCH: MAPPING THE STATE OF THE ART

ABSTRACT:

This chapter offers a review of empirical and conceptual published studies indexed in the main academic search databases, covering the literature on the internationalisation of small and medium-sized firms. A total of 554 papers covering the period between 1977 and 2014 were analyzed in this study, providing a significant contribution to knowledge in this field and improving understanding of the relevant research to date. The analysis revealed the following general trends: empirical research focuses mainly on Europe, and it is characterized by a multi-topic diversity that identifies 74 different topics. This chapter provides academics and practitioners with a clear perspective on future directions of SME internationalisation.

KEYWORDS: Internationalisation; SME; Small firms; Literature review; Internationalisation topics.

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3.1. Introduction

The current trend of increasing integration and interrelationships in the international economy has had a pervasive influence on the internationalisation of small and medium-sized enterprises (SMEs). To date, although several studies have analyzed the literature on SME internationalisation, a full understanding still needs to be developed of this phenomenon in its several dimensions, as it is of major importance to both companies in the international economy and academic research.

The study of internationalisation, particularly of SMEs, has been of increasing interest to the research community (e.g., Etemad, 2004; McAuley, 2010; Kuivalainen, Sundqvist, Saarenketo and McNaughton, 2012) because of the relationship between SME competitiveness and increased productivity, flexibility, and an active presence in the global market.

Although SME internationalisation is a topic that has already received special attention, it is still relatively new. Traditionally, research has extensively focused on large manufacturing firms, especially on the activities of multinational enterprises (MNEs), mainly applying the transaction cost model, the eclectic paradigm, and monopolistic advantage theory (Dana, 2001; Etemad, Wright and Dana, 2001; Wright and Dana, 2003; McAuley, 2010). However, international markets are not only occupied by MNEs but also by SMEs, which differ extensively in terms of competences, market behavior and strategies followed. SMEs have created new opportunities and shown profitable growth (Lin and Chaney, 2007) while playing an important role in the contemporary global marketplace (Javalgi, Todd and Granot, 2011; Hessels and Parker, 2013). If in the literature on SME internationalisation, a contrast is drawn between the “traditional stages models” and “new” phenomena, born globals (BGs), or international new ventures (INVs) (D’Angelo, Majocchi, Zucchella and Buck, 2013), one often finds articles dealing with firms and ventures without clearly referring if they are dealing with small or large firms.

Previous reviews have found that the theoretical and methodological bases of SME internationalisation knowledge are growing but that the field is still fragmented. While several researchers have tried to put forward an integrative view of internationalisation of SMEs (e.g., Saarenketo, Puumalainen, Kuivalainen and Kyläheiko, 2004; Graves and Thomas, 2008; Mejri

and Umemoto, 2010), none of the models has been commonly accepted by the academic community.

Although previous studies have covered several topics within SME internationalisation, the present study is unique in its depth and length of coverage. McAuley (1999; 2010) covers 20 years of research (1989–2009) but selects only some of the relevant work published (i.e., 24 papers) on SME internationalisation, using a process view and failing to cover internationalisation from other angles. Leonidou and Katsikeas (1996), Coviello and McAuley (1999), Coviello and Jones (2004) and Rialp, Rialp and Knight (2005) review 10 years of research limited to early internationalizing firms. Fillis (2001) analyzes 33 papers on internationalisation, covering the period 1975–2000, without applying a clear criterion for firm size and, therefore, including MNEs in the study. Etemad (2004) and Kuivalainen, Sundqvist, Saarenketo and McNaughton (2012) present an overview of the conceptual frameworks and concepts relating to internationalisation patterns of SMEs without including trends in the empirical literature on this area of research. Kontinen and Ojala (2010) focus on a review of the relevant research on internationalisation of family businesses, in which only 56% of the studies are based on SMEs.

The following authors stand out for their emphasis on international entrepreneurship. Keupp and Gassmann (2009) review 179 papers published in 16 journals. Although firm size is not considered or defined as a search criterion in their study on international entrepreneurship, their conclusions note that small, young firms have a propensity to internationalize. Jones, Coviello and Tang (2011) reviewed 323 relevant journal, excluding SME internationalisation papers that do not incorporate elements of entrepreneurship. Peiris, Akoorie and Sinha (2012) analyze 291 papers but exclude papers focusing on SME internationalisation without entrepreneurial intervention and include papers that mix SMEs with large firms. Kiss, Danis and Cavusgil. (2012) analyze 88 papers focusing on international entrepreneurship in emerging economies. They conclude that the research in emerging economies is still quite limited and argue for a stronger theoretical grounding and development, better contextual positioning, and greater methodological rigor and sophistication.

Based on these reviews, the growing interest in internationalisation and SMEs is obvious. However, one can also conclude that several studies, although addressing internationalisation, have not focused specifically on how SMEs behave. These studies' focus has been on early internationalisation, family business, internationalizing firms, international entrepreneurship, BGs, INVs and so on, without a clear criterion for firm size, clearly separating SMEs from large firms.

In this context, the present chapter seeks to fill this gap in reviews on the internationalisation of SMEs. For this reason, this chapter systematically examines the literature on internationalisation with the clear objective of analyzing only SMEs, the relevant topics studied, and the latter's theoretical or empirical nature—without any restrictions on time, journals, papers, or researchers. Rather than restricting the search to journals with the highest impact in their fields, we included all published and accessible journal papers that fit the selection criteria deployed. Based on these criteria, this literature review is unique in the literature, to the best of our knowledge.

Evaluations of SME internationalisation processes remain in high demand, with the following questions still needing to be answered. How much SME internationalisation research has been published and in what kind of journals? What are the main characteristics of SME internationalisation research? What is the current state of research and future opportunities for scholars? To explore these issues, we carried out an extensive literature review, seeking to provide an overview of published work focusing on SME internationalisation. In addition to addressing the above-mentioned questions, this review also complements previous surveys of SME internationalisation research that did not apply a systematic perspective. Through this in-depth look at SME internationalisation patterns, the present study helps identify pathways, patterns, and trends, providing insights into how knowledge may be developed in the future and, consequently, contributing to a better understanding of the SME internationalisation field.

This chapter, therefore, categorizes, summarizes, synthesizes, and interprets research on SME internationalisation, between 1977 and 2014. To this end, we reviewed and evaluated 554 studies published in international journals that, as a whole, can be considered representative of the present knowledge about SME internationalisation. These papers were systematically analyzed in an effort to clarify the current state of knowledge about SME internationalisation, focusing on the main topic studied, type of paper and methodology, principal methodological procedures, and countries analyzed. At the end of the present chapter, we discuss our findings, providing insights into the most important and challenging areas for the research community and practitioners, as well as a clearer perspective on future developments within this topic.

3.2. SME Internationalisation

The concept of SME internationalisation is multifaceted, and the definition of SME varies significantly across countries. However, similar criteria to define SMEs are used in the United States (US) and Europe (European Capital Market Institute, 2001). An SME in Europe is a firm that has fewer than 250 employees and a turnover not exceeding €50 million or a balance sheet total not exceeding €43 million (European Commission, 2014). However, in the US an SME can have 100 to 1,500 employees or a turnover from US\$2.5 to US\$21.5 million (US Small Business Administration, 2014). Although there are many working definitions of SME in Europe and the US, as well as across the world, the economic status of small firms and the way they perceive the internationalisation of their business are what is considered most important for the present study's purposes.

The contribution of SMEs to foreign trade is relatively insignificant. The Observatory of European SMEs (2007) concludes that 8% of EU SMEs have reported a value for exports, as part of their turnover. This was significantly less than the percentage of large enterprises (28%) that did so.

Nonetheless, SMEs account for 90% of businesses and more than 50% of employment worldwide (IFC, 2012). SMEs represent 99% of all businesses in the EU, and, as in the rest of the world, SMEs are a key driver of economic growth, innovation, employment, and social integration (European Commission, 2014; World Bank Group, 2015). The internationalisation of SMEs is an important asset in the growth and survival of the world economy (Dutot, Bergeron and Raymond, 2014), especially when these businesses' resources are scarce compared to those of large multinational firms (Karlsen and Nordhus, 2011).

According to the mainstream literature, the concept of internationalisation has been evolving over time. It appears to be an ambiguous term in the literature, and its definition varies according to the phenomena under study (Chetty and Hunt, 2003). These can include exports, trade, cross-border clusters, cross-border collaborations, alliances, subsidiaries, branches, and joint ventures that extend beyond the home country environment (Singh, Gaur and Schmid, 2010). Internationalisation also includes a process of increasing involvement in international operations (Luostarinen, 1980; Welch and Luostarinen, 1988; Ruzzier, Hisrich and Antoncic, 2006) or adapting business operations (Calof and Beamish, 1995), as well as de-internationalisation

phenomena (Calof and Beamish, 1995; Benito and Welch, 1997; Chetty and Hunt, 2003). It varies according to several factors, including firm size, age, and type of management, among others.

In academic circles, internationalisation is a phenomenon that has been intensively studied in recent decades. This research has looked at the topic from different angles, including organizational theory, marketing, strategic management, international management, entrepreneurship, and small business management (Ruzzier et al., 2006; O’Cass and Weerawardena, 2009). The resulting increased volume of internationalisation research includes diverse studies of foreign-market entry strategies, use of information on exports, marketing strategies, and performance in international markets (O’Cass and Weerawardena, 2009). SMEs seeking to grow revenues and to protect their domestic market position find exporting activities to be a common and relatively low risk path by which to gain access to foreign markets (Bello and Gilliland, 1997; Peng and York, 2001; Salomon and Jin, 2008). However, in this context, SMEs face intense competition in international markets, confronting MNEs and national firms that are regionally dominant (Etemad, 2004).

Several perspectives have been used to explain what influences internationalisation. From a historic viewpoint, the first economic studies focused on the national level, studying how various nations maintained decisive competitive advantages in international trade, while also discussing market factors. Over time, the focus has changed from a country perspective to a microeconomic approach. The concept of internationalisation as a process has been extensively studied in the literature by the Uppsala school (Bell, 1995; Johanson and Vahlne, 1977; 1990; Cavusgil, 1980). The latest approaches specifically related to the internationalisation processes of SMEs have taken an entrepreneurial perspective (Oviatt and McDougall, 1994; Jones and Nummela, 2008; O’Cass and Weerawardena, 2009).

Strong criticisms of the traditional process-based view of internationalisation have been put forward by more recent theories involving international business and entrepreneurship perspectives, such as “INVs” or “global start-ups” (Oviatt and McDougall, 1994), “high-technology start-ups” (Jolly, Alahuhta and Jeannet, 1992), “born globals” (Knight and Cavusgil, 1996; 2004; Madsen and Servais, 1997), or “infant MNEs” (Lindqvist, 1997). In fact, recent studies (Oviatt and McDougall, 2005; Zahra, 2005; Coviello, 2006) have identified an increasing number of firms that do not fit the traditional stages of the internationalisation process, as these firms were born already with the goal of playing an active role in international markets.

The traditional theoretical models of internationalisation, which focus mainly on large firms, are also applicable to SMEs. Both types of firms begin their international expansion after reaching a robust size in their domestic market, with competitive advantages arising from their products, and acquiring the accompanying technology, financial resources, or skills management (Oviatt and McDougall, 1994; 1999).

Since the beginning of this century, researchers have attempted to find an all-inclusive reason to explain why firms internationalize. As studies focus on particular aspects of internationalisation, they neglect others. This has resulted in an increased number of frameworks and explanations for internationalisation behavior, each trying to fit the various theories that reflect globalization, complexity of markets, and “new” businesses in an integrative view (e.g., Etemad, 2004; McAuley, 2010; Mejri and Umemoto, 2010; Kuivalainen, Saarenketo and Puumalainen, 2012), as we can see in chapter two.

Clearly, some features are only covered by internationalisation theories. Among these, SMEs are one of the main driving forces in economic development that deserve in-depth analysis so that SME internationalisation research can exploit the newly uncovered or still under-researched topics.

3.3. Methodology: Data Gathering

We adopted the basic guidelines for a systematic review set out by Tranfield, Denyer and Smart (2003). Our review process, therefore, included three stages: (1) planning the review, with particular emphasis on the delimitation of the subject area; (2) conducting the review, especially the definition of the review protocol, identification of key search terms, and data analysis; and (3) reporting and dissemination or thematic analysis, with a cross-sectional approach. A search was performed to identify and analyze the multiple perspectives taken by research published on the internationalisation of SMEs. This systematic electronic search was performed using the following electronic databases: EBSCO, Emerald, Web of Science, and ScienceDirect. These represent some of the most important databases covering management, economics, social sciences, and multidisciplinary areas—based on which we formed a combination of search keywords.

Contrary to most literature reviews, we decided not to restrict our analysis to a particular set of academic journals in the field. This decision reflected a desire to capture as much variability as possible in order to identify different perspectives, following Jones et al. (2011).

The methodological approach complied with two essential conditions. First, we only considered journal papers, excluding books, book chapters, reports, and conference papers, since journal publications are seen as having the highest impact in the management field and are regarded as containing validated knowledge (Tahai and Meyer, 1999; Podsakoff, Mackenzie, Bachrach and Podsakoff, 2005). No attention was given to the reputation of the researchers or journals, despite a known tendency for “new” researchers to follow established researchers who have experience in their area.

Second, papers were selected that included the key search terms “SME and internationaliz(s)ation,” “SME and internationa*,” “small firm and internationaliz(s)ation,” “small firm and internationa*,” “medium-sized firm and internationaliz(s)ation,” “medium-sized firm and internationa*,” “medium firm and internationaliz(s)ation,” and “medium firm and internationa*” - in the title, abstract, and/or keywords. As the focal point of our research is on SME internationalisation, it was essential that this focus to be reflected in the survey conducted with the search engines. There are many studies covering the internationalisation of firms without being clear whether they are SMEs or not. As such, to remove all doubts regarding the focus of this literature review, it was decided to include “SME internationalisation” in the title, abstract, and/or keywords, to direct the search to the desired research niche of SMEs and to extend the scope to any subject within internationalisation. The general research areas covered are: management, marketing, economics, business, and social sciences. The time frame covered articles until December 2014.

Our first search resulted in a total of 707 papers from the four above-mentioned databases. However, a second selection removed inappropriate papers that did not match or fulfill the criteria defined, resulting in a total of 554 studies covering the period 1977–2014. This result was obtained without any kind of subjective intervention. It is clear that there are very few studies from the 1970s and 1980s, which was unexpected. One possible explanation for the lack of more studies prior to the 1990s is that the vast majority of papers do not meet the criteria set out above. We therefore sought to determine if the criteria might be too restrictive by analyzing several papers that were not included and found that they deal with export activities and that references to SMEs are not explicit.

A content analysis was then performed based on a matrix that was created by incorporating the following variables: (1) references of the selected published paper, (2) paper type (i.e., conceptual vs. empirical), (3) main topic covered, (4) main results and implications, (5) methodology used, (6) country of origin, (7) nature of SMEs analyzed, and (8) name of the publishing journal. These eight items allowed us to map the state of the art in SME internationalisation, as well as to summarize and evaluate the SME internationalisation literature and start identifying the focus and trends of internationalisation research. This review method thus applied a systematic process involving inductive thematic analysis of search results (Braun and Clarke, 2006) and sought to organize the literature into patterns of topics.

As Jones et al. (2011), we followed an interpretative synthesis in which – based on the articles’ focus, core ideas and arguments – we inductively derived the topics based on our understanding of the articles. Then, after this identification, we organized and classified the articles, and created the different topics. Based on the topics generated, we aggregated them on higher order classes that we call categories. The list of authors, categories and topics is in Table 8.

3.4. Findings

Table 2 shows the number of papers studying the internationalisation of SMEs. Since 2006, output has increased markedly, with the output in 2012 and 2014 resulting in the highest number of studies published per annum on the subject. This change reflects the increasing importance and contemporary nature of the internationalisation of SMEs and its increasing relevance for the research community over the last few years. The reasons for this may be the increasing number of internationalized SMEs and, on the other hand, the fact that—as shown in various studies—the internationalisation of SMEs not only appears to differ in many ways from that of MNEs but also has diversified its contextual underpinnings. Consequently, the present analysis of the search results was divided into two different timeframes (i.e., 1977–2005 and 2006–2014).

Table 2 - Intensity of the papers published by years

Year	Number of papers	% papers	Accumulated Number papers (%)	Conceptual article		Empirical article	
				No.	%	No.	%
1977	1	0.18	0.18			1	0.19
1980	1	0.18	0.36	1	2.70		
1994	1	0.18	0.54			1	0.19
1995	4	0.72	1.26			4	0.77
1996	4	0.72	1.99			4	0.77
1997	13	2.35	4.33	2	5.41	11	2.13
1998	6	1.08	5.42			6	1.16
1999	9	1.62	7.04	1	2.70	8	1.55
2000	13	2.35	9.39	2	5.41	11	2.13
2001	12	2.17	11.55			12	2.32
2002	8	1.44	13.00			8	1.55
2003	14	2.53	15.52	1	2.70	13	2.51
2004	20	3.61	19.13	2	5.41	18	3.48
2005	21	3.79	22.92	1	2.70	20	3.87
2006	29	5.23	28.16	4	10.81	25	4.84
2007	37	6.68	34.84	4	10.81	33	6.38
2008	32	5.78	40.61			32	6.19
2009	41	7.40	48.01	1	2.70	40	7.74
2010	49	8.84	56.86	4	10.81	45	8.70
2011	54	9.75	66.61	2	5.41	52	10.06
2012	64	11.55	78.16	6	16.22	59	11.41
2013	49	8.84	87.00	2	5.41	47	9.09
2014	72	13.00	100.00	4	10.81	69	13.35
Total	554	100.00	100.00	37	6.68	517	93.32

Source: Own preparation based on the data collection of the databases.

3.4.1. Paper category, references, and publication medium

As shown in Table 2 above, 93% of the 554 studies follow an empirical methodology, whereas 6.7% are conceptual papers. A clear distinction can be made between the two types of publications: while empirical papers were published in all years between 1977 and 2014, conceptual papers were not only published less often but also were more concentrated between 2006 and 2014. Based on this analysis, research on SME internationalisation has followed a more empirical approach. This may be a consequence of the increasing importance of SMEs in the international arena and, also, a result of the need to expand knowledge about the different antecedents and characteristics of the internationalisation of SMEs, which is related to the contemporary nature referred to earlier.

Table 3 - Top thirteen publication outlet

Year	Number of papers	Number of articles published												Total	
		IBR	IMR	JWB	JSBM	JIE	JSBED	SBE	JBR	EMJ	ISBJ	JIBS	EJM		JIM
1977	1											1			1
1980	1														0
1994	1								1						1
1995	4							1	2				1		4
1996	4	1			1										2
1997	13	3						2		1		1		1	8
1998	6			1	1										2
1999	9		1		1		1		1			1	1	2	8
2000	13	1	1	1	2									2	7
2001	12						1		1						2
2002	8						1	1	1	1				1	5
2003	14	1	1		2			1		1	1				7
2004	20	1	1				1				2	1	1	1	8
2005	21	3		1	3	1		2							10
2006	29	2	3	1	1	1	6	1				1			16
2007	37		1	4				1			1	1	1	1	10
2008	32	3	4	1	2	1				3					15
2009	41	3	3				2			3	1	2	2		16
2010	49	3		3	2	4		1	1	1			3		18
2011	54	6		2	1	3	2		1		2	2			19
2012	64	11	6	1	1	2		3	3	2	1	2		1	33
2013	49	2	3	5	2	3		1	1	1	1				19
2014	72	9	5	5	3	4	3	1	3	1	4	1		1	40
Total	554	49	29	25	22	19	17	15	15	14	13	13	10	10	251
%	100.00	8.84	5.23	4.51	3.97	3.43	3.07	2.71	2.71	2.53	2.35	2.35	1.81	1.81	45.31

Legend: International Business Review (IBR); International Marketing Review (IMR), Journal of World Business (JWB), Journal of Small Business Management (JSBM), Journal of International Entrepreneurship (JIE), Journal of Small Business and Enterprise Development (JSBED), Small Business Economics (SBE), Journal of Business Research (JBR), European Management Journal (EMJ), International Small Business Journal (ISBJ), Journal of International Business Studies (JIBS), European Journal of Marketing (EJM), Journal of International Marketing (JIM).

Source: Own preparation.

The 554 studies were published in 194 different journals. Table 3 displays the most important top journals that published papers on SME internationalisation between 1977 and 2014, which represent more than 45% of the total number of papers published (i.e., 554) in this period. As a result of the criteria used during the present research, *International Business Review* appears as the major reference publication in this research area, followed by the *International Marketing Review* and *Journal of World Business*. From the fourth place onwards, we find that journals addressing small businesses topics start to stand out.

3.4.2. Topics

In this review, topics represent the fundamental concepts and subjects of each paper. To analyze the topics of the 554 studies selected, we deployed a data matrix that grouped and aligned the references by year of publication, arranged by topics. Each paper was analyzed using an interpretative and synthesizing approach (Noblit and Hare, 1988), in which key categories and

topics were identified. We used a combination of thematic and content analysis (Weed, 2008) in order to capture the quantitative (i.e., frequency), as well as qualitative (i.e., explanatory value) aspects of the papers selected. We prepared a summary table in which each study was categorized systematically based on the topic identified. The topics were determined based on the content of each paper, its abstract, title, and keywords. We found 74 topics on SME internationalisation. Table 8 shows the most important results of this analysis: the topics and the categories associated with each paper. The table only lists 73 topics, as the topic “literature review of internationalisation research” was removed. We also found that, for example, nine papers might cover up to five different topics and four papers cover six topics. As such, the set of 546 papers—the number left after the papers covering the literature review were removed from the analysis—referred to the 73 topics 1,247 times.

Table 4 - Topics/themes covered

Year	1 topic	2 topics	3 topics	4 topics	5 topics	6 topics	Total of papers	(%)
1977	1						1	0.79
1980		1					1	0.79
1994	1						1	0.79
1995		2	1	1			4	3.15
1996		3	1				4	3.15
1997	4	5	3	1			13	10.24
1998	1	5					6	4.72
1999	3	3	2		1		9	7.09
2000	1	7	3	2			13	10.24
2001	4	4	4				12	9.45
2002	1	5	2				8	6.30
2003	4	8	2				14	11.02
2004	4	11	2	2	1		20	15.75
2005	5	11	3	2			21	16.54
Subtotal	29	65	23	8	2	0	127	22.92
(%)	22.83	51.18	18.11	6.30	1.57	0.00		
2006	10	13	5	1			29	6.79
2007	11	19	4	3			37	8.67
2008	8	11	11	1	1		32	7.49
2009	15	11	11	4			41	9.60
2010	10	18	17	2	1	1	49	11.48
2011	12	24	16	2			54	12.65
2012	12	24	20	5	2	1	64	14.99
2013	5	20	17	5		2	49	11.48
2014	7	29	23	10	3		72	16.86
Subtotal	90	169	124	33	7	4	427	77.08
%	21.08	39.58	29.04	7.73	1.64	0.94		
Total	119	234	147	41	9	4	554	100
(%)	21.48	42.24	26.53	7.40	1.62	0.72		

Source: Own preparation.

The topics most commonly addressed by the researchers are the following: (1) performance—111 papers, representing 20.33% of papers and 8.90% of the total number of times

to which the topic was referred; (2) internationalisation process—93 papers, representing 17.03% of papers and 7.46% of the total number of times to which the topic was referred; (3) strategic perspective—90 papers, representing 16.48% of papers and 7.22% of the total number of times to which the topic was referred; (4) the entrepreneurship approach—85 papers, representing 15.57% of papers and 6.82% of the total number of times to which the topic was referred; (5) the network approach—84 papers, representing 15.38% of papers and 6.74% of topics; and (6) the knowledge-based perspective—53 papers, representing 9.71% of papers and 4.25% of the total number of times to which the topic was referred. Altogether, these six topics cover 94.51% of the 546 papers and 41.38% of the 1,247 of times to which the topics were referred. The last three are the most common topics, confirming what was stated above regarding the attention given in the literature to theories about the internationalisation of SMEs.

In order to have a clearer view of how research has progressed in the field, we decided to analyze how the range of topics was covered within different timeframes. Accordingly, we analyzed research published in two different time periods: from 1977 to 2005 and from 2006 to 2014, as shown in Table 4.

Between 1977 and 2005, 74.01% (i.e., 94 out of 127) of the papers covered only one or two topics out of the 73 topics identified, almost always within the same topic area (i.e., entry mode and market selection, stage models, and the internationalisation process). For instance, Coviello and Munro (1997) covered four topics: market selection/entry mode/market entry, stage models, the network approach, and the internationalisation process. Sinha, Akoorie, Ding and Wu (2011) covered four topics: offshoring decisions/“backshoring”, cooperative strategy, transaction cost theory and network view. Coviello and Martin (1999) covered the following five topics: market selection/entry mode/market entry, stage models, foreign direct investment theory, the network approach, and the internationalisation process. Hinson and Abor (2005) covered three topics: firms’ profile, performance, and online channel.

From 2006 to 2014, the results are quite different: 259 of the 427 papers (60.66%) addressed one or two topics, and 168 covered three or more topics (39.35%). For example, Karabulut (2013) and Freeman, Hutchings, Lazaris and Zyngier (2010) covered six topics. Karabulut (2013) examined export intensity and capacity, internationalisation theories, exporting and exports behavior, stage models and the Uppsala model, foreign direct investment theory, and the internationalisation process. Freeman et al. (2010) studied the internationalisation process, the network approach, the knowledge-based perspective, BGs, and rapid internationalisation, as well

as market selection/entry mode/market entry. Among researchers covering five topics, we found Armario, Ruiz and Armario (2008)—market orientation and commitment, BGs, stage models, the knowledge-based perspective, and outcomes/performance—and Kalinic and Forza (2012)—international competencies, rapid internationalisation, BGs, the entrepreneurship approach, and the network approach. For example, Eberhard and Craig (2013) covered the following three topics: internationalisation of family firms, export intensity and capacity, and the network approach. The number of research papers covering three or more topics during the 2006–2014 period grew five times compared with the 1977–2005 period.

Over the course of the 37-year period reviewed, the diversity and complexity of research topics covered increased, as new, more specific topics came to light (e.g., the stewardship perspective, trade fairs, enterprise and university cooperation, international business e-risk, effects of banks on internationalisation trade, gender, innovation, INVs, BGs, environmental strategy, and brand management—which partly reflect new societal complexities). During the first part of the period under analysis, there was a high level of concentration on traditional internationalisation theories, such as the Uppsala and stage models, whereas, from 2000 onwards, the entrepreneurial focus and global or international behavior are more prevalent in SME internationalisation. In a way, one can say that there was an increased focus on diversification over time. For example, in 2014, several studies focused on specific research topics: Hewerdine, Rumyantseva and Welch (2014) investigated the international behavior of high-tech SMEs, Rostamzadeh, Ismail and Noubar (2014) studied the entrepreneurial intensity of Malaysian SME, and Kubickova and Prochazkova (2014) analyzed the impact of the internationalisation process of Czech SMEs.

3.4.3. Research methods and analytical procedures

Researchers studying SME internationalisation can benefit from understanding the research methods followed until now, as well as the analytical procedures implemented. Accordingly, after removing both conceptual and literature review papers, 510 papers were used in this phase of our analysis.

The researchers favored quantitative methodologies over qualitative ones, as shown in Table 5. Moreover, the ratio of quantitative versus qualitative works increased during the 2006–2014

period. Cross-sectional studies are substantially more researched than longitudinal studies. The majority (70%) of the dual-approach method studies were carried out after 2006.

Table 5 - Number and types of analytical approaches

Year	Number of papers	Case Studies	Longitudinal research	Cross-sectional research	Quantitative	Qualitative	Dual-approach (quantitative and qualitative)	
1977	1				1			
1980								
1994	1				1			
1995	4		1	2	4	1	1	
1996	4	1			2	1		
1997	11	2		1	6	2		
1998	6	1		1	3	1		
1999	8	4		2	4	4		
2000	11	2	1	3	9	2		
2001	11	7			6	7	2	
2002	8	2	1	2	5	3	1	
2003	13	3	1	5	9	3		
2004	16	3	2	1	9	4	2	
2005	20		1	4	15	1		
2006	24	6	3	8	13	9	1	
2007	33	14	1	10	19	10		
2008	32	10	2	9	20	12	4	
2009	40	11	1	6	26	10	1	
2010	43	16		5	27	16	2	
2011	52	15	1	4	28	18	1	
2012	57	19	8	11	36	19		
2013	46	6	5	8	36	6	3	
2014	69	15	6	25	46	19	2	
Total	Nº	510	137	34	107	325	148	20
	(%)	100.00	26.86	6.67	20.98	63.73	29.02	3.92

Source: Own preparation.

3.4.4. Country of origin

As shown in Table 6, only 14.5% of the research covers data from several countries. This is a clear consequence of the following factors: (a) the importance of an outward perspective for most researchers and countries, (b) a focus on a sectoral perspective and how the sectors were analyzed, (c) a focus on the firms' perspective and how it evolved, (d) the difficulty of doing research from a multi-country perspective, and (e) the influence of cultural differences that make it difficult to carry out research in different countries.

Table 6 - Regional coverage

Year	Number of papers	Multi countries	One country	Oceania	Europe	America	Asia	Africa
1977	1		1			1		
1980								
1994	1		1			1		
1995	4	1	2		5			
1996	4	1	3		3	2	1	
1997	11	3	8	1	8	4	0	
1998	6	2	4		4	3		
1999	8	1	6	2	6	3		
2000	11	1	9	1	6	4		
2001	11	2	6	2	5	2	1	
2002	8	3	5		11	1	2	
2003	13	2	9	2	7	4		
2004	16	3	15	1	16	3	2	
2005	20	1	19	1	11	5	2	2
2006	24	8	15	2	22	5	5	1
2007	33	8	25	6	29	5	9	1
2008	32	9	22	5	32	4	4	
2009	40	2	35	2	26	11	9	2
2010	43	3	37	3	27	9	6	1
2011	52	4	46	2	34	6	13	1
2012	57	8	51	4	38	13	8	1
2013	46	6	40	3	23	10	9	3
2014	69	6	58	7	34	14	14	2
Total	510	74	417	44	347	110	85	14
%	100	14.51	81.57	8.63	68.04	21.57	16.67	2.75

Source: Own preparation.

Europe is the most targeted continent in the literature, clearly reflecting the importance of SMEs across Europe. Within Europe, the United Kingdom (UK) is the most frequently studied country within SME internationalisation research (i.e., 50 studies), followed by Italy, Spain, Finland, and Sweden with 32, 31, 29, and 28 papers, respectively.

The UK (i.e., 50 studies) and the US (i.e., 46 studies) are the countries that most often contributed to the SME internationalisation research. The focus of US SME research is mainly on performance and the strategic perspective, followed by the network approach.

Interestingly, Asian countries received increasing attention from 2006 onwards, in which China stands out with 18 papers focusing on performance, the network approach, and the strategic perspective. One can also conclude that more than 90% of research on the internationalisation of Asian SMEs took place after 2006.

On the American continent, 64.55% of the studies are from the US and Canada, with the US representing 41.82% of all publications on this continent. A full 68% of published studies on the American continent were carried out after 2006.

In total, 60.74% of the studies published between 1977 and 2005 were carried out in Europe and 24.44% in the Americas. The remaining 26% were spread over the rest of the world. During the 2006–2014 period, Europe's share of the studies dropped to 56.99%, as a consequence of the growth in the number of studies in Asia, North America, and Oceania. Regrettably, the African continent is lagging behind the other continents on SME internationalisation. There are two possible explanations for this. First, the lack of factor endowment might compromise the internationalisation path of African SMEs, and, second, perhaps understaffed and/or under-budgeted academic research is hindering new research on the internationalisation of African SMEs.

There were 74 papers analyzing a multiple-country perspective. 52.70% covered two countries, and 18.92% covered three countries, while four country studies accounted for 12.16%. We identified 5.41% of the papers as including five and more countries. With the exception of one study (Hong, Kwon and Roh, 2009) that involved three continents (i.e., North America, Asia, and Europe), most of the latter papers addressed European countries.

3.4.5. SME sectoral perspective and empirical methodologies

Based on the fact that 93.32% of the articles follow empirical methodologies (517 out of 554) and given the context of the topics and category found on the literature of SME internationalisation, we decided to explore the SME universe of the empirical research, namely the SME sector and branch.

There is a clear prevalence for studying industrial firms as opposed to service-based firms (47% vs. 11%) as show on Table 7.

It is important to note that 58% (295 out of 510) of articles identified the branch where the firm operates (service or manufacturing) and only 36% (184 out of 510) identified the sector where the firm operates. It is also notable that multi-sector studies (24.90%) are more prevalent than a single-sector studies (18.24%).

Table 7 - SME branch/nature

Year	Number of papers	Service Studies	Manufacturing Studies	Multi-sector Studies	Single-sector Studies	
1977	1		1			
1980						
1994	1					
1995	4	1	2		2	
1996	4	1	2	1	2	
1997	11	1	6	1	4	
1998	6		1		1	
1999	8	1	5	2	3	
2000	11	1	6	2	2	
2001	11	2	5	6		
2002	8		3	2		
2003	13	1	9	4	3	
2004	16	1	7	4	6	
2005	20	1	11	4	2	
2006	24	2	16	6	5	
2007	33	5	16	10	6	
2008	32	1	15	7	10	
2009	40	4	16	7	10	
2010	43	3	18	8	8	
2011	52	2	23	4	11	
2012	57	8	26	20	6	
2013	46	9	28	16	6	
2014	69	11	24	23	6	
Total	No.	510	55	240	127	93
	(%)	100.00	10.78	47.06	24.90	18.24

Source: Own preparation

It is also interesting to analyse how research on SME internationalisation is scattered across industries. There are 36 studies (7.06%) covering the food industries and with a slightly lower percentage is the electronic, electric equipment and machinery sector with 33 studies (6.47%); whereas there are 29 studies (5.69%) analysing the textile industries. The high and high/low tech industries were analysed 22 times, followed by clothing and fashion industries with 21 studies; the software industry appears in 19 articles, followed by the wood and furniture industry as well as the chemicals and chemical products, each with 18 studies.

Firms competing in business to business context include 2.35% studies (12 out of 510). In this analysis some industries, such as polymer processing/plastics/rubber, medical device/instruments, agricultural sector, biotechnology and jeweller/gifts/gold, represent a marginal percentage of the research (around 0.2%-3%). One multi-sector study includes seven industries (wood/furniture, computers, footwear, mechanical tools/machinery, textiles, clothing/fashion and food). There are five and eight studies involving six and five industries respectively; twelve articles analysed four different sectors and thirteen researchers' focussed on three different industries. The majority of the studies that identify the industrial sector focus on one or two

sectors (almost 75%: 139 out of 184). On one hand, by examining a greater variety of industry contexts, the academic community can enhance the understanding of the links between industry sectors and internationalisation patterns as well as to contribute to theories that may be generalized to a greater range of sectors. On other hand, the sectors identified in the literature may reflect the international trends of the stimulus policies by the various national governments (as is the case of the wine and footwear industry).

The main data collection methods are clearly focused on surveys: 57.45% of the empirical articles, of which 29.01% are sent by email (web questionnaires). Interviews are the second most popular choice for data collection among researchers (31.37%). Multi-method data collection was used in 14.31% of the articles.

The top managers, CEOs or/and the managing directors are the key sources for data collection, reflecting their importance/authority in decision-making regarding the internationalisation of SMEs (35.10% of the empirical studies).

Taking into account that 63.73% (325 out of 510) of the research follows a quantitative approach, we decided to investigate how the sample size of the firms differs in the research undertaken. There are 126 studies (24.71%) where the sample size is between 50 and 199 SMEs, followed by a simple size up 20 firms (22.35%) and between 200 and 499 SMEs (16.27%). Only 11.37% of the empirical articles presented a sample size that exceeds 1 000 firms. Nevertheless, the empirical studies can be thought of as small sample sizes with a relatively low response rate (between 1% and 19%: 10.59% of the empirical studies). Nevertheless, we found on the literature 8.43% of the empirical articles identifying a response rate between 20% and 30%.

The main methodologies used when analysing SME internationalisation were exploratory in nature and used regression techniques for analysis (22.16%). Nonetheless, correlation analyses are also employed in 18.24% of the studies. In recent years, only three studies used triangulation methodologies, combining more than one technique to analyse the data collected.

3.5. Discussion

3.5.1. Summary

This chapter uncovered a notable diversification in this field regarding the main topics, research methods, geographical variety, and theoretical background. One conclusion is that there is a growing breadth and depth of topics in this area, in which classic topics such as the internationalisation process, the strategic perspective, and the network-based approach are the most covered ones. However, entrepreneurship is a “more recent” topic that has been focused more extensively than the knowledge-based or resource-based perspectives. This recent trend has been followed by a growing interest among SME internationalisation scholars on topics such as BGs, INVs, rapid internationalisation, early internationalisation, international competencies, and market selection. These topics not only complement “classic” studies on SME internationalisation but also give a new life to the understanding of new challenges for SMEs.

Despite their importance, some topics or categories are under-researched, as is the case with financing, which was a surprise, given the difficulties experienced by SMEs when internationalizing. One possible explanation for this is that financing studies covering the internationalisation of SMEs abroad might be “camouflaged” by studies covering capital structure, return on assets, return on sales, profitability, liquidity, and performance. Although INVs, rapid internationalisation, and early internationalisation are among the “most recent” topics found in this literature review, one cannot fail to notice that these topics are not among the most prevalent ones. This might be explained by the fact that we conducted our study using a specific review protocol that did not include new ventures, entrepreneurship, international entrepreneurship, entrepreneurial orientation, or new technology-based firms, among other keywords—even though SMEs also play a crucial role in these.

International marketing and innovation perspectives stand out as important categories addressing other “recent” studies, such as online channels, trade fairs, international marketing channels, corporate social responsibility, research and development, innovation, technological strategies, and intellectual property.

Cross-sectional perspectives are more frequently used *vis-à-vis* longitudinal studies due to the inherent difficulties of this type of research. In this respect, longitudinal studies would be of added value to comprehend better how firms’ behavior changes across time.

In contrast to previous studies, the present chapter covers studies from all continents. Nonetheless, Europe still dominates research on SME internationalisation, which may be the result of the importance of SME internationalisation for the European economy, in which SMEs are a dominant force, in contrast to the pattern in the US, where research traditionally focuses on MNEs. However, if SME internationalisation research is to give a clear picture of what occurs across the business world, more studies from Africa, Latin America, and Asia are needed to develop a clearer understanding of SMEs from developing countries, currently an under-researched topic.

On their path toward understanding and conceptualizing how and why SMEs internationalize, researchers have extensively focused on the traditional approach of internationalisation centered on the internationalisation process, the network-based approach, entrepreneurial behavior, strategic perspectives, and performance.

Moreover, in spite of all the literature that supports the conclusion that internationalisation brings positive effects to SMEs, there is a lack of substantive evidence that internationalisation has a positive impact on performance, in specific, mainly for SMEs (Pangarkar, 2008). Ruigrok and Wagner (2003) argue that the link between internationalisation and performance has triggered extensive interdisciplinary research, in which researchers tried to empirically prove the theoretical argument that international expansion is a prerequisite for boosting the financial success of firms. One of the main challenges the research community faces is that, despite the vast array of research on internationalisation, there is a need for a more universal understanding of how the features of the internationalisation of SMEs influence performance. As such, the knowledge of how internationalisation impacts performance and how international performance supports the internationalisation of SMEs is still limited and requires further research, so that all stakeholders alike can benefit, including academics, practitioners, policymakers, and national and regional governments. Based on this gap, in the fourth chapter we propose a model that highlights three important factors: industry-, environment- and firm-related aspects affecting firms' entrepreneurial orientation, bringing together the fundamentals of SMEs' internationalisation processes that influence these firms' export performance.

The number of topics analyzed in SME internationalisation research has been increasing, although papers continue to be clearly anchored to core topics in internationalisation theories and perspectives. Moreover, the topics are growingly interrelated, which indicates that scholars feel that the frontier of knowledge on SME internationalisation needs to be expanded on several fronts.

Although 74 different topics were identified, there are some that have not yet been deeply studied and deserve future research. Among these are how technological advances in transport systems, logistics and communications facilitate SMEs' doing business abroad and how the degree of economic integration – from preferential trade agreement to complete economic integration – of the country of origin influences SME internationalisation patterns and outcomes. Other neglected topics are how SMEs behave, or differ, in the internationalisation process, when entering a foreign market within the same, or different, economic block to which they belong, and how different cultural dimensions influence the internationalisation path when SMEs internationalize across continents. Regarding to the innovation topic, the literature on this topic is closely associated with R&D, product and technology. Thus, on the model proposed on the fourth chapter we highlight nine different innovation capabilities at firm level, as well as an entrepreneurial orientation of SMEs. We include not only R&D and manufacturing innovation capabilities, but also learning, resource exploiting, marketing, organisational, strategic, exploratory innovation and exploitative innovation capabilities.

The same way BGs and INVs constitute a cornerstone to understanding the particularities of rapid internationalisation (Knight and Cavusgil, 2004; Oviatt and McDougall, 1994), as they opened new streams of research, this chapter uncovers that when analyzing internationalisation from a wider perspective – SME internationalisation – a deeper and broader perspective is still in high demand, especially on under-researched topics as e.g. the following ones: (a) how de-internationalisation, export withdrawal, divestitures, or re-internationalisation might complement the evolutionary internationalisation process of the firm; (b) how different family and non-family firms really behave and differ in internationalisation patterns across geographical latitudes; (c) how on-line, e-commerce, and e-business internationalisation is paving the way of SMEs' competitiveness *vis-à-vis* off-line internationalisation processes; (d) how knowledge and organizational resources leverage SMEs, both high-tech and traditional low-tech firms, in their internationalisation quest for superior performance; (e) how public policies might facilitate the internationalisation of SMEs and legitimize superior international performance; and (f) how founders, owners and managers' prior experience and risk-taking proclivity might influence the internationalisation of SMEs:

Based on Table 8, one can conclude that, despite the considerable amount of research, the following areas need more study: trade credit and financing; venture funding; online, e-commerce, and e-business internationalisation; trade fairs; enterprise-university cooperation; start-up patterns;

service SMEs; and new product development capabilities. Others include the degree of innovation and innovation capabilities, brand management, collaborative strategies, supply chain alignment, nascent entrepreneurs, and family versus non-family firms, among other topics that need to be examined in terms of how they influence SME internationalisation. Moreover, a multi-topic perspective is also necessary in order to gain a multidimensional perspective on how SMEs might muddle through in international environments.

There is still a clear gap in terms of an inward-outward perspective on SME internationalisation. Generic research on SME internationalisation has extensively focused on the outward, rather than on the inward, perspective. While the present study included Knudsen and Servais (2007) and Overby and Servais's (2005) perspective and although one can find several studies containing an inward perspective (e.g. Andersson and Servais, 2010; Rasmussen, Madsen and Servais, 2012), studies including an inward-outward perspective are still quite rare. The failure to adopt a holistic perspective (Fletcher, 2001) can also be explained by the fact that the inward perspective is addressed through international purchasing and international sourcing or outsourcing, which are normally performed by large firms, and covered by studies published in operations and supply chain journals. Nevertheless, if future research in this field is to evolve to a holistic level – as indeed theoretical refinements would demand – scholars need to elaborate on this strand of research.

The internationalisation of SMEs has had a pervasive influence across the business world. Nevertheless, a more all-inclusive perspective is still required in order to understand all the ramifications for academics and practitioners. This perspective needs to include both inward and outward perspectives and the de-internationalisation process, as well as providing a dynamic perspective on this field. An accepted broader perspective are needed, including empirical validation and an interdisciplinary approach.

Finally, despite the studies found regarding de-internationalisation (e.g., Crick, 2004; Vissak and Masso, 2015), there is a lack of studies on export withdrawal, divestitures, backshoring, nearshoring, and re-internationalisation. This is indeed a challenging topic to cover because of not only the intricacies of its definition (Welch and Luostarinen, 1988; Calof and Beamish, 1995; Benito and Welch, 1997; Chetty, 1999) but also the problem of defining research methodologies capable to collect data on the subject. Although scholars have had encounters with firms de-internationalizing their activities (e.g., Nummela, Saarenketo and Loane, 2014), this topic would

not only complement the academic knowledge on internationalisation but also support the SME business community in their quest to compete in an expanded business arena.

Despite the abundance of research, there is insufficient research related to the distinction between family and non-family managers of SME, mainly in developing economies in which small family firms play a key role. There is a clear overlap between these two areas that calls for further study. Due to their economic importance in several different contexts, especially to policymakers, these two segments need to be analyzed further. In addition, one gap not addressed in the present chapter relates to women and ethnic studies. In certain economies, these aspects are recognized as a major driving force. It is also our belief that it would be important to cover more deeply the African, Latin American, and Asian literature on these subjects, in order to understand these less researched, specifically constrained settings in terms of not only technological endowments but also socio-economic and political settings.

Although manufacturing industry studies are prevalent, especially in the area of food and electronic and machinery industries, multi-sector studies are gaining importance with 24.90% of the studies. Clearly, there is a huge opportunity not only to diversify the study of manufacturing sectors (into areas such as plastics and the chemical industry), but also in the service industry that is clearly underrepresented. This would help to identify how a service-based perspective would complement the theory that has been built-up by studying manufacturing industry. Moreover, the particular characteristics of the service industry mean that brand new windows of opportunity may unfold in areas such as modes of entry, international service provision, product/process innovation, and entrepreneurial perspective, among other things. Although there are several studies involving multiple sectors, there is a lack of comparative research within and across sectors.

SMEs are by nature structurally flexible where the top managers seem to be the centre of knowledge, which have a role of connecting the internal sphere of the firm network with its external sphere. In this context, CEOs, founders and executives are the key informants chosen for almost all of the studies, based mainly on web-questionnaires. In order to access key decision makers, researchers need to focus on more than one informant (only 3.92% of the research uses multi-key informants). This not only gives researchers multiple perspectives, but also helps underpin a triangulation approach. However, an emphasis on multiple informants helps provide a much richer perspective and multi-method for data collection is needed.

Sample size is usually larger for quantitative research, while qualitative studies are normally based on between one and ten SMEs. Studies of SME internationalisation have normally used small samples, probably to source and collect readily obtainable data or to address specialised sectors. Typically, they have also a high and low response rates (with a very close percentages: between one and nine percent of response rate we found 10.59% of the empirical studies and up 31% we found 9.80% of the empirical research) and benefitted from the perspective of the top decision makers.

In addition, the findings indicate that regression techniques and correlation analysis have been on the rise in recent years. Descriptive methodologies can be accurate and systematic, but cannot reveal causal relationships between variables, thus they cannot be of great interest unless new fields are being explored. Accordingly, it is expected that future research will use more sophisticated analytical tools such as structural equation modelling, Partial Least Squares (PLS) and econometric techniques.

Although more empirical research is needed in this area, especially in developing countries, new conceptual perspectives are in high demand to help support new empirical research and its implications for practitioners and public policies. One can conclude that, despite the considerable amount of research done, there are still open avenues to follow. Moreover, the research community needs to understand how and why SME internationalisation differs across continents. As such, one of the challenges of new research is to welcome not only studies covering a broader perspective (e.g., African, Latin American, and Asian SMEs) but also comparative studies covering different regions, firms, and perspectives, so that researchers can better understand both the plurality of business communities and their internationalisation patterns. From this perspective, it is quite challenging to include some settings, for example, Middle East SMEs, because of their unique cultural patterns, which are almost completely absent in this search.

Overall, the gaps identified in the literature represent promising opportunities for future research, which may contribute substantially to the development of the field. Studies employing different perspectives are needed in order to follow multiple lines of investigation and to develop theoretically sound perspectives for different research strands.

3.5.2. Contributions to scholarship

Oviatt and McDougall (1994) and Knight and Cavusgil (2004) influential papers challenged the traditional perspectives of internationalisation business as a research area dominated by multinational firms. Based on the concepts of early internationalisation and international entrepreneurship theory, their INVs and BGs not only quickly caught up, but also shifted the emphasis of international business to young, innovative, opportunity-driven firms. However, BGs account for new 20% of new ventures in Europe (Eurofound, 2012), which means that the understanding of the intricacies of SME internationalisation, following a wider perspective, is still important for international business scholarship, as the breadth and depth of the topics found in Table 8 vary significantly, as do the analytical research approaches used.

This study took a different approach from that of earlier reviews. To the best of our knowledge, this is the first academic study to include contemporary research specifically on SME internationalisation, as all previous studies (McAuley, 1999; 2010; Leonidou and Katsikeas, 1996; Coviello and McAuley, 1999; Coviello and Jones, 2004; Rialp et al., 2005; Fillis, 2001; Etemad, 2004; Kuivalainen et al., 2012; Kontinen and Ojala, 2010; Keupp and Gassmann, 2009; Jones et al., 2011; Peiris et al., 2012; Kiss et al., 2012) focused on specific areas within internationalisation, without using the term SME. This study contributes to a clearer understanding of the multifaceted perspectives of SME internationalisation, covering 74 different topics and seven different categories. Moreover, the present review identified that internationalisation theories cover 16 different topics (in 500 papers).

If the primary focus of this chapter was to help researchers and academics keep abreast of how the internationalisation of SMEs has evolved, it was also possible to make an inventory of the different categories and topics found. Although BGs have been an important milestone in international business scholarship, there are still under explored topics on SME internationalisation. The variety of categories and topics, as referred above, claim for an analysis of new research streams that are still open ahead regarding, for example: de-internationalisation as part of the internationalisation process, family vs. non-family firms, online/electronic internationalisation, organizational resources, innovation capability/strategy, International market/entrepreneurship orientation, firm proactiveness, founders / owners / managers risk-taking proclivity, new product development / imitation strategies, servitization in international markets, firm characteristics (industry, size, type, age, gender issues, performance objectives, financial

issues), opportunity discovery / creation / exploitation, growth maintenance and competitive intensity in international markets, and finding and financial activities, among others.

Methodologically it is important to set out more longitudinal studies that demonstrate the sustainability of international performance of SMEs. Geographically, studies on Latin America, Africa, Asia and Middle East can be of added value in order to keep abreast of how SMEs that belong different levels of development can legitimize (or improve) known theories, perspectives and frameworks and improve our understanding of internationalisation of SMEs.

The internationalisation literature has made a significant attempt to develop integrative models depicting the core constructs in the SME internationalisation process. Although we found strong support for international strategies, new research is still necessary to clarify how international expansion affects SMEs performance and how successful internationalisation strengthens SMEs' internal resources.

3.5.3. Applied implications

This chapter is of added value for several stakeholders. It provides practitioners, policymakers, and academics with pragmatic evidence of a multifaceted perspective on the relevant topics covered across the world. It helps business managers to keep abreast of the intricacies and complexities of the internationalisation of SMEs. It also offers advantages to policymakers at the national or local level, as it provides them with substantial knowledge for how to design and promote more efficient SMEs internationalisation policies, based on multi-polar, regulatory, cognitive, and normative perspectives.

For managers and academics, this chapter uncovers several under-researched topics that need to be explored so that SME managers can take better advantage of SME-specific knowledge and become aware of the strengths of a multifaceted, polycentric perspective on the internationalisation of SMEs. As a result, chief executive officers, entrepreneurs, and business owners can benefit if academics and policymakers become more aware of all the potential for, and impacts on, business communities of the internationalisation of SMEs, in terms of performance, sales, and international reach.

3.5.4. Limitations and future research directions

This review is not definitive. Rather, its objective was to make an inventory, summarize, synthesize, and interpret research on the internationalisation of SMEs in order to provide an accurate picture of our present knowledge about this topic. Given the focus of this research, we made a selection of papers based on limited key search words, since we wanted to ensure that all the literature reviewed was clear in its categorization of firms (i.e., SME) and that it focused on internationalisation, regardless of the topic addressed. As such, considering the selection criteria defined above, the results could have been totally different had we used search criteria terms such as “small ventures,” “new firms,” “new ventures,” “export,” “international market entry,” “foreign market entry,” “born global,” “international new venture,” “international market entry,” “born international,” “new entrepreneurial venture,” “global smaller firm,” “instant exporters,” and “early internationalizing firms,” to mention just a few. Regardless, it is clear that this research complements previous reviews, as explained above.

Given the 554 papers analyzed, the lack of studies on the 1970s and 1980s may seem inexplicable. However, this might be explained by the fact that most studies carried out on internationalisation not only did not explicitly mention SMEs but also used terms such as export activities instead of internationalisation.

Based on the sample size, this study was based on ‘counting’ the number of articles to categorize them in the categories and topics, which limited the richness of the debate of the different perspectives and topics on SME internationalisation. However, the interconnectedness of the topics, although difficult to achieve with such a large sample size, deserve further attention in future research.

Another limitation of our research is the lack of information in certain papers regarding the size of firms, hindering the identification of the type of firm studied (i.e., if an SME or not). In addition, although Google Scholar is quite popular, we decided not to use it because the output was unmanageable. Had we included it, the results would have been different.

Another limitation of our research is related to the key search words and journal titles. For example, certain journals are typical outlets for studies involving SMEs, as is the case of *JSBM*, *JSBED*, *SBE*, and *ISBJ*, among others. As a result, the titles, abstract, and keywords of papers might not include the words “small” or “SME,” as these topics are implicitly focused on in the journals in which these papers are published. This limitation can only be overcome by using a

different research approach. In this context, it is also important to emphasize that this literature review comprised a set of topics that was thematically grouped and categorized, mapping all of them, which has never been done before.

In order to deepen their analysis, future reviews might assess SME internationalisation using other search terms. Although it would be tempting to expand the search selection criteria, caution is needed, as the outcome exponentially increases, which can jeopardize the investigation. In addition, there are studies that refer to “new” ventures that include not only SMEs but also large firms (e.g., Peiris et al., 2012), which requires close scrutiny during the phase of paper selection in order to ascertain that they include only SMEs. Moreover, it would be advantageous to include non-English literature, which would help to understand the particularities, for example, of the Portuguese, Spanish, and French literature on the internationalisation of South American and African firms. Due to the multi-disciplinary and multi-theoretical nature of SME internationalisation - complex phenomenon offering a high potential for fruitful analyses - the process of debating, testing, and theorizing is important for the development and consolidation of this research area.

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Table 8 - Appendix: references by categories and topics/themes

Category	Topic/Theme	References	Topics*
Internationalisation theories	Internationalisation theories	(Andersson, Gabrielsson & Wictor, 2004; Barbosa, González-Campo & Vargas, 2013; Bell, 1995; Brouthers, Brouthers & Werner, 1996; Chiao, Yang & Yu, 2006; Crick & Spence, 2005; Dan, 2012; Dias & Lopes, 2014; Hilmersson, 2013; Johnson, Arya & Mirchandani, 2013; Karabulut, 2013; Ojala, 2008; Ojala & Tyrvainen, 2008; Olejnik & Swoboda, 2012; Orser, Spence, Riding & Carrington, 2010; Pangarkar, 2008; Schulz, Borghoff & Kraus, 2009; Sandberg, 2014; Segaro, 2012; Styles, Wilkinson & Chandra, 2009; Thai & Chong, 2013; Tabares, Anzo & Estrada, 2014; Torrens, Amal & Tontini, 2014; Zarei, Nasserri & Tajeddin, 2011)	24
	International new ventures	(Cabrol & Nlemvo, 2009; Cancino & La Paz, 2010; Crick, 2009; Hallböck & Gabrielsson, 2013; Kaur & Sandhu, 2014; Manolova, Manev & Gyoshev, 2010; McGaughey, 2007; Nowiński & Rialp, 2013; Park, Whitelock & Giroud, 2009; Prashantham & Floyd, 2012; Riding, Orser, Spence & Belanger, 2012; Ripollés, Blesa & Monferrer, 2012; Sasi & Arenius, 2008; Schwens & Kabst, 2011; Spence, Orser & Riding, 2011; Tang, 2011; Tolstoy & Agndal, 2010)	17
	Born global	(Armario, Ruiz & Armario, 2008; Barbosa & Ayala, 2014; Barbosa, González-Campo & Vargas, 2013; Bell, McNaughton & Young, 2001; Cancino & Coronado, 2014; Chandra, Styles & Wilkinson, 2012; Chetty & Campbell-Hunt, 2004; Crick, 2009; Freeman, Hutchings, Lazaris & Zyngier, 2010; Gabrielsson, Kirpalani, Dimitratos, Solberg & Zucchella, 2008; Gassmann & Keupp, 2007; Gerschewski, Rose & Lindsay, 2014; Laanti, Gabrielsson & Gabrielsson, 2007; Li, Qian & Qian, 2012b; Kalinic & Forza, 2012; Kaur & Sandhu, 2014; Kocak & Abimbola, 2009; Krašnicka & Glód, 2013; Kuivalainen, Saarenketo & Puumalainen, 2012; Thai & Chong, 2008; Moen & Servais, 2002; Mort & Weerawardena, 2006; Rialp-Criado, Galván-Sánchez & Suárez-Ortega, 2010; Schueffel, Baldegger & Amann, 2014; Sui & Baum, 2014; Sui, Yu & Baum, 2012; Taylor & Jack, 2012; Uner, Kocak, Cavusgil & Cavusgil, 2013; Zhang, Sarker & Sarker, 2013; Zhou, 2007; Zhou, Wu & Luo, 2007)	31
	Stage models/Uppsala model	(Armario, Ruiz & Armario, 2008; Boehe, 2009; Coviello & Martin, 1999; Coviello & Munro, 1997; Gankema, Snuif & Zwart, 2000; Kamakura, Ramón-Jerónimo & Gravel, 2012; Karabulut, 2013; Karlson & Nordhus, 2011; Korsakienė & Tvaronavičienė, 2012; Moen, Gavlen & Endresen, 2004; Westhead, Wright & Binks, 2004)	11
	Foreign direct investment theory	(Berra, Piatti & Vitali, 1995; Chen, Ding & Wu, 2014; Coviello & Martin, 1999; De Maeseneire & Claeys, 2012; Huett, Baum, Schwens & Kabst, 2014; Ivarsson & Alvtam, 2013; Karabulut, 2013; Lauridsen, 2004; Steinmann, Kumar & Wasner, 1980; Svetličič, Jaklič & Burger, 2007; Lee, Lee & Kwak, 2013; Li & Hu, 2002; Lu & Beamish, 2006; Ruokonen, 2008; Todo & Sato, 2014; Vachani, 2005)	16
	Resource-based view	(Boehe, 2009; Camison & Villar - Lopez, 2010; Chetty & Wilson, 2003; Ciszewska-Mlinarić & Mlinarić, 2010; D'Angelo, Majocchi, Zucchella & Buck, 2013; Dhanaraj & Beamish, 2003; Fernández-Olmos & Díez-Vial, 2013; Fernández-Ortiz & Lombardo, 2009; Freeman & Styles, 2014; Freeman, Styles & Lawley, 2012; Garg & Kumar, 2014; Graves & Thomas, 2006; Hessels & Parker, 2013; Hessels & Terjesen, 2010; Huett, Baum, Schwens & Kabst, 2014; Ioan, 2012; Javalgi & Todd, 2011; Kahiya & Dean, 2014; Knight & Kim, 2009; Kuhlmeier & Knight, 2010; Lee & Marvel, 2009; Libaers & Meyer, 2011; Maranto-Vargas & Rangel, 2007; O'Casey & Weerawardena, 2009; Olmos, 2011; Martín-Tapia, Aragón-Correa & Rueda-Manzanares, 2010; Pett & Wolff, 2003; Rabino, Simoni & Zanni, 2008; Segaro, 2012; Stoian, Rialp & Rialp, 2011; Serra, Pointon & Abdou, 2012; Todd & Javalgi, 2007; Toledo, Hernández & Griffin, 2010; Tolstoy & Agndal, 2010; Torrens, Amal & Tontini, 2014; Xie & Suh, 2014; Westhead, Wright & Ucbasaran, 2001; Westhead, Wright & Ucbasaran, 2004; Wilkinson & Brouthers, 2006)	39
	Entrepreneurship approach	(Acs, Morck & Yeung, 2001; Amal & Filho, 2010; Basile, 2012; Barbosa & Ayala, 2014; Bhatti & Kumar, 2012; Boehe, 2009; Chandra, Styles & Wilkinson, 2012; Ciravegna, Lopez & Kundu, 2014; Ciravegna, Majano & Zhan, 2014; Chelliah, Sulaiman & Munusamy, 2011; Crick & Spence, 2005; Dai, Maksimov, Gilbert & Fernhaber, 2014; De Clercq, Sapienza & Crijns, 2005; Di Gregorio, Musteen & Thomas, 2009; Dimitratos, Amorós, Etchebarne & Felzensztein, 2014; Dimitratos, Plakoyiannaki, Pitsoulaki & Tüselmann, 2010; Dimitratos, Voudouris, Plakoyiannaki & Nakos, 2012; Filser, Eggers, Kraus & Málóvics, 2014; Fletcher & Harris, 2012; George, Wiklund & Zahra, 2005; Gerschewski, Rose & Lindsay, 2014; Glavas & Mathews, 2014; Glavas, Pike & Mathews, 2014; Goxe, 2010; Hallböck & Gabrielsson, 2013; Hunkeler, 2003; Hutchinson, Quinn & Alexander, 2005; Islam, 2010; Javalgi & Todd, 2011; Javalgi, Todd, Johnston & Granot, 2012; Jones, 1999; Jones, Coviello & Tang, 2011; Jørgensen, 2014; Kaur & Sandhu, 2014; Kalinic & Forza, 2012; Keen & Etemad, 2012; Ketkar & Acs, 2013; Khapne, 2012; Knight, 2000; Knight, 2001; Knight & Cavusgil, 2004; Kocak & Abimbola, 2009; Koladkiewicz, 2013; Kontinen & Ojala, 2011; Korsakienė & Tvaronavičienė, 2012; Loane, Bell & Cunningham, 2014; Löfgren, 2014; Lu & Beamish, 2001; Manolova, Manev & Gyoshev, 2010; Matlay, 2006; Mort & Weerawardena, 2006; McGaughey, 2007; Mtigwe, 2005; Musteen & Datta, 2011; Musteen, Datta & Butts, 2014; Nakos, Brouthers & Dimitratos, 2014; Naldi & Davidsson, 2014; Nkongolo-Bakenda, Anderson, Ito & Garven, 2010; Nowinski & Bakinowska, 2012; O'Casey & Weerawardena, 2009; Omri & Becuwe, 2014; Orser, Spence, Riding & Carrington, 2010; Rao, 2007; Ripollés, Blesa & Monferrer, 2012; Rundh, 2011; Rostamzadeh, Ismail & Bodaghi, 2014; Ruzzier, Hisrich & Antoncic, 2006; Schueffel, Baldegger & Amann, 2014; Schwens & Kabst, 2011; Sciascia, D'Orta, Bruni & Larrañeta, 2014; Sommer, 2010; Sommer & Haug, 2011; Spence & Crick, 2006; Styles, Wilkinson & Chandra, 2009; Subrahmanya, 2007; Todd & Javalgi, 2007; Tolstoy, 2010; Tolstoy, 2014; Tseng & Johnsen, 2011; Volchek, Jantunen & Saarenketo, 2013; Williams, Rodgers & Baric, 2012; Wolff & Pett, 2006; Wright, Westhead & Ucbasaran, 2007; Yang, 2012; Zhou, 2007)	85

Knowledge-based view	(Anderson, Boocock & Graham, 2001; Armario, Horrillo & Robles, 2009; Armario, Ruiz, & Armario, 2008; Basly, 2007; Burpitt & Rondinelli, 1998; Carlsson & Dale, 2011; Chelliah, Pandian, Sulaiman & Munusamy, 2010; Chetty, Eriksson & Lindbergh, 2006; Dai & Liu, 2009; Davenport, 2005; De Clercq, Sapienza & Crijns, 2005; Deligianni, Voudouris & Lioukas, 2014; Dimitratos, Amorós, Etchebarne & Felzensztein, 2014; Dimitratos, Lioukas, Ibeh & Wheeler, 2010; Descotes & Walliser, 2011; Elenurm, 2008; Gassmann & Keupp, 2007; Eliasson, Hansson & Lindvert, 2012; Fletcher & Harris, 2012; Freeman, Hutchings, Lazaris & Zyngier, 2010; Gnizy, Baker & Grinstein, 2014; Hahti, Madupu, Yavas & Babakus, 2005; Hilmersson, 2014; Jonsson & Lindbergh, 2010; Knight & Cavusgil, 2004; Knight & Liesch, 2002; Kuivalainen, Puumalainen, Sintonen & Kyläheiko, 2010; Kuivalainen, Saarenketo & Puumalainen, 2012; Kuivalainen, Sundqvist, Puumalainen & Cadogan, 2004; Liesch & Knight, 1999; Lindstrand, Melén & Nordman, 2011; Maelkburger, Schwens & Kabst, 2012; Mejri & Umamoto, 2010; Mets, Kaarna & Kelli, 2010; Musteen & Datta, 2011; Musteen, Datta & Butts, 2014; Naldi & Davidsson, 2014; Nordman & Tolstoy, 2014; Nummela, Puumalainen & Saarenketo, 2005; Ojala, 2009; Park & Ghauri, 2011; Park, Whitelock & Giroud, 2009; Pittiglio, Sica & Villa, 2009; Prashantham & Floyd, 2012; Saarenketo, Puumalainen, Kuivalainen & Kyläheiko, 2004; Saarenketo, Puumalainen, Kyläheiko & Kuivalainen, 2008; Sandberg, 2013; Sandberg, 2014; Scott-Kennel & von Batenburg, 2012; Sciascia, D'Oria, Bruni & Larrañeta, 2014; Thai & Chong, 2013; Tolstoy, 2010; Zahra, Neubaum & Naldi, 2007)	53
Network view	(Abban, Omta, Aheto & Scholten, 2013; Agndal & Chetty, 2007; Amal & Filho, 2010; Andersen, 2006; Anderson, Boocock & Graham, 2001; Babakus, Yavas & Hahti, 2006; Bagchi-Sem & Kuechler, 2000; Berra, Piatti & Vitali, 1995; Bradley, Meyer & Gao, 2006; Boeche, 2013; Boojihawon, 2007; Cancino & Coronado, 2014; Chetty & Campbell-Hunt, 2003; Chetty & Holm, 2000; Chetty & Stangl, 2010; Chetty & Wilson, 2003; Chiarvesio, Di Maria & Micelli, 2010; Child & Hsieh, 2014; Child & Rodrigues, 2008; Ciravegna, Lopez & Kundu, 2014; Ciravegna, Majano & Zhan, 2014; Coviello & Munro, 1997; Coviello & Martin, 1999; D'Angelo, Majocchi, Zucchella & Buck, 2013; Dai & Liu, 2009; Deprey, Lloyd-Reason & Ibeh, 2012; Dias & Lopes, 2014; Dimitratos, Amorós, Etchebarne & Felzensztein, 2014; Dimitratos, Voudouris, Plakoyiannaki & Nakos, 2012; Eberhard & Craig, 2013; Echeverri-Carroll, Hunnicutt & Hansen, 1998; Evers & Knight, 2008; Farinha, Ferreira & Gouveia, 2014; Freeman, Hutchings, Lazaris & Zyngier, 2010; Frybourg, 1997; Gabriellsson, Kirpalani, Dimitratos, Solberg & Zucchella, 2008; Goxe, 2010; Guerrieri & Pietrobelli, 2004; Hadjikhani & Ghauri, 2001; Hayer & Ibeh, 2006; Hilmersson, 2014; Hilmersson, 2013; Hilmersson & Jansson, 2012; Ibeh & Kasem, 2011; Isidor, Schwens & Kabst, 2011; Johnsen, 2007; Jansson & Sandberg, 2008; Kalinic & Forza, 2012; Karlsen & Nordhus, 2011; Kaur & Sandhu, 2014; Kontinen & Ojala, 2011; Korsakienė & Tvaronavičienė, 2012; Kreivi, Wang, Muhos & Kess, 2012; Leonidou & Katsikeas, 2003; Lin & Chaney, 2007; Löfgren, 2014; Manolova, Manev & Gyoshev, 2010; Meyer & Skak, 2002; Mort & Weerawardena, 2006; Musteen, Datta & Butts, 2014; Musteen, Francis & Datta, 2010; Ojala, 2009; Park, Han, Rojas, Son & Jung, 2011; Ruokonen, Nummela, Puumalainen & Saarenketo, 2008; Ruzzier & Antoncic, 2007; Sandberg, 2013; Sandberg, 2014; Sasi & Arenius, 2008; Seifriz, Gondim & Pereira, 2014; Senik, Scott-Ladd, Entrekim & Adham, 2011; Spence, 2004; Sinha, Akoorie, Ding & Wu, 2011; Tang, 2011; Tikkanen, 1998; Tolstoy, 2014; Tolstoy & Agndal, 2010; Tolstoy, 2010; Torkkeli, Puumalainen, Saarenketo & Kuivalainen, 2012; Ural, 2009; Westhead, Wright & Binks, 2004; Witkowski & Thibodeau, 1999; Zarei, Nasser & Tajeddin, 2011; Zhou, Wu & Luo, 2007; Zimmerman, Barsky & Brouthers, 2009)	84
Psychic distance countries	(Brock, Johnson & Zhou, 2011; Child, Rodrigues & Frynas, 2009; Nordman & Tolstoy, 2014; Ojala, 2008; Ojala, 2009)	5
Geographic proximity/diversity/scope	(D'Angelo, Majocchi, Zucchella & Buck, 2013; Davenport, 2005; Ciešlik, Kaciak & Welsh, 2012; Fernández-Olmos & Díez-Vial, 2013; Kamakura, Ramón-Jerónimo & Gravel, 2012; Li, Qian & Qian, 2012a; Li, Li & Shi, 2011; Ojala & Tyrväinen, 2007; Sandulli, Fernández-Menéndez, Rodríguez-Duarte & Lopez-Sanchez, 2012; Singh, Gaur & Schmid, 2010; Teixeira, Santos & Brochado, 2008; Zimmerman, Barsky & Brouthers, 2009)	12
Regional development theory	(Westhead, Wright & Binks, 2004)	1
Transaction cost theory	(Brouthers & Nakos, 2004; Khemakhem, 2010; Sinha, Akoorie, Ding & Wu, 2011)	3
Internationalisation process	(Agndal & Elbe, 2007; Agndal, Chetty & Wilson, 2008; Alajoutsijärvi, Mannermaa & Tikkanen, 2000; Anderson, Boocock & Graham, 2001; Armario, Horrillo & Robles, 2009; Barbosa & Ayala, 2014; Basile, 2012; Belso-Martínez, 2006; Benkraiem & Miloudi, 2014; Boter & Holmquist, 1996; Chadwick, Ghafoor, Khail, Khan & Hassan, 2011; Cambra-Fierro & Vazquez-Carrasco, 2010; Carazo, 2007; Carazo, 2009; Chelliah, Sulaiman & Yusoff, 2010; Chetty & Campbell-Hunt, 2003; Chetty & Stangl, 2010; Chiarvesio, Di Maria & Micelli, 2010; Ciešlik, Kaciak & Welsh, 2012; Ciszewska-Mlinarić & Mlinarić, 2010; Cortezia & Souza, 2011; Coviello & Martin, 1999; Coviello & Munro, 1997; Dalli, 1995; Dias & Lopes, 2014; Evers & Knight, 2008; Fink & Kraus, 2007; Frackiewicz & Grzesiuk, 2013; Francioni, Mussoa & Vardiabasisb, 2013; Freeman, Hutchings, Lazaris & Zyngier, 2010; Gabriellsson, Kirpalani, Dimitratos, Solberg & Zucchella, 2008; Gankema, Snuif & Zwart, 2000; Gashi, Hashi & Pugh, 2014; Goxe, 2010; Graves & Shan, 2013; Gurău & Merdji, 2008; Hessels & Parker, 2013; Hewerdine, Rumyantseva & Welch, 2014; Hilmersson, 2013; Hutchinson, Quinn & Alexander, 2005; Hutchinson, Quinn & Alexander, 2006; Jansson & Sandberg, 2008; Kalinic, Sarasvathy & Forza, 2014; Karabulut, 2013; Kennedy & Keeney, 2009; Ketkar & Acs, 2013; Koladkiewicz, 2013; Kontinen & Ojala, 2012; Krašnicka & Glód, 2013; Kreivi, Wang, Muhos & Kess, 2012; Kubickova & Peprny, 2011; Kubickova & Prochazkova, 2014; Kuhlmeier & Knight, 2010; Kuivalainen, Puumalainen, Sintonen & Kyläheiko, 2010; Laudal, 2011; Lee, Lee & Kwak, 2013; Liesch & Knight, 1999; Lin & Chaney, 2007; Lindstrand, Melén & Nordman, 2011; Lloyd-Reason & Mughan, 2002; London, 2010; Meyer & Skak, 2002; Middleton, Liesch & Steen, 2011; Miocevic & Cmjak-Karanovic, 2010; Mockaitis, Vaiginienė & Giedraitis, 2006; Molero, 1998; Moreira,	93

		2007; Mtigwe, 2005; Neupert, Baughn & Dao, 2006; Nkongolo-Bakenda, Anderson, Ito & Garven, 2010; Nummela, Loane & Bell, 2006; O'Casey & Weerawardena, 2009; Peurseem & Jiang, 2008; Pilmayer & Scherle, 2014; Prashantham & McNaughton, 2006; Rialp-Criado, Galván-Sánchez & Suárez-Ortega, 2010; Rodriguez, 2007; Ruokonen, Nummela, Puumalainen & Saarenketo, 2008; Ruzzier, Hisrich & Antoncic, 2006; Saarenketo, Puumalainen, Kuivalainen & Kyläheiko, 2004; Sasi & Arenius, 2008; Schweizer, 2012; Schwens & Kabst, 2011; Singh, Pathak & Naz, 2010; Spence, Orser & Riding, 2011; Steinmann, Kumar & Wasner, 1980; Suh, Bae & Kundu, 2007; Thai & Chong, 2013; Tunisini & Bocconcelli, 2009; Torrens, Amal & Tontini, 2014; Wang, Muhos & Kess, 2011; Zapata & Barrientos, 2013; Zucchella & Siano, 2014)	
	Cognitive perspective: decision-making process	(Acedo & Galan, 2011; Baldauf, Cravens & Wagner, 2000; Child & Hsieh, 2014; Dimitratos, Lioukas, Ibeh & Wheeler, 2010; Dimitratos, Petrou, Plakoyiannaki & Johnson, 2011; Fabian, Molina & Labianca, 2009; Hutchinson, Quinn & Alexander, 2006; Javalgi, Todd, Johnston & Granot, 2012; Kalinic, Sarasvathy & Forza, 2014; Kownatzki, Walter, Floyd & Lechner, 2013; Mikhailitchenko & Lundstrom, 2006; Miocevic & Crnjak-Karanovic, 2011; Schweizer, 2012; Serra, Pointon & Abdou, 2012; Sommer & Haug, 2011; Stoian & Rialp-Criado, 2010; Williams, 2013)	19
	Internationalisation patterns; Export patterns; Start up patterns	(Hewerdine, Romyantseva & Welch, 2014; Jones, 1999; Lee, Kelley, Lee & Lee, 2012; McGaughey, 2007; Richardson, 2014; Taylor & Jack, 2012; Testa, 2011)	7
International strategy	Offshoring decisions/"backshoring"	(Aspelund & Butsko, 2010; Canham & Hamilton, 2013; Di Gregorio, Musteen & Thomas, 2009; Sinha, Akoorie, Ding & Wu, 2011)	4
	Quality management systems	(Đorđević, Bešić, Milošević & Bogetić, 2010; Imbriani, Morone & Testa, 2014)	2
	Cooperative strategy (joint ventures, partnership, alliances)	(Bradley, Meyer & Gao, 2006; Bontempi & Prodi, 2009; Chadwick, Ghafoor, Khail, Khan & Hassan, 2011; Dias & Lopes, 2014; Fink, Harms & Kraus, 2008; Fink & Kraus, 2007; Globerman & Nielsen, 2007; Harrigan, Ramsey & Ibbotson, 2008; Harrigan, Ramsey & Ibbotson, 2009; Karim, 2009; Kennedy & Keeney, 2009; Kirby & Kaiser, 2003; Klingler-Vidra, 2014; Kock, Nisuls & Söderqvist, 2010; Lee, Kelley, Lee & Lee, 2012; Leonidou & Katsikeas, 2003; Li, Li & Shi, 2011; Li, Yi & Chang, 2013; Lopez-Navarro, Callarisa-Fiol & Moliner-Tena, 2013; Lopez-Perez, & Rodriguez-Ariza, 2013; Nakos & Brouthers, 2008; Nakos, Brouthers & Dimitratos, 2014; Shin, Park & Ingram, 2012; Sinha, Akoorie, Ding & Wu, 2011; Spence, 2004; Swoboda, Meierer, Foscht & Morschett, 2011; Tabares, Anzo & Estrada, 2014; Tunisini & Bocconcelli, 2009; Ulubasoglu, Akdis & Kok, 2009)	29
	Inward perspective/international purchasing	(Agndal, 2006; Holmlund, Kock & Vanyushyn, 2007; Knudsen & Servais, 2007; Möller & Salminen, 2006; Overby & Servais, 2005; Yu & Lindsay, 2011; Zhou, Wu & Luo, 2007)	7
	Environmental strategy	(Andersson, Gabrielsson & Wictor, 2004; Andzelic, Dzakovic, Lalic, Zrnica & Palcic, 2011; Campbell, 1996; Caniato, Caridi, Crippa & Moretto, 2012; Hadjikhani & Ghauri, 2001; Hunkeler, 2003; Kouznetsov, Dass & Schmidt, 2014; Kuivalainen, Sundqvist, Puumalainen & Cadogan, 2004; Martín-Tapia, Aragón-Correa & Rueda-Manzanares, 2010; Martín-Tapia, Aragón-Correa & Senise-Barrio, 2008; Westhead, Wright & Ucbasaran, 2001; Zhang, Sarker & Sarker, 2013)	12
	Strategic perspective	(Agndal & Chetty, 2007; Amal & Filho, 2010; Anderson, 2011; Bagchi-Sem & Kuechler, 2000; Bell, Crick & Young, 2004; Bello, 2009; Belich & Dubinsky, 1995; Berra, Piatti & Vitali, 1995; Campbell, 1996; Cancino & La Paz, 2010; Chen, Hsu & Chang, 2014; Chetty & Campbell-Hunt, 2004; Chiarvesio, Di Maria & Micelli, 2010; Crick & Spence, 2005; Cui, Walsh & Zou, 2014; Deligianni, Voudouris & Lioukas, 2014; Dhanaraj & Beamish, 2003; Dimitratos, Petrou, Plakoyiannaki & Johnson, 2011; Evangelista, 2000; Fernández & Bustamante, 2005; Fernandez & Nieto, 2005; Fernandez-Ortiz & Lombardo, 2009; Francis & Collins-Dodd, 2004; Francioni, Mussoa & Vardiabasisb, 2013; Frey, Iraldo & Testa, 2013; Galbraith, Rodriguez & DeNoble, 2008; Gemser, Brand & Sorge, 2012; Gnizy, Baker & Grinstein, 2014; Golovko & Valentini, 2011; Graves & Thomas, 2008; Gorton & White, 2009; Hahti, Madupu, Yavas & Babakus, 2005; Hagen, Zucchella, Cerchiello & De Giovanni, 2012; Hatonen, 2010; Hessels & Parker, 2013; Hollenstein, 2005; Hutchinson, Quinn & Alexander, 2006; Johnson, Arya & Mirchandani, 2013; Karlsen & Nordhus, 2011; Keen & Etamad, 2012; Kennedy & Keeney, 2009; Knight, 2001; Knight & Liesch, 2002; Kock, Nisuls & Söderqvist, 2010; Kownatzki, Walter, Floyd & Lechner, 2013; Kumar, Singh & Shankar, 2014; Kuuluvainen, 2012; Lages, Abrantes & Lages, 2008; Lindell & Karagozoglu, 1997; Li & Dimitratos, 2014; Löfgren, 2014; Li, Yi & Chang, 2013; London, 2010; Lu & Beamish, 2006; Maldifassi & Chacón, 2014; Merrilees, Tiessen & Miller, 2000; Mikhailitchenko & Lundstrom, 2006; Miocevic & Crnjak-Karanovic, 2012; Moen, 2000; Musso & Francioni, 2014; Naidu & Prasad, 1994; Nguyen, Le & Bryant, 2013; Nowiński & Rialp, 2013; Patel, Pieper & Hair, 2012; Pena-Vinces, Cepeda-Carrion & Chin, 2012; Pisoni, Fratocchi & Onetti, 2013; Prater & Ghosh, 2005; Rabino, Simoni & Zanni, 2008; Raymond & St-Pierre, 2013; Raymond, St-Pierre, Uwizeyemungu & Le Dinh, 2014; Rialp-Criado, Galván-Sánchez & Suárez-Ortega, 2010; Robertson, 2003; Rodriguez, 2007; Shih & Wickramasekera, 2011; Shin, Park & Ingram, 2012; Solberg & Durrieu, 2008; Spence & Crick, 2006; Sui & Baum, 2014; Tang, 2011; Taylor & Jack, 2012; Stewart & McAuley, 2000; Valdés, 2009; Volchek, Jantunen, & Saarenketo, 2013; Tolstoy, 2014; Westhead, Wright & Ucbasaran, 2004; Williams, 2007; Xie & Suh, 2014; Yang, 2012; Yu & Lindsay, 2011; Zhang, Ma, Wang & Wang, 2014)	90
	Internationalisation/Export barriers, uncertainties, challenges, motivations	(Acedo & Galan, 2011; Acs, Morck, Shaver & Yeung, 1997; Al-Hyari, Al-Weshah & Alnsour, 2012; Altuntaş, Tokol & Harcar, 2007; Anderson, 2011; Arteaga-Ortiz & Fernandez-Ortiz, 2010; Babakus, Yavas & Hahti, 2006; Baldauf, Cravens & Wagner, 2000; Bell, 1997; Burpitt & Rondinelli, 2000; Cardoza & Fornes, 2011; Hutchinson, Fleck & Lloyd-Reason, 2009; Hutchinson, Quinn, Alexander & Doherty, 2009; Katsikeas & Morgan, 2003; Korsakienė & Tvaronavičienė, 2012; Li, Tan & Hida, 2011; Loane, Bell & Cunningham, 2014; Morgan & Katsikeas, 1997; Nkongolo-Bakenda, Anderson, Ito & Garven, 2010; Patel, Pieper & Hair, 2012; Rutihinda, 2008; Sass, 2012; Shah, Javed & Syed, 2013; Singh, Pathak & Naz, 2010;	29

	Shih & Wickramasekera, 2011; Suarez-Ortega, 2003; Uner, Kocak, Cavusgil & Cavusgil, 2013; Xie & Suh, 2014; Zhang, Sarker & Sarker, 2008)	
International competencies	(Chetty, Eriksson & Lindbergh, 2006; Chetty, Johanson & Martín, 2014; Child & Hsieh, 2014; Cortezia & Souza, 2011; D'Angelo, Majocchi, Zucchella & Buck, 2013; Deprey, Lloyd-Reason & Ibeh, 2012; Floriani & Fleury, 2012; Garg & Kumar, 2014; Globerman & Nielsen, 2007; Grosse, Mudd & Cerchiari, 2013; Hilmersson, 2014; Huett, Baum, Schwens & Kabst, 2014; Isidor, Schwens & Kabst, 2011; Ivarsson & Alvstam, 2013; Kalinic & Forza, 2012; Knight & Kim, 2009; Kula & Tatoglu, 2003; Lal, 1996; Lal, 2002; Lal, 2005; Majocchi, Bacchiocchi & Mayrhofer, 2005; Nowinski & Bakinowska, 2012; Nummela, Saarenketo & Puimalainen, 2004; Prater & Ghosh, 2006; Sandberg, 2014; Reuber & Fischer, 1997; ST-Pierre, Defays, Benezech & Garcia, 2014; Steinerowska-Streb, 2012; Zhou, 2007)	29
Perceived cost	(Suh, Bae & Kundu, 2007)	1
Country-level vs firm-level	(Beleska-Spasova & Glaister, 2009)	1
International business risks/e-risk	(Dahles, 2007; Dai, Maksimov, Gilbert & Fernhaber, 2014; Matthee & Heymans, 2013; Pezderka & Sinkovics, 2011; Todo & Sato, 2014)	5
Stewardship perspective	(Segaro, 2012; Segaro, Larimo & Jones, 2014)	2
Export's promotion/Government assistance	(Acs, Morck & Yeung, 2001; Alvarez, 2004; Ayob & Freixanet, 2014; Bannò, Piscitello & Amorim Varum, 2014; Burpitt & Rondinelli, 1998; Carazo, 2007; Crick & Jones, 2000; Durmusoglu, Apfelthaler, Nayir, Alvarez & Mughan, 2012; Francis & Collins-Dodd, 2004; Freixanet, 2012; Moini, 1998; Regnier, 2009; Shamsuddoha, Ali & Ndubisi, 2009; Toledo, Hernández & Griffin, 2010; Wilkinson & Brouthers, 2006; Wilkinson, Keillor & d'Amico, 2005)	16
Globalization	(Garg & Kumar, 2014; Garcia, 2009; Kamakura, Ramón-Jerónimo & Gravel, 2012; Khapne, 2012; Miocevic & Crnjak-Karanovic, 2012; Pangarkar, 2008; Prater & Ghosh, 2006; Rao, 2007; Reuber & Fischer, 1997; Winch & Bianchi, 2006)	10
Rapid internationalisation	(Barbosa, González-Campo & Vargas, 2013; Bell, 1995; Bell & Loane, 2010; Bell, McNaughton & Young, 2001; Cancino & La Paz, 2010; Chandra, Styles & Wilkinson, 2012; Chetty, Johanson & Martín, 2014; Dias & Lopes, 2014; Freeman, Hutchings, Lazaris & Zyngier, 2010; Kalinic & Forza, 2012; Keen & Etemad, 2012; Loane, Bell & McNaughton, 2007; Nowinski & Bakinowska, 2012; Ruokonen, 2008; Taylor & Jack, 2012)	15
Early internationalisation	(Cheng & Yu, 2008; Gallego & Casillas, 2014; Jones, 1999; Kaur & Sandhu, 2014; Knight & Cavusgil, 2004; Lee, Kelley, Lee & Lee, 2012; Li, Qian & Qian, 2012b; London, 2010; Murray & Ron, 2010; Nowinski & Bakinowska, 2012; Nowinski & Rialp, 2013; Preece, Miles & Baetz, 1999; Sui, Yu & Baum, 2012; Zhou, 2007)	14
Social capital	(Abban, Omta, Aheto & Scholten, 2013; Agndal, Chetty & Wilson, 2008; Ellis & Pecotich, 2001; Lindstrand, Melén & Nordman, 2011; Nowinski & Bakinowska, 2012; Park, Han, Rojas, Son & Jung, 2011; Prashantham & Floyd, 2012; Prashantham & McNaughton, 2006; Qiao, Fung & Ju, 2013; Rodrigues & Child, 2012; Ruzzier & Antoncic, 2007; Ulubasoglu, Akdis & Kok, 2009)	12
Exporting/Exports behavior	(Abor, Agbloyora & Kuipo, 2014; Acedo & Galan, 2011; Barletta, Pereira & Yoguel, 2013; Benkraiem & Miloudi, 2014; Bilkey & Tesar, 1977; Campbell, 1996; Cassiman & Golovko, 2011; Descotes & Walliser, 2011; Ellis & Pecotich, 2001; Gashi, Hashi & Pugh, 2014; Golovko & Valentini, 2011; Holmlund, Kock & Vanyushyn, 2007; Karabulut, 2013; Katsikeas & Morgan, 2003; Khemakhem, 2010; Lopez-Navarro, Callarisa-Fiol & Moliner-Tena, 2013; Lu & Beamish, 2006; Moen & Servais, 2002; Olmos, 2011; Parhizkar, Smith & Miller, 2009; Ruiz-Fuensanta, 2011; Subrahmanya, 2007; Teo, Chan & Tan, 2007; Wilkinson, Keillor & d'Amico, 2005; Williams & Chaston, 2004; Zhang, Sarker & Sarker, 2013)	26
Market selection/Entry mode/market entry	(Agndal, Chetty & Wilson, 2008; Bangara, Freeman & Schroder, 2012; Bontempi & Prodi, 2009; Brouthers, Brouthers & Werner, 1996; Brouthers & Nakos, 2004; Brouthers & Nakos, 2005; Ciravegna, Lopez & Kundu, 2014; Chadwick, Ghafoor, Khail, Khan & Hassan, 2011; Coviello & Martin, 1999; Coviello & Munro, 1997; Cui, Walsh & Zou, 2014; Dalli, 1995; Dimitratos, Plakoyiannaki, Pitsoulaki & Tüselmann, 2010; Eliasson, Hansson & Lindvert, 2012; Ellis & Pecotich, 2001; Francioni, Mussoa & Vardiabasisb, 2013; Freeman, Hutchings, Lazaris & Zyngier, 2010; Gallego & Casillas, 2014; Hutchinson, Quinn & Alexander, 2006; Jansson & Sandberg, 2008; Kouznetsov, Dass & Schmidt, 2014; Maekelburger, Schwens & Kabst, 2012; Martín Martín & Drogendijk, 2014; Melia, Perez & Dobon, 2010; Mockaitis, Vaiginienė & Giedraitis, 2006; Moen, Gavlen & Endresen, 2004; Moini, Kalouda & Tesar, 2008; Morgan & Katsikeas, 1997; Musso & Francioni, 2014; Ojala, 2008; Ojala, 2009; Ojala & Tyrvainen, 2007; Ojala & Tyrvainen, 2008; Pillmayer & Scherle, 2014; Pinho, 2007; Sandberg, 2013; Rasheed, 2005; Ripollés, Blesa & Monferrer, 2012; Rundh, 2011; Westhead, Wright & Ucbasaran, 2002)	40
Cross-cultural management	(Brock, Johnson & Zhou, 2011; Dahles, 2007; Swift & Lawrence, 2003; Dimitratos, Petrou, Plakoyiannaki & Johnson, 2011; Ojala & Tyrvainen, 2007; Richardson, 2014; Teixeira, Santos & Brochado, 2008; Zapata & Barrientos, 2013)	8
Competitiveness	(Andzelic, Dzakovic, Lalic, Zrnica & Palcic, 2011; Arze & Svensson, 1997; Barbosa, González-Campo & Vargas, 2013; Dan, 2012; Evangelista, 2000; Di Gregorio, Musteen & Thomas, 2009; Farinha, Ferreira & Gouveia, 2014; Fernández & Bustamante, 2005; Freixanet, 2012; Gassmann & Keupp, 2007; Isaksen, 1997; Johnson, Arya & Mirchandani, 2013; Lindell & Karagozoglu, 1997; Maranto-Vargas & Rangel, 2007; Pena-Vinces, Cepeda-Carrion & Chin, 2012; Preece, Miles & Baetz, 1999; Raymond, St-Pierre, Uwizeyemungu & Le Dinh, 2014; Smallbone, Piasecki, Venesaar, Todorov & Labrianidis, 1999; Todd & Javalgi, 2007; Valdés, 2009; Williams, 2007)	21
Host-home country	(Cui, Walsh & Zou, 2014)	1
Free trade agreements	(Álvarez & Vergara, 2013; Battisti, Jurado & Perry, 2014)	2
Demand/supply factors	(Caniato, Caridi, Crippa & Moretto, 2012; Charkaoui, Ouahman & Bouayyad, 2012; Frey, Iraldo & Testa, 2013; Kumar, Singh & Shankar, 2014; Rettab & Rao, 2009; Robertson, 2003)	6
Re/De-internationalisation	(Crick, 2004)	1

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	Location decisions	(Freeman & Styles, 2014; Freeman, Styles & Lawley, 2012; Galbraith, Rodriguez & DeNoble, 2008; Sass, 2012; Huett, Baum, Schwens & Kabst, 2014; Li & Hu, 2002)	6
Financing	Banks' effects on internationalisation trade	(Abor, Agbloyora & Kuipo, 2014; Arslan & Karan, 2009; Benkraiem & Miloudi, 2014; Klingler-Vidra, 2014; Chen, Ding & Wu, 2014; Gupta, Wilson, Gregoriou & Healy, 2014; Lindstrand & Lindbergh, 2011; Matthee & Heymans, 2013; Miloudi, 2014; Riding, Orser, Spence & Belanger, 2012)	9
	Equity based-funding methods	(Smolarski & Kut, 2011)	1
International Marketing	Online channel	(Bell & Loane, 2010; Frackiewicz & Grzesiuk, 2013; Glavas & Mathews, 2014; Glavas, Pike & Mathews, 2014; Hamill & Gregory, 1997; Harrigan, Ramsey & Ibbotson, 2008; Harrigan, Ramsey & Ibbotson, 2009; Hinson & Abor, 2005; Hinson & Sorensen, 2006; Javalgi, Todd, Johnston & Granot, 2012; Kula & Tatoglu, 2003; Lal, 2002; Lal, 2005; Moen, Madsen & Aspelund, 2008; Moini & Tesar, 2005; Pezderka & Sinkovics, 2011; Sinkovics, Sinkovics & Ruey-Jer, 2013; Tiessen, Wright & Turner, 2001; Tseng & Johnsen, 2011)	19
	Trade fairs	(Kreivi, Wang, Muhos & Kess, 2012)	1
	Export marketing research and information	(Belich & Dubinsky, 1995; Crick & Chaudhry, 1997; Elenurm, 2008; Hart & Tzokas, 1999; Williams, 2003)	5
	International marketing channels	(Alajoutsijärvi, Mannermaa & Tikkanen, 2000; Battisti, Jurado & Perry, 2014; Cui, Walsh & Zou, 2014; Gnizy, Baker & Grinstein, 2014; Hallböck & Gabrielsson, 2013; Madsen, Moen & Hammervold, 2012; Khemakhem, 2010; Knight, 2000; Lages, Abrantes & Lages, 2008; Merrilees & Tiessen, 1999; Merrilees, Tiessen & Miller, 2000; Moen, 2000; Mohammadzadeh, 2012; Parhizkar, Smith & Miller, 2009; Park, Whitelock & Giroud, 2009; Rundh, 2011; Tikkanen, 1998; Stewart & McAuley, 2000; Williams & Chaston, 2004; Witkowski & Thibodeau, 1999)	20
	Brand management	(Spence & Essoussi, 2010)	1
	Corporate social responsibility	(Boehe & Cruz, 2010; Laudal, 2011; Lopez-Perez, & Rodriguez-Ariza, 2013)	3
	Market orientation and commitment	(Armario, Ruiz & Armario, 2008; Bagchi-Sem & Kuechler, 2000; Chetty, Johanson & Martín, 2014; Dimitratos, Voudouris, Plakoyiannaki & Nakosd, 2012; Filser, Eggers, Kraus & Málóvics, 2014; Javalgi, Todd & Granot, 2011; Ripollés, Blesa & Monferrer, 2012; Ruokonen, 2008; Ruiz-Fuensanta, 2011; Ruokonen, Nummela, Puumalainen & Saarenketo, 2008; Shin, Park & Ingram, 2012)	11
	Customer behavior	(Frackiewicz & Grzesiuk, 2013)	1
	Institutional view	(Chen, Hsu & Chang, 2014; Cheng & Yu, 2008; Cheng & Yu, 2012; Hessels & Terjesen, 2010; Jonsson & Lindbergh, 2010; Li, Yi & Chang, 2013; Vachani, 2005)	7
Innovation perspective	Innovation	(Acs, Morck & Yeung, 2001; Acs, Morck, Shaver & Yeung, 1997; Alvarado & Granados, 2013; Barbosa & Ayala, 2014; Boter & Holmquist, 1996; Brines, Shepherd & Woods, 2013; Chang & Hughes, 2012; Chetty & Stangl, 2010; Chiarvesio, Di Maria & Micelli, 2010; Maranto-Vargas & Rangel, 2007; Dai, Maksimov, Gilbert & Fernhaber, 2014; D'Angelo, 2012; D'Angelo, Majocchi, Zucchella & Buck, 2013; Di Gregorio, Musteen & Thomas, 2009; Farinha, Ferreira & Gouveia, 2014; Fernández-Ribas, 2010; Frey, Iraldo & Testa, 2013; Frybourg, 1997; Golovko & Valentini, 2011; Hallböck & Gabrielsson, 2013; Hatonen, 2010; Hollenstein, 2005; Ion & Victor, 2013; Imbriani, Morone & Testa, 2014; Islam, 2010; Knight & Cavusgil, 2004; Libaers & Meyer, 2011; Löfgren, 2014; Melia, Perez & Dobon, 2010; Micelli, 2010; Molero, 1998; Murray & Ron, 2010; Musteen & Datta, 2011; Narula, 2002; Nordman & Tolstoy, 2011; O'Cass & Weerawardena, 2009; Pittiglio, Sica & Villa, 2009; Schilirò, 2000; Raymond, St-Pierre, Uwizeyemungu & Le Dinh, 2014; Seifriz, Gondim & Pereira, 2014; Volchek, Jantunen & Saarenketo, 2013; Zucchella & Siano, 2014)	41
	R&D investment	(Buckley, 1997; D'Angelo, 2012; Esteve-Perez & Rodriguez, 2013; Farinha, Ferreira & Gouveia, 2014; Ion & Victor, 2013; Lee, Kelley, Lee & Lee, 2012; Lee & Marvel, 2009; Lindell & Karagozoglu, 1997; Narula, 2002; Qian & Li, 2003; Qiao, Fung & Ju, 2013; Sass, 2012; Teixeira, Santos & Brochado, 2008)	13
	Product diversity/product innovation	(Bell, Crick & Young, 2004; Boehe & Cruz, 2010; Cassiman & Golovko, 2011; Esteve-Perez & Rodriguez, 2013; Hong & Roh, 2009; Imbriani, Morone & Testa, 2014; Katsikeas, Deng & Wortzel, 1997; Li, Qian & Qian, 2012a; Nordman & Tolstoy, 2011; Singh, Gaur & Schmid, 2010; Tolstoy, 2014)	11
	Technology strategies	(Buckley, 1997; Crick & Jones, 2000; Galbraith, Rodriguez & DeNoble, 2008; Hatonen, 2010; Isidor, Schwens & Kabst, 2011; Lee, Kelley, Lee & Lee, 2012; Musteen & Datta, 2011; Nordman & Tolstoy, 2011; Park & Ghauri, 2011; Pena-Vinces, Cepeda-Carrion & Chin, 2012)	10
	Enterprise-university cooperation	(Conlon & Humphreys, 2007; Swift & Lawrence, 2003; Wang, Muhos & Kess, 2011)	3
	Intellectual property	(Mets, Kaarna & Kelli, 2010)	1
	Patents	(Fernández-Ribas, 2010)	1
Firms' characteristics	Firms' profile (size, type, age)	(Álvarez & Vergara, 2013; Andersson, Gabrielsson & Victor, 2004; Baldauf, Cravens & Wagner, 2000; Chelliah, Pandian, Sulaiman & Munusamy, 2010; Crick & Chaudhry, 1997; Hinson & Abor, 2005; Katsikeas, Deng & Wortzel, 1997; Laudal, 2011; Majocchi, Bacchiocchi & Mayrhofer, 2005; Martin-Tapia, Aragon-Correa & Rueda-Manzanares, 2010; Pisoni, Fratocchi & Onetti, 2013; Svetličič, Jaklič & Burger, 2007; Westhead, Wright & Ucbasaran, 2002)	13
	Management skills/Top executive attributes	(Bangara, Freeman & Schroder, 2012; Eyre & Smallman, 1998; Fernandez-Ortiz & Lombardo, 2009; Graves & Thomas, 2006; Hsu, Chen & Cheng, 2013; Hutchinson, Quinn & Alexander, 2006; Loane, Bell & McNaughton, 2007; Middleton, Liesch & Steen, 2011; Mitter, Duller, Feldbauer-Durstmüller & Kraus, 2014; Mohammadzadeh, 2012; Nowinski & Bakinowska, 2012; Omri & Becuwe, 2014; Pinho, 2007; Qiao, Fung & Ju, 2013; Segaro, Larimo & Jones, 2014; Shih & Wickramasekera, 2011; Reuber & Fischer, 1997; Ruzzier, Antoncic, Hisrich & Konecnik, 2007; Todo & Sato, 2014; Westhead, Wright & Ucbasaran, 2001; Williams & Chaston, 2004; Zahra, Neubaum & Naldi, 2007)	22

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	Expatriate selection	(Cheng & Lin, 2009)	1
	Human capital/Skilled workers	(Aidis & Mickiewicz, 2006; Belich & Dubinsky, 1995; Loane, Bell & Cunningham, 2014; Monks, Scullion & Creaner, 2001; Robertson, 2003; ST-Pierre, Defays, Benezech & Garcia, 2014)	6
	Degree of internationalisation	(Floriani & Fleury, 2012; Pangarkar, 2008; Zhang, Ma, Wang & Wang, 2014)	3
	Internationalisation of family firms	(Brines, Shepherd & Woods, 2013; Eberhard & Craig, 2013; Fernandez & Nieto, 2005; Graves & Thomas, 2008; Koladkiewicz, 2013; Kontinen & Ojala, 2012; Mitter, Duller, Feldbauer-Durstmüller & Kraus, 2014; Segaro, 2012)	8
	Export manager's rewards	(Coudounaris, 2011)	1
	Gender	(Orser, Spence, Riding & Carrington, 2010; Williams, 2013)	2
Performance	Impact on SME survival	(Krašnicka & Głód, 2013; Kubickova & Prochazkova, 2014; Lee, Kelley, Lee & Lee, 2012; Maldifassi & Chacón, 2014; Parhizkar, Smith & Miller, 2009; Suh & Kim, 2014)	6
	Multi-dimensional internationalisation	(Chetty, 1999; Ruzzier, Antoncic & Hisrich, 2007)	2
	Industrial districts	(Belso-Martínez, 2006; Berra, Piatti & Vitali, 1995; Echeverri-Carroll, Hunnicutt & Hansen, 1998; Guerrieri & Pietrobelli, 2004; Tunisini & Bocconcelli, 2009)	5
	Outcomes/performance	(Abban, Omta, Aheto & Scholten, 2013; Abor, Agbloyora & Kuipo, 2014; Altıntaş, Tokol & Harcar, 2007; Alvarez, 2004; Álvarez & Vergara, 2013; Amal & Filho, 2010; Armario, Horrillo & Robles, 2009; Armario, Ruiz & Armario, 2008; Babakus, Yavas & Haahti, 2006; Baldauf, Cravens & Wagner, 2000; Bannò, Piscitello & Varum, 2014; Barletta, Pereira & Yoguel, 2013; Belso-Martínez, 2006; Boehe & Cruz, 2010; Burpitt & Rondinelli, 2000; Brouthers & Nakos, 2005; Camison & Villar-Lopez, 2010; Charkaoui, Ouahman & Bouayyad, 2012; Chang & Hughes, 2012; Chelliah, Sulaiman & Yusoff, 2010; Cheng & Lin, 2009; Chetty, Johanson & Martín, 2014; Chiao, Yang & Yu, 2006; Chiarvesio, Di Maria & Micelli, 2010; Ciešlik, Kaciak & Welsh, 2012; Ciszewska-Mlinarić & Mlinarić, 2010; Coudounaris, 2011; Crick, 2009; Cui, Walsh & Zou, 2014; Dai & Liu, 2009; D'Angelo, Majocchi, Zucchella & Buck, 2013; Dhanaraj & Beamish, 2003; Durmusoglu, Apfelthaler, Nayir, Alvarez & Mughan, 2012; Fernandez-Ortiz & Lombardo, 2009; Filser, Eggers, Kraus & Málóvics, 2014; Floriani & Fleury, 2012; Freeman & Styles, 2014; Freeman, Styles, & Lawley, 2012; Freixanet, 2012; Gerschewski, Rose & Lindsay, 2014; Gorton & White, 2009; Graves & Shan, 2013; Haahti, Madupu, Yavas & Babakus, 2005; Hagen, Zucchella, Cerchiello & De Giovanni, 2012; Hart & Tzokas, 1999; Hinson & Abor, 2005; Hong & Roh, 2009; Hsu, Chen & Cheng, 2013; Javalgi, Todd & Granot, 2011; Jonsson & Lindbergh, 2010; Kahiya & Dean, 2014; Knight & Cavusgil, 2004; Knight & Kim, 2009; Kocak & Abimbola, 2009; Knight, 2000; Krašnicka & Głód, 2013; Kuhlmeier & Knight, 2010; Kuivalainen, Puumalainen, Sintonen & Kyläheiko, 2010; Kuivalainen, Sundqvist, Puumalainen & Cadogan, 2004; Kumar, Singh & Shankar, 2014; Lal, 1996; Lee, Kelley, Lee & Lee, 2012; Lee & Marvel, 2009; Li, Qian & Qian, 2012b; Li, Qian & Qian, 2012a; Li, Li & Shi, 2011; Lu & Beamish, 2001; Lu & Beamish, 2006; Madsen, Moen & Hammervold, 2012; Martin-Tapia, Aragon-Correa & Senise-Barrio, 2008; Merrilees, Tiessen & Miller, 2000; Majocchi, Bacchiocchi & Mayrhofer, 2005; Miocevic & Crnjak-Karanovic, 2011; Miocevic & Crnjak-Karanovic, 2012; Moen, 2000; Moini, 1998; Musteen, Datta & Butts, 2014; Musteen, Francis & Datta, 2010; Nakos & Brouthers, 2008; Nakos, Brouthers & Dimitratos, 2014; Nazar & Shaikh, 2011; Nguyen, Le & Bryant, 2013; Nummela, Saarenketo & Puumalainen, 2004; Pangarkar, 2008; Qian & Li, 2003; Rasheed, 2005; Raymond & St-Pierre, 2013; Raymond, St-Pierre, Uwizemungu & Le Dinh, 2014; Rutihinda, 2008; Sandulli, Fernández-Menéndez, Rodríguez-Duarte & Lopez-Sanchez, 2012; Schilirò, 2000; Sciascia, D'Oria, Bruni & Larrañeta, 2014; Singh, Gaur & Schmid, 2010; Sinkovics, Sinkovics & Ruey-Jer, 2013; Smolarski & Kut, 2011; Solberg & Durrieu, 2008; Steinerowska-Streb, 2012; Stoian, Rialp & Rialp, 2011; Torkkeli, Puumalainen, Saarenketo & Kuivalainen, 2012; Torrens, Amal & Tontini, 2014; Ural, 2009; Volchek, Jantunen & Saarenketo, 2013; Westhead, Wright & Ucbasaran, 2002; Wilkinson & Brouthers, 2006; Wolff & Pett, 2006; Yu & Lindsay, 2011; Zhang, Ma, Wang & Wang, 2014; Zhang, Sarker & Sarker, 2008; Zhang, Sarker & Sarker, 2013; Zhou, Wu & Luo, 2007; Zucchella & Siano, 2014)	111
	Export intensity/capacity	(Dan, 2012; D'Angelo, 2012; Eberhard & Craig, 2013; Esteve-Perez & Rodríguez, 2013; Grosse, Mudd & Cerchiarri, 2013; Hinson & Sorensen, 2006; Ioan, 2012; Karabulut, 2013; Lal, 2005; Maldifassi & Chacón, 2014; Martin-Tapia, Aragon-Correa & Rueda-Manzanares, 2010; Majocchi, Bacchiocchi & Mayrhofer, 2005; Martin-Tapia, Aragon-Correa & Senise-Barrio, 2008; Moen, 2000; Moen & Servais, 2002; Morgan & Katsikeas, 1997; Preece, Miles & Baetz, 1999; Su & Adams, 2010; Teo, Chan & Tan, 2007; Zhang, Sarker & Sarker, 2008)	20
	Total number of times the topic was referred		1247

*Number of articles for each topic.

Source: Own preparation.

4. EXPORT PERFORMANCE AND THE INTERNATIONALISATION OF SMES

ABSTRACT:

This chapter proposes a conceptual model that analyses the factors influencing the export performance of small and medium-sized enterprises (SMEs) and integrates international entrepreneurship theory and international strategies. Rooted in an extensive bibliography that provides the basis for key constructs, the proposed model brings together the fundamentals of SMEs' internationalisation processes that influence these firms' export performance. The model highlights three important factors: industry-, environment- and firm-related aspects affecting firms' entrepreneurial orientation. The model contributes to a better understanding of the key factors affecting the export performance of SMEs, providing a simple structure that can be strategically used by entrepreneurs when launching their firms into international markets. The model complements previous approaches but offers a more integrative approach based on research that ventures further into a little explored area of the literature on internationalisation theories.

KEYWORDS: Internationalisation; SMEs; Performance; Conceptual Model; International Strategy; International Entrepreneurship.

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4.1. Introduction

The evolving business practices of the 1980s brought new market approaches – including a demand for accelerated entry into international markets – that forced firms to make necessary strategic adaptations (Verdier and Prange, 2011). The internationalisation path has become not only an option for many firms but also a strategic means of survival, growth and expansion (McDougall et al., 1994; Graves and Thomas, 2008; Alon et al., 2009; Papadopoulos and Martín, 2011; Dutot et al., 2014). This has been reflected in an increase in small and medium-sized enterprises (SMEs) following a path of international expansion (Evers, 2011; Child and Hsieh, 2014; Toulova et al., 2015).

The impact of internationalisation on firms' performance has been a focus of both researchers and professionals (Xie et al., 2009). Over the years, multiple studies have linked internationalisation and performance (e.g. Lu and Beamish, 2001, 2006; Ruzzier et al., 2007; Lee and Marvel, 2009; Lee et al., 2012; Sass, 2012; Torkkeli et al., 2012; D'Angelo et al., 2013; Musteen et al., 2014; Zucchella and Siano, 2014; Cui et al., 2014; Gerschewskia, et al., 2015; Lohrke et al., 2015). Ruigrok and Wagner (2003) and Oesterle et al. (2008) reviewed empirical studies that suggest a positive relationship between these two constructs. However, the cited authors also indicated the need for further studies.

Technological, economic, political and social changes have stimulated researchers to raise new questions and offer alternative explanations as to why firms internationalise, including formulating several theories that analyse different internationalisation processes. Past research emphasised the activities of multinational enterprises (MNEs), as well as how smaller firms have tended to restrict their business to domestic markets (Levitt, 1983; Bartlett and Ghoshal, 1988; Yip, 1989; Melin, 1992; Dana et al., 1999a, 1999b; Dana, 2001; Etemad et al., 2001; Wright and Dana, 2003; Dana et al., 2004; Dana and Wright, 2009). In general, studies on MNEs have mainly used the transaction cost model, eclectic paradigm and monopolistic advantage theory (McAuley, 2010) – all of which fail to explain the roles and propensities of small firms in the international business arena.

SMEs are of increasing importance in the international economy. The active role of SMEs in international markets has long been of interest in the academic community, especially to those studying international trade (e.g. Leonidou and Katsikeas, 1996; Coviello and McAuley, 1999; Lu and Beamish, 2001; Knight, 2001; Etemad and Wright, 2003; Etemad, 2004a, 2004b; Torrès and Julien, 2005; Raymond et al., 2005; Amal and Filho, 2010; Wright et al., 2007; Dimitratos et al., 2010; McAuley, 2010; Kuivalainen et al., 2012; Kalinic and Forza, 2012; Child and Hsieh, 2014; Toulouva et al., 2015). However, SME internationalisation studies are relatively new and significantly different from those done on MNEs (Etemad and Wright, 2003; Mejri and Umemoto, 2010; Dasí et al., 2015). Several attempts have been made to conceptualise the internationalisation phenomenon, ranging from the traditional stages model to born globals and international new ventures (D'Angelo et al., 2013). However, there is a lack of consensus on how to explain this phenomenon from an integrated perspective. In this context, new perspectives on how to integrate, develop and evaluate the internationalisation of SMEs are in high demand (e.g. Andersen, 1993; Leonidou and Katsikeas, 1996; Raymond et al., 2005; Schulz et al., 2009; Thai and Chong, 2013).

There are several theories representing diverse views of the internationalisation process, (Whitelock, 2002). In particular, the internationalisation of SMEs has been the focus of international entrepreneurship and networking theories, with integrative models representing a recent trend in the area (e.g. Fetcher, 2001; Bell et al., 2003; Etamad, 2004a, 2004b; Mejeri and Umemoto, 2010). Despite the above-mentioned diversity, all these theories try to interpret and conceptualise key information about firms and markets regarding the internationalisation process. In order to take this theoretical progression one step further, in this chapter, we propose a conceptual model that helps explain internationalisation processes' drivers of firm performance based on a series of elements. These are (1) key aspects of several of the most cited internationalisation theories; (2) the importance of internationalisation and export performance, particularly for SMEs; (3) the importance for researchers to understand the entire process of firms' internationalisation and (4) these processes' relevance for the business world. These impact factors, used as antecedents in the proposed conceptual model, could be of interest to entrepreneurs who intend to define and expand their firms' internationalisation processes successfully.

The goal of this chapter is to model the export performance of SMEs conceptually. This model is based mainly on a tripartite analysis: (1) a literature review covering the internationalisation of SMEs, (2) the conceptual models proposed by Lages (2000), Ruzzier et al.

(2006), Ratten et al. (2007) and Kuivalainen et al. (2012) and (3) the classification of determinants of export performance, grounded in Zou and Stan's (1998) work. The proposed theoretical framework integrates international entrepreneurship theory and international strategies in order to understand and explain how SMEs' internationalisation drivers affect export performance.

This conceptual chapter develops and deepens an academic topic in need of further exploration. The resulting findings have a potential strategic application for SMEs that need to examine their performance throughout their internationalisation process. In doing so, this chapter contributes to both theory and practice by developing an updated framework and internationalisation procedures. The chapter is organised as follows. After this introduction, the second section briefly reviews several theories explaining firms' internationalisation process, identifying internationalisation impacts and developing key export performance indicators. This is followed by a discussion covering three important factors that influence internationalisation: industry-, environment- and firm-related aspects affecting international entrepreneurship orientation and international strategies. In addition, the literature review covers export performance, as well as how the differences between reactive and proactive stimuli can influence export performance. The final section presents this study's theoretical and practical implications, limitations and future avenues of research.

4.2. Literature review

Good theories help legitimise academic research. Keupp and Gassmann (2009) described international business as a broad area of research with robust theoretical paradigms. Among these are several theories and different perspectives about what factors affect internationalisation. Early economic studies focused on the national level and the ways that various nations gain decisive advantages in international business. Over time, researchers' focus has moved away from the country level to embrace a microeconomic approach, adopting an internationalisation perspective that uses the firms' point of view. These different explanations have been developed over time in an attempt to analyse and explain firms' internationalisation processes by answering the five-dimensional question of how, why, where, what and when. Answering this question helps identify

important factors in the success of firms' internationalisation processes, which is a major objective in both the professional (i.e. to minimise costs and maximise investment) and academic arenas.

One of the most robust conceptual frameworks in the literature describes internationalisation as a behavioural process, in which expansion into foreign markets begins in markets geographically close to firms (i.e. the 'comfort zone') in an attempt to avoid risk. Firms then move to markets with psychic proximity, according to the Uppsala model. The existing literature successfully describes the development of firms' internationalisation activities and their potential translation into MNEs, but researchers have not yet explained why and how the internationalisation process begins or develops in its embryonic stage (Wennberg and Holmquist, 2008). This traditional view also is inconsistent with more recent conceptualisations of firms' internationalisation processes (O'Cass and Weerawardena, 2009).

The internationalisation literature suggests that some theories are important when explaining the earlier phases and consequences of the internationalisation of firms (Johanson and Vahlne, 1990). Among the various research streams, special relevance has been given to what is known as incremental models, such as the Uppsala stages model and network model. However, the international entrepreneurship perspective (Oviatt and McDougall, 1994, 1999) and the born global perspective (Knight and Cavusgil, 1996, 2004; Madsen and Servais, 1997; Bell et al., 2001, 2003; Chetty and Campbell-Hunt, 2004) have challenged these traditional approaches.

The internationalisation of firms assumes either a growing process of involvement and international exposure (e.g. the Uppsala model) or an immediate entry into foreign markets, as is the case of born globals. It appears that firms may choose from a range of market penetration formulas, which implies that they may experience various levels of commitment, control and risks. Over time, the development of theory in this area has become highly fragmented, resulting in several streams of research that focus on the same general issues from different perspectives (Sarkar and Cavusgil, 1996; Papadopoulos and Martín, 2011). In this sense, each of the literature inputs alone does not explain the complex nature of firms' internationalisation, but, when analysed altogether, they complement each other and facilitate an understanding of this phenomenon.

Currently, new dynamic firms ignore past restrictions to internationalisation and launch themselves into the world with rapid internationalisation capabilities (Rennie, 1993; Knight and Cavusgil, 1996). Tuned to a 'new' international entrepreneurship perspective, these firms have led to the emergence of born global firms, which focus on worldwide opportunities. According to Jones et al. (2011), international entrepreneurship is a 'new' field (i.e. since the 1980s) with a

strong influence on international business, stimulating intensive research in this area (e.g. Dana and Wright, 1999, 2003, 2009; McDougall and Oviatt, 2000; Entrialgo et al., 2000; Hult et al., 2003; Etamad, 2004b; Jones and Coviello, 2005; Oviatt and McDougall, 2005a, 2005b; Ratten, 2006; Wright et al., 2007; Dana et al., 2008; Jones and Nummela, 2008; Filatotchev et al., 2009; Schulz et al., 2009; Keup and Gassmann, 2009; O’Cass and Weerawardena, 2009; Dimitratos et al., 2010; Dana, 2011; Hessels and Stel, 2011; Jones et al., 2011; Lisboa et al., 2011; Ramadani and Dana, 2013; Gurău et al., 2015). McDougall and Oviatt (2000) defined international entrepreneurship as a combination of innovative, proactive and risk-seeking behaviour that crosses national borders, with the intention of creating value for firms and exploiting opportunities. Accounts of SMEs’ entrepreneurial behaviour are common in the more recent literature, focusing on opportunities (i.e. identification, exploration and exploitation) in which networks, knowledge, owners, resources and capabilities play an important role – with industry and technology as driving forces.

This international entrepreneurship perspective, which intersects two main topics – international business and entrepreneurship – has caught the attention of governments as a mechanism that supports the internationalisation of SMEs. The pursuit of early internationalisation among new ventures has brought new challenges for both managers/owners and policymakers alike (Wright and Dana, 2003).

International entrepreneurship places an emphasis on entrepreneurial behaviour (Ruzzier et al., 2006) based on the rapid internationalisation of firms, which is quite unique among the various perspectives on SME internationalisation. Another peculiar characteristic of international new ventures is their emphasis on two important aspects: active entrepreneurs’ outward, global orientation and the strong technology base of firms (e.g. Knight and Cavusgil, 1996, 2004; Bell et al., 2003). Clearly, this view opposes traditional sequential models.

Several researchers defend a new, more integrative, holistic perspective of internationalisation that captures the variety of situations found in different business practices (Melin, 1992; Fletcher, 2001; Etamad, 2004a; Rask et al., 2008; McAuley, 2010). This holistic model is necessarily realistic and comprehensive, taking into account the different contributions of internationalisation theories and models that have been proposed over the years and correctly explaining the internationalisation of firms (e.g. Leonidou and Katsikeas, 1996; Coviello and McAuley, 1999; Fillis, 2001; Whitelock, 2002; Ruzzier et al., 2006; Mejeri and Umemoto, 2010). Although, this holistic approach has already been studied, for instance by Fletcher (2001), Bell et

al. (2003), Etemad (2004a) and Mejeri and Umemoto (2010), no single model has yet replaced the more traditional approaches already in existence. As such, one might argue that current theories do not fully explain SME internationalisation (Thai and Chong, 2013) or address the specific case of SMEs (Torrès and Julien, 2005). As noted by Schulz et al. (2009), new research with new inputs is needed. SMEs have intangible resources that allow them to be competitive and to survive and grow (Mejeri and Umemoto, 2010; Love and Roper, 2015). With fewer resources – most importantly, financial limitations – and international experience, it is pertinent to ask how SMEs are able to succeed in global marketplaces (Karlsen, 2001; Zucchella and Siano, 2014). As such, one of the key issues that internationalisation theories must address is how SMEs can achieve their desired level of performance as they move towards internationalisation (Chetty and Campbell-Hunt, 2003; Weerawardena et al., 2007; OECD, 2009; Tahir et al., 2011).

Table 9 - Drivers (factors) of SME internationalisation

Factors	Description
Firm-related factors (Amoako-Gyampah, 2003; Oviatt and McDougall, 2005a)	Financial and human, physical and organisational resources. Knowledge (Freeman and Reid, 2006; Johanson and Vahlne, 1990). Information processing and management of international experience (Manolova et al., 2002; Oviatt and McDougall, 2005a). Executives and managers (Freeman and Reid, 2006). Financial issues (Freeman and Reid, 2006). Firm size (Pan e Li, 2000; Boateng and Glaister, 2002). Innovative and proactive corporate culture: (Crick and Spence, 2005; Dimitratos and Plakoyiannaki, 2003). Innovation capability: learning capability; R&D capability; resource exploiting capability; manufacturing capability; marketing capability; organisational capability; strategic capability (Guan and Ma, 2003); exploratory innovation; exploitative innovation (Hortinha et al., 2011; Lubatkin et al., 2006). Firm characteristics and human capital (Ruzzier et al., 2006; Leonidou and Katsikeas, 1996). Marketing (Leonidou and Katsikeas, 1996).
Industry-related factors (Thorelli, 1986; Crick and Spence, 2005)	Innovativeness, new ideas, products and services (Xie et al., 2009). Level of technology (Thorelli, 1986; Leonidou and Katsikeas, 1996). Production capacity (economies of scale) (Johanson and Vahlne, 1990; Leonidou and Katsikeas, 1996).
Location-related factors (Oviatt and McDougall, 2005a)	External environment (Ruzzier et al., 2006). Location factors (Hamel, 1991). Political, legal, governmental, economic, social and cultural factors (Hamel, 1991). Competitiveness (Porter, 1980, 1985, 1990, 1998; Klein, 2002). Internal environment (Ruzzier et al., 2006). Availability of the employees (including supervisors and top managers) for international expansion (Badri et al., 2000; Oviatt and McDougall, 2005a).

Source: Own preparation, based on the literature review.

The relationship between performance and degree of internationalisation has been one of the most studied topics in the literature, as researchers seek to provide empirical evidence for the theoretical argument that international expansion is a prerequisite for a driving financial success (Ruigrok and Wagner, 2003; Etemad, 2004b). The following important factors have been identified as drivers of SME internationalisation (Amoako-Gyampah, 2003; Oviatt and McDougall, 2005a), in particular, industry-related factors (Thorelli, 1986; Crick and Spence, 2005) and location-related factors (Oviatt and McDougall, 2005a), which are presented in Table 9. These include sub-factors that are the focus of analysis in internationalisation theories found in the literature.

In choosing the internationalisation path, entrepreneurs play a crucial role. This is especially true for SMEs, as most managers are also the owners (e.g. Fernández and Nieto, 2005; McAuley, 2010; Kontinen and Ojala, 2012; Segaro, 2012). The role of entrepreneur is especially important in the quite early phases of SMEs' internationalisation (Etemad and Wright, 2003; Sommer, 2010; Hollensen, 2011), and their success depends on their ability to be internationally competitive (Dana and Etemad, 1994; Alon et al., 2009). This is increasingly important in the context of global competition between firms, in which innovative strategies and entrepreneurial abilities are vital to gaining competitive advantages (Hult et al., 2003). Firms that cross national boundaries are more aggressive and prepared to compete internationally than firms that remain only in their domestic market (Dana and Etemad, 1994). Specifically, entrepreneurs' innovative processes play a central role in uncovering new opportunities, using new knowledge, initiating new procedures, selling new products and serving new markets. Firms have to have specific capabilities and use them strategically in order to identify market gaps to be filled with new added value solutions (Zawislak et al., 2012). Innovation strategies and entrepreneurial abilities are tools used to increase the efficiency and profitability of firms (Lisboa et al., 2011; Gunday et al., 2011), which are strongly affected by external forces (i.e. the political, socio-cultural, technological and macro-economic characteristics of each country). These, in turn, affect the different styles of entrepreneurship that have arisen around the world (Ratten, 2006; Ramadani and Dana, 2013).

Sommer (2010) and Tahir et al. (2011) examined key success factors among SMEs and found that entrepreneurial and marketing behaviour skills are crucial to engaging in business opportunities abroad, improving performance and overcoming the challenges faced by SMEs in a global world. Andersson (2000) developed a fresh perspective on entrepreneurs by proposing three new categories. The first is the marketing entrepreneur, who implements an international push

strategy, finds a market need and remains proactive in firms' internationalisation processes. The second is the technical entrepreneur, who implements a strategy focusing on technological development – especially product and production development – and creates an international pull strategy. Last, the structure entrepreneur implements an international restructuring of an industry or firm, as a consequence of the organisation's overall strategy. Managers' teams must be highly committed to an internationalisation strategy in order to support the general direction and speed of international market entry activities (Welch and Welch, 1996; Oviatt and McDougall, 2005b).

As many SMEs have limited resources (Julien et al, 2004; Jasra et al., 2011) and lack important skills, such as foreign languages and intercultural experiences, the network approach gives these firms new opportunities to grow by using relational experiences that reduce specific needs, increase knowledge and stimulate productive opportunities (Törnroos, 2002). Moreover, cultural awareness and understanding are often decisive for firms' success, particularly in industrial markets in which face-to-face interaction is a central issue (Törnroos, 2000). Importantly, these capabilities are also complemented by experience, international skills and each firm's level of resources (Calof and Beamish, 1995).

There are several internationalisation strategies, each with a specific profile in terms of risk, control, resources (e.g. managerial expertise and entrepreneurial predisposition), scope for gains (e.g. potential learning about the market and experience gained) and potential returns (e.g. higher financial returns and advantages of further market opportunities). For example, direct or indirect exporting, licensing (e.g. franchises) and maintaining an overseas presence (e.g. foreign direct investment) are among the most utilised options in firms' internationalisation strategies, of which exporting is the most usual method of entering foreign markets and ideal for beginners wishing to avoid unnecessary risks (Dana and Etemad, 1994; Leonidou and Katsikeas, 1996). Exporting is also the first real step and preferred path of internationalised SMEs (Jones 2001; Lages and Montgomery, 2004), since they have focused for many years on domestic market activities. Clearly, exporting is the 'easiest' and most common way into overseas markets for SMEs, as it is the least risky option for firms with limited resources, which make these firms' approaches necessarily different from the managerial perspectives on decision-making in other forms of international business. According to Lages and Montgomery (2004), exporting activities are an important path not only for firms – to learn, explore scale economies, incur lower costs of production and become stronger competitors mainly in domestic markets – but also for nations' economic development. Exporting involves activities of SMEs in markets at a geographic and

psychic distance, with new competitive scenarios characterised by different cultural, economic and political aspects, such as distribution channels, customer tastes, legal aspects, local rivalries and business practices (Villar et al., 2014).

Various models seek to explain the export development process. Leonidou and Katsikeas (1996) reviewed the literature and identified three generic stages. The first is pre-engagement, in which firms sell only in their domestic market and do not export or show interest in exporting activities – or they have exported in the past but no longer do so. The second is initial engagement, in which firms are involved in sporadic export activities, having the potential to increase their overseas involvement. Advanced engagement is the third, in which firms are regular exporters with extensive overseas experience and are considering further engagement with other forms of international business. These phases highlight the importance of resource and knowledge accumulation by SMEs, which in turn leads to a gradual and sequential decision-making process of entering international markets (i.e. the stage model of internationalisation). Each stage is characterised by a typical behaviour associated with SMEs' internal commitments, with special regard to entrepreneurs who, in their relational activities, have a crucial role not only in spotting business opportunities but also in acquiring resources. This propensity of SMEs to network may lead entrepreneurs to establish alliances abroad that pull or push firms into international markets, particularly if their important customers have entered foreign business networks (Westhead, Ucbasaran. and Binks, 2004). It is during the pre-export stage – characterised as a sensitive and fragile phase – that stimuli are particularly crucial in determining firms' future approach to exporting (Welch and Wiedersheim-Paul, 1980).

Based on these three theoretical lines, two basic forms of activity in corporate internationalisation strategies can be distinguished. First, the passive form is when passive exporters treat and fill overseas orders as they would domestic orders or export through domestically based export intermediaries. Second, the active form is when active exporters make deliberate efforts to initiate exports and firms directly transcend national boundaries (Crick, 1995; Leonidou, 1995; Mura et al., 2011).

These concepts are interrelated with the notions of active or proactive – as identified by Verisan and Achimescu (2011) – and reactive involvement and motivations. The latter comes from the model proposed by Cavusgil (1982), who conceptualised export behaviour as a process that leads firms to internationalisation. In the case of proactive stimulus, firms initiate the internationalisation process, drawing on their own internal competencies or market opportunities.

Growth, technological competences, unique products, economies of scale, better tax conditions and foreign market opportunities are some reasons this happens. In reactive situations, firms react to changes in their operational conditions and perceive internationalisation as an answer to that change. Competitive pressure, unsolicited foreign orders, seasonal effects of demand, saturation of the domestic market or its limited size, geographic proximity and reduced psychological distance are some examples of reactive stimuli.

Although the mainstream international business literature states that firms venture abroad only when they are established in their domestic market, researchers know that this is not always the case, as seen with born globals and international new ventures. However, for most SMEs, their first steps abroad are typically due to reactive motivations. These are situations in which firms react or respond to unsolicited export orders that can be a means of shortening the firms' export development process (Bilkey and Tesar, 1977; Katsikeas, 1996; Etemad and Wright, 2003; Bell et al., 2003), rather than proactive motivations, because SMEs have limited financial resources (Lages and Montgomery, 2004). A response to pressures can also be classified as a reaction (e.g. to pressure from competitors, decreases in domestic sales, excess capacity, overproduction and proximity to customers). Proactive motivations, on the other hand, are based on management's choice to expand their firms' business to an international level in order to improve the firms' strategic and competitive advantages (Bell et al., 2003; Verisan and Achimescu, 2011).

A proactive strategy in the internationalisation process of SMEs is the degree to which firms consider foreign markets as a logical source of expansion for their business (Bell et al., 2003; Navarro et al., 2011). They allocate their resources in an intense search to identify, collect and process information on foreign markets' needs and business opportunities (Francis and Collins-Dodd, 2000; Zou and Cavusgil, 2002). As such, the progress of internationalisation processes along the proactivity stream is linked to top managers' perceptions, attitudes, commitments and orientations (Lages and Montgomery, 2004; Filatotchev et al., 2009; Andersson and Florén, 2011). These reduce the psychological barriers to foreign markets and allow better and faster response to customers, competitors and other external foreign market factors (Cadogan and Cui, 2004). This proactivity is about taking initiative, anticipating and performing new opportunities and creating or participating in emerging markets (Entrialgo et al., 2000), which is more commonly addressed in the international entrepreneurship literature involving new international ventures and born globals.

In short, these various export incentives can be classified using a combination of internal (i.e. stimuli associated with firms' internal characteristics) or external (i.e. stimuli stemming from firms' external environments) and proactive (i.e. stimuli associated with firms' interest in exploiting unique internal competences or market possibilities) or reactive behaviour (i.e. stimuli denoting passive engagement in export activities as a response to environmental pressures) (e.g. Pavord and Bogart, 1975; Wiedersheim-Paul et al., 1978; Czinkota, 1982; Johnston and Czinkota, 1982). Albaum et al. (1989) combined these factors in a quadruple typology, namely, internal-proactive, internal-reactive, external-proactive and external-reactive, of the critical driving factors of firms' expansion into international business based on the exporting process (Olson and Wiedersheim-Paul, 1978). Leonidou (1995) compared several studies that focused on the degree of export stimulating factors and concluded that it is impossible to establish a common order that takes into account the degree of influence of the stimulating factors because firms are exposed to several stimulating factors with different degrees of impact on their export decision process. Crick and Chaudhry (1997) and Leonidou (2011) reached to the same conclusion. Moreover, the internal-proactive, internal-reactive, external-proactive and external-reactive typology has not been tested in research involving new international ventures, as entrepreneurs have remained the focus of international entrepreneurship theory.

From firms' point of view, internationalisation is a means to better their performance – a perspective that is implicit in almost any internationalisation theory. According to Lages et al. (2009), the resource-based view of firms is used objectively in studies analysing performance. Since firms approach international markets as a vital resource and a way to internalise risks (Oesterle et al., 2008), performance becomes crucial when analysing their strategies' level of success. However, due to the individuality of each firm, performance is a complex construct, which makes it difficult to find an all-encompassing definition (Lages, 2000; Lages and Montgomery, 2004). Internationalisation can even be considered a reactive response to domestic market performance (Jones and Nummela, 2008). Wennberg and Holmquist (2008) suggested that weak performance in domestic markets can be a strong reason for internationalisation, despite the fact that performance in international markets is even more uncertain than in domestic markets. This reinforces Jones and Coviello's (2005) observation that internationalisation is a flexible and reactive process responding to market changes and internal conditions of firms.

It is widely accepted in the literature that outward internationalisation has a positive impact on firms' performance. Hence, performance is the main driver of the international expansion of

firms (Papadopoulos and Martín, 2010). This relationship is less clear in SMEs, mainly due to their internal constraints and limited ability to compete in international markets (Pangarkar, 2008). However, Ruigrok and Wagner (2003) and Oesterle et al. (2008) observed that the link between internationalisation and performance has triggered extensive interdisciplinary studies, in which researchers have tried to empirically prove the theoretical argument that international expansion is a prerequisite for boosting the financial success of firms. The findings of these studies, however, have turned out to be inconsistent and even contradictory.

Internationalisation and performance – more specifically, export performance – is a critical issue both for entrepreneurs and government authorities. It has also garnered significant attention from researchers trying to link these two concepts (Papadopoulos and Martín, 2010). However, research on outcomes of SMEs' cross-border entrepreneurship is more limited compared with the literature on antecedents, which highlights the potential value-creating role of international entrepreneurship, so it is also possible that internationalisation results in negative outcomes (Hessels, 2008).

By doing business abroad, firms' export activities appear to have a positive financial impact, or at least this is the firms' goal. These activities also are a source of competitive advantages and stimuli in the process of learning skills or developing competence and accumulating knowledge and technology at the firm level (i.e. an increase in productivity and innovativeness). At the country level, export activities contribute to the national economy and prosperity, the development of national industries and the improvement of productivity and employment levels (Hessels and Stel, 2011). However, there are other reasons for the internationalisation of SMEs besides performance, such as firm growth, access to new and more profitable markets, search-cost advantages, the ability to follow customers' international moves and ways to leverage existing resources and capabilities and meet learning objectives (OECD, 2009; Daszkiewicz and Wach, 2012).

Papadopoulos and Martín (2010) analysed seven key studies, selected based on their relevance and significant impact on the relationship between internationalisation and export performance. While objective indicators for measuring export performance were once popular, from the 1990s onwards, studies began to reflect the use of compound and complex scales, giving export performance an operational sophistication. Multiple scales now include both objective and subjective indicators (e.g. perceived success of exports), as well as other indicators that distinguish economic measures from strategic measures. Papadopoulos and Martín (2010) concluded that the

seven papers reviewed use the economic dimension (i.e. a combination of sales, market share and/or temporal changes in one or more indicators), overall satisfaction measures and/or perceived success in a specific international initiative or general exports. The strategic dimension is not always used, but when it is, the selection is based on weighted scales of management's perception of how well their firm is achieving proposed objectives. Among the selected studies, no single study used the same set of constructs and measures.

Table 10 summarises objective and subjective scales used in the literature to measure export performance. Clearly, this is a multidimensional construct, which is difficult to measure and which demands particular attention to the potential implications that internationalisation has for export performance. As measuring export performance is a complex issue, it is advisable to use multiple measures (McDougall and Oviatt, 1996; Westhead and Cowling, 1997; Lu and Beamish, 2001, 2005, 2006; Westhead, Wright and Ucbasaran, 2004), especially in the case of SMEs. Most studies have assessed firms' export performance over short periods.

Table 10 - Summary of export performance measures

Objective measures	Subjective measures
Financial ratios (e.g. profits, ROI, cash-flow). (Zou et al., 1998)	Related with management decisions and export expansion strategy: market indicators (e.g. market trends); competition indicators (e.g. team commercial aggressiveness and price competitiveness); technological intensity (e.g. level of innovation versus technological investments). (Zou et al., 1998; Francis and Collins-Dodd, 2004; Katsikeas et al., 1996)
Economic measures (e.g. sales, profits, market share, intensity of exports, exports sales growth). (Katsikeas et al., 2000; Francis and Collins-Dodd, 2004)	Goal achieving performance (export performance). Customer satisfaction performance (perceived performance) that determines trust and relationship value, important in B2B context and international market operations. (Zou et al., 1998; Garbarino and Johnson, 1999; Sharma et al., 1999; Walter et al., 2000)
Non-economic measures related to export markets (e.g. number of export countries, percentage of exports for each country), the export growth per market per product (e.g. projections of the 'weight' of exports). (Katsikeas et al., 2000; Francis and Collins-Dodd, 2004)	Generic subjective measures (e.g. perceived success of exports, achieving exports objectives, achieving performance indicators / export performance, export skills. (Katsikeas et al., 2000; Francis and Collins-Dodd, 2004)

Source: Own preparation, based on the literature review.

Today, more than 55 years since the first studies of models of firms' internationalisation models, a consensus has arisen that internationalisation is no longer a single decision or a discreet fact, but rather a multifaceted process playing out over time (Welch and Paavilainen-Mäntymäki,

2014). Firms' internationalisation processes are complex and susceptible to a number of pitfalls. Sometimes, this means taking two steps forward and one step back or even reversing the process with de-internationalisation. There are always implications – positive or negative – for firms' performance indicators.

4.3. Proposed Conceptual Model

This work is essentially based on a tripartite analysis: (1) the above literature review on internationalisation theories (i.e. key constructs of models), (2) the conceptual models proposed by Lages (2000), Ruzzier et al. (2006), Ratten et al. (2007) and Kuivalainen et al. (2012) and (3) the classification of export performance determinants (i.e. dependent and independent factors) by Zou and Stan (1998). Based on this analysis, we propose a conceptual model that intends to demonstrate conceptually the performance impact of internationalising SMEs. No other study was identified in the literature that links so many variables to the area of SME internationalisation.

From the above-mentioned models, our research extracted three main factors related to the industry, firm and location, which influence the export performance of firms. This approach emphasises the relationship between several factors serving as antecedents of firms' internationalisation, which have an impact on the performance of these firms' internationalisation processes, as described below.

Lages (2000) identified how internal and external factors influence export performance, as well as the moderating effects of the adaptation of an international marketing programme. He used as internal factors firms' characteristics and competences, management characteristics, product characteristics and management attitudes and perceptions. He utilised as external factors industry characteristics, foreign market characteristics and domestic market characteristics.

Ruzzier et al. (2006) reviewed the literature on SME internationalisation and further developed the conceptual model that was first proposed by Antoncic and Hisrich (2000). This model is comprehensive, although not exhaustive, mainly covering interactions between constructs. It highlights SME internationalisation antecedents (i.e. environmental conditions and organisational characteristics, such as entrepreneurial human capital and firm characteristics) and internationalisation consequences (i.e. firm performance, such as sales growth and profitability). Ruzzier et al. (2006) suggested an ongoing evaluation, especially by professionals, of all the

elements related to internationalisation and emphasised that the skills and expertise of manager-entrepreneurs are crucial to the development and success of their firm's internationalisation process.

Based on research on the internationalisation of SMEs in 27 European countries, Ratten et al. (2007) developed a conceptual model that explains the internationalisation process of SMEs in Europe. This approach combines firms' internal (e.g. networks and resources) and external (i.e. environments, such as market competitive structure, industry sector and economy) factors.

Kuivalainen et al. (2012) suggested a holistic model of internationalisation, patterns, antecedents and outcomes. They identified several firm-, managerial- and environmental-level determinants as antecedents of an internationalisation path. They distinguished early and late internationalisation patterns in terms of combinations of scale, scope and temporal measures. Outcomes are measured by both objective and subjective indicators.

Zou and Stan (1998) identified internal, external, controllable and uncontrollable determinants of export performance. For instance, an export marketing strategy is identified as an internal and controllable determinant, management characteristics are identified as uncontrollable, internal determinants and industry characteristics are seen as external, uncontrollable determinants of export performance. These are evaluated with financial measures (e.g. sales), non-financial measures (e.g. satisfaction) and composite scales.

Since internationalisation is influenced by several factors, as identified in the literature, and the need for a holistic perspective, we propose a conceptual model that not only complements previous frameworks but also is more integrative and developed, as compared to previous models (see Figure 1). This model seeks to identify the most important drivers of SMEs' export performance, providing a useful reference in the professional planning of firms embarking on international expansion strategies, simplifying decision-making processes and systematising the most important variables. This is a clear, simple way of viewing the complex phenomenon of SME internationalisation, which highlights several variables found in the literature of this field, underlines the role of reactive and proactive involvement and reflects firms' lower or higher level of commitment to their internationalisation processes.

The model also seeks, more specifically, to detach the international strategic posture of SMEs, distinguishing active (i.e. proactive) from passive (i.e. reactive) internationalisation stimuli. This approach reveals the degree to which firms are more or less involved in their outward internationalisation process, as active firms have higher levels of involvement and investment

abroad than passive firms. As such, the model also is linked with the central analysis of the Uppsala model, which suggests that firms' internationalisation results from the acquisition of empirical knowledge for a specific market, allowing them to increase their commitment to this market and implying a step-by-step involvement in internationalisation processes. Based on this international strategic perspective and Bell et al.'s (2003) model, the stage model can be integrated with two other pathways of internationalisation, in order to reflect recent research on born globals and born-again globals. Bell et al. (2003) highlighted three different patterns followed by firms: (1) an active search for foreign markets, which is the typical behaviour of born global firms, (2) a reactive motivation to enter the international marketplace, typical of traditional firms, and (3) a critical event within the life of a firm, which characterises born-again global firms. These aspects are fundamentally connected with firm-related factors (e.g. skills, knowledge, competences and innovations).

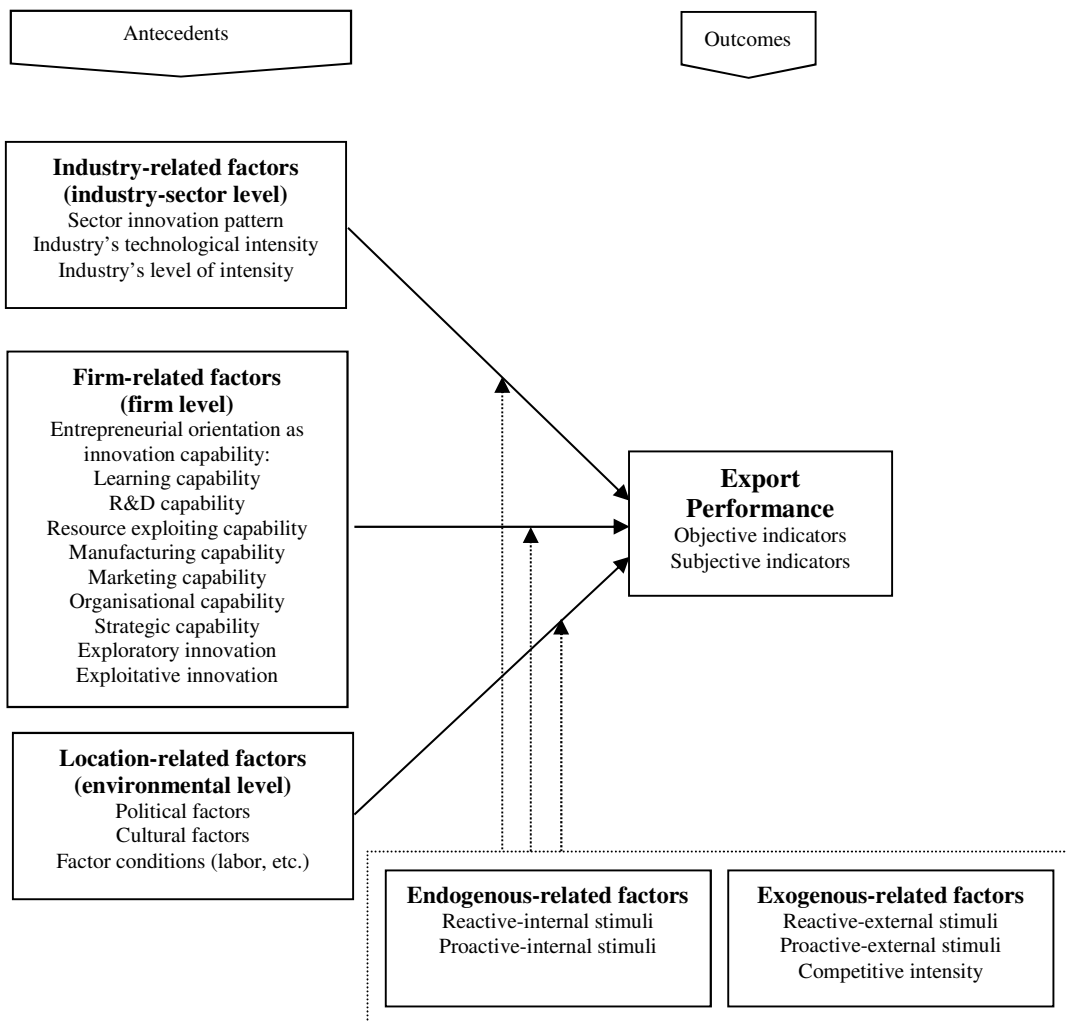
We consider the moderating role of two distinct factors – what we term endogenous and exogenous factors – in the relationship between the drivers of internationalisation (i.e. innovation capabilities) and export performance. According to Bruyat and Julien (2001), proactive/reactive internal factors, which we depict as endogenous factors, affect the internationalisation processes of firms and their export performance. In addition, proactive/reactive external factors, which we categorise as exogenous factors, include competitive intensity and reactive and proactive internal stimuli. The cited authors found that entrepreneurs/owners create a dynamic symbiosis capable of creating, learning from and influencing and being influenced by their firm's environment (i.e. factors internal and external to their firm). It is this international entrepreneurship perspective, involving entrepreneurs, firms and markets, which is central to the outward-oriented perspective incorporated into the proposed model.

The incorporation of external and internal factors represents a cross-analysis of firms' internationalisation processes, since internationalisation is influenced by both internal (i.e. firms' physical transformations, brand and marketing, expertise, proactive attitude and leadership) and external factors (i.e. the technological/industrial environment, the industry's competitiveness rate and cultural and political factors). Moreover, the proposed conceptual model combines macro-, meso- and microanalysis, reinforcing Ratten et al.'s (2007) integrative conceptual model of factors driving SMEs' internationalisation.

Currently, firms are part of a context described in Figure 1 as location and industry factors, which were largely explained by the eclectic or ownership, location and internationalisation (OLI)

paradigm. The diamond and cluster concepts of Porter (1990) are related to the OLI paradigm, and they affect the competitiveness and international strategies of firms and reinforce upstream and downstream activities throughout supply chains. This context is a source of competitive advantage that underpins the internationalisation of firms. The interaction between the context and firms' features defines their internationalisation pathway – in a reactive/passive or active/proactive manner – with effects on export performance. This process is guided by four types of complementary perspectives: rational (or economic), learning (or behavioural), inter-organisational (or network) and entrepreneurial. These are highlighted in our conceptual model.

Figure 1 - Conceptual model of the drivers of SMEs' export performance



Source: Own elaboration

As internationalisation has implications for export performance, this can be measured using both financial (e.g. export sales and profit) and non-financial indicators, which include some strategy-based items (e.g. the export objectives of firms). As recommended by Lages (2000), the use of financial and non-financial measures with both objective and subjective indicators is mandatory.

Within the model, we also identify relevant internationalisation antecedents, divided into three major factors summarising industry, location and firm factors. The first two factors represent firms' external factors, while the latter represent factors within firms with natural connections to external environments.

In a pattern reinforced by the emergence of born globals, an entrepreneurial orientation at the firm level is crucial to SMEs, not only to help them develop technologically but also to push them into international markets. Linked to the entrepreneurial perspective, which was strengthened by Ruzzier et al.'s (2006) work, both firms and their managers/owners take on an entrepreneur's proactive and innovative role in order to develop the firm from the resources perspective. Internationalisation and entrepreneurship appear to represent an opportunity to fight the current economic and financial crisis in the global economy. Entrepreneurship, paired with innovation, is a combination designed to win competitive advantages, particularly in international scenarios (O'Cass and Weerawardena, 2009). As such, we also sought to introduce this approach not only into our model's international strategic perspective (i.e. reactive/proactive) but also into firm-related factors.

The model emphasises an innovation-oriented structure of firms based on their international entrepreneurial strategies, with a focus on internal resources as innovation capabilities. These are two key aspects of any resource-based paradigm and a means to improving firms' efficiency and effectiveness, reinforcing their competitive advantages and enhancing their performance (e.g. Lee et al., 2001; Lages et al., 2009). This internal capacity for organisation-wide innovation has been explored by 'new' integrative models based on a knowledge-based perspective (Simpson et al., 2006). We aim to highlight the sustainable international competitive advantages of SMEs through a knowledge-based perspective (as an extension of the resource-based view), identifying the innovation capabilities affecting export performance, which may influence management decisions of entrepreneurs and SMEs development.

The proposed conceptual model contains the main variables of more conventional and typical internationalisation theories in the literature. This model also includes new trends in

entrepreneurship, seeking to present a holistic view of SMEs internationalisation. This holistic view gathers the key elements of several researchers' theoretical models that represent the mainstream line of thinking. This perspective enables SMEs to realise what is important in their decision-making processes in regards to international activities, and it can also be used by practitioners. This integrative model, which incorporates the most recent trends in the international research literature, captures the most relevant elements and the nature of interactions in business internationalisation. The result is a more complete model, as compared to traditional ones, since it provides three levels of analysis (i.e. industry, firm and environment) that integrate several factors influencing SME internationalisation. This approach helps both the academic literature and related professionals take a step forward, building one model with the fundamental factors that influence performance during firms' internationalisation processes. Once one is aware of the impacts of firms' internationalisation, it is possible to decide the best international market strategy for firms, preventing problems and helping entrepreneurs to project scenarios.

Several studies (e.g. Bilkey and Tesar, 1977; Leonidou and Katsikeas, 1996; Chetty, 1999; Bell et al., 2003; Ruzzier et al., 2006) have focused on the most important empirical models of the process of entering international markets. However, previous models that seek to analyse internationalisation do not evaluate the relationship between antecedents of internationalisation and export performance based on such an extensive number of variables. The proposed model groups the firm, industry and environmental levels with moderating factors such as endogenous and exogenous stimuli, which is dissimilar to Lages's (2000) approach focusing on the degree of marketing programmes' adaptations along internationalisation pathways. As such, the proposed model seeks to fill this gap by supporting and evaluating the relationship between the three above-mentioned levels.

4.4. Conclusions and implications

The perspective of a globalised world, in which business frontiers and barriers are diminished and a growing mass of consumers share similar habits, values and attitudes, has become clearer now more than ever before. Information and communication technologies have shortened geographical distances and sped up the diffusion of everything. Reductions in

transportation costs have boosted international trade and the number of people travelling all over the world. Therefore, firms increasingly view internationalisation of their activities as a natural step. This reality also is common among SMEs, which, therefore, face globalisation and internationalisation among their most important challenges.

The personal characteristics of entrepreneurs/owners/managers play a decisive role in the internationalisation of SMEs, encouraging firms to depend more on networks and knowledge management. Another driving force is the ways technology, innovation and intensity of competition influence export performance. However, the relationship between firms' degree of involvement in internationalisation and performance appears to be a controversial topic both in management, in general, and in international business, in particular. Therefore, the proposed conceptual model seeks to fill this gap by including how endogenous and exogenous factors moderate the main drivers of SMEs' internationalisation processes through their impact on export performance.

Based on an extensive bibliography, this theoretical-conceptual integrative model uses key constructs as antecedents involving the characteristics of the specific firm, industry and location. The basic intention of this model is to evaluate the relationship between several drivers of internationalisation (i.e. as antecedents) and export performance (i.e. as outcome), which has been overlooked by previous models. This model helps visualise this impact and brings together the fundamentals of SMEs' internationalisation processes that influence these firms' export performance, by highlighting important industry-, environment- and firm-related factors and including entrepreneurial orientation as a capacity for innovation.

The literature on internationalisation of firms reveals a clear need for a model that offers a more interdisciplinary approach as discussed in the second chapter. As such, the proposed model not only contributes to the development of related research through an improved understanding of key factors affecting the performance of internationalised firms but also aids practitioners by providing a simple, easily understood structure that includes the key elements that need to be strategically analysed when entrepreneurs launch their firms into the international business arena. Academically, the proposed model complements previous approaches – offering a more integrative and developed approach and researching further into a little explored sub-area of the literature on internationalisation theories – as a holistic model of the internationalisation processes of SMEs.

The model's added value is the complementarity of two aspects. First, the model addresses how internal and external factors in firms influence export performance. Clearly, differences are to be expected across sectors as a consequence of specific industries' competitive conditions that can influence firm-related factors. Second, the model introduces moderating effects (i.e. endogenous and exogenous factors), which provide a dynamic approach to the drivers of SME internationalisation. In this model, it is expected that proactive-internal and proactive-external stimuli will differentiate the relationship between antecedents of internationalisation and export performance.

As this model intertwines industry-, firm- and location-related factors with endogenous and exogenous factors, this model will be able to capture differences across new international ventures, born globals and active and passive internationalised firms. This is because industry- and location-related factors are expected to play a major role among born globals, while firm-related factors are expected to be crucial among new international ventures, as a result of the influence of the exogenous factors shown in Figure 1.

On a quite widely spread level, SMEs suffer shortages of resources, especially financial assets. As a result, this model could help to identify the main factors with an impact on export performance that differentiate internationalised firms from those *en route* to internationalisation, as well as those firms that have succeeded from those that are still struggling along the path to internationalisation. Academically, this model integrates various theories of internationalisation and reflects the latest trend in the relevant literature: holistic models. For entrepreneurs, this model could support strategic decision-making about export performance for all new international ventures, preventing and identifying inadequate international expansion.

The main limitation of this proposal is that the conceptual model has not yet been empirically tested, part of which will be the subject of the sixth chapter specifically within the plastic industry. However, to do this, researchers must take into account the vast diversity of SMEs, in which size, age and share of international operational should not be neglected. As such, in order to validate the model, it would be advisable to utilise this approach first with industrial firms covering a wide range of sectors – specialised suppliers and science-, research-, cost- and resource-based enterprises, among others – and then with service-based firms. Definitely, the model does not apply to the segment of firms that export variable quantities irregularly. Another limitation is that, given the complex nature of the topic, the literature review could be considered

restricted, but, in this respect, we sought to address only the most important research and researchers within this topic.

Before exploring quantitative data to prove empirically part of the conceptual model at firm level (firm-related factors) on the plastics industry sector, the fifth chapter explores the key actors of the supply chain network. Based on the fact that the plastics industry is strongly based on business to business relationships we add to this research a qualitative analysis in order to identify if suppliers and customers are crucial elements on the supply chain network in upstream and downstream activities.

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5. MULTIDYADIC RELATIONSHIPS: A MULTI-STAGE PERSPECTIVE

ABSTRACT:

This chapter assesses to what extent the relationship among firms in downstream activities in the supply chain stimulates the relationship in upstream activities. Following a qualitative approach based on semi-structured, in-depth interviews in seven case studies on the plastics industry, in three different countries, this chapter shows that the business relationship with suppliers both encourages and results from a business relationship with direct and indirect downstream customers, driving the development of new products and the internationalisation of firms. Moreover, relational links among firms in the supply chain are important to ensure a more effective bi-directional relationship among the different stages of the supply chain. The supplier-customer relationships in the supply chain is important not only from a dyadic perspective but also from a multi-stage perspective as there is an important feedback effect involving close ties among firms in upstream and downstream activities. In this study it involved the development of new product innovation capabilities in upstream activities and the developed on internationalisation. This chapter explores a gap in multi-stage B2B marketing activities, namely firms' relationships with their suppliers and their customers. As such, it complements knowledge on supplier-customer relationships following a multi-stage perspective in upstream and downstream relationships.

KEYWORDS: Multi-stage marketing; Networks; Supply chain; Product innovation; Internationalisation; Plastics industry.

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5.1. Introduction

The concept of networks, that emerged on 1982 (Mattson and Johanson, 2006), helped to understand the importance of inter-organizational relationships and networks as a means of generating competitive advantages not only from within the firm, but also as a result of a supplier-customer relationship in which resources and knowledge were exchanged by different actors (individuals and organizations). Dyer and Singh (1998), who characterize competitive advantages from two different sources, reinforce this view: from within the firm, in which the resource-based view and the dynamic capabilities approach play an important role; and from without the firm (classically the industry structure). Based on these two perspectives, one can argue that the firms' critical innovation capabilities extend beyond the boundaries of the firm specifically with suppliers and direct and indirect B2B customers.

In today's business world, firms can hardly work in a stand-alone basis because of an uncertain, complex environment. In fact, in order to achieve competitive advantages firms exchange and share knowledge, resources and capabilities in competitive arrangements throughout the supply chain, which for simplicity reasons we would call networks.

It is critical for firms to develop unique firm-specific assets based on peculiar resources and capabilities (Wernerfelt, 1984; Barney, 1991). Innovation is very important for firms as it involves activities such as market orientation, knowledge management activities, research and development activities and management of teams (Moreira and Karachun, 2014). Innovation is closely intertwined with new product development (NPD) activities as the development of new products and processes, the integration of suppliers in R&D activities, the involvement of customers in NPD activities have consequences for the firms' performance (Moreira and Karachun, 2014). Innovation represents one of the main avenues for building firm-specific advantages (Zucchella and Siano, 2014) and is critical to the growth and success of the firm (Guan and Ma, 2003; Lisboa et al., 2011a). Innovative resources and capabilities are recognized as a major driver of firms growth, both in domestic and international markets (Teece et al., 1997), which is an area little explored in the literature specifically when firms are addressing direct and indirect customers in foreign markets (Peng and York, 2001; Hillebrand and Biemans, 2011; Lisboa et al., 2011b; Kleinaltenkamp et al., 2012).

Innovation and NPD activities rely on knowledge and skills, which are based not only on intangible knowledge and resource-based capabilities, but also on tangible technological capabilities, influencing the firm's sustainable competitive advantage *vis-à-vis* competitors (e.g. Teece et al., 1997; Johnsen and Ford, 2006). However, external actors of a network also contribute to the creation and development of capabilities, knowledge and innovation (Caloghirou et al., 2004; Johnsen and Ford, 2006; Blomqvist and Levy, 2006; Kang and Kang, 2009). Moreover, innovation-based networks are important to reduce uncertainty, to share costs and risks and to access to external knowledge among actors in B2B relationships (Pyka and Küppers, 2002; Cozzarin and Percival, 2006; Weber and Khademian, 2008).

Inter-organizational networks – which include not only the complex production system inside the firms, but also throughout the supply chain – are important in stimulating firms' competitive advantage and international strategies (Tan, 2001; Frohlich and Westbrook, 2001; Ritter and Gemünden, 2004; Chang et al., 2012). Moreover, the competitiveness of the supply chain affects the competitiveness of the individual firms (Trkman et al., 2007; Dyer, 1996; Hsu, 2005).

Research on inter-organizational networks has been analyzed from different theoretical lenses involving network theory, resource dependency theory, transaction cost economics, resource-based view, social exchange theory, social network theory, among others (Franco et al., 2011). Successful supplier-customer relationships may evolve to larger B2B networks based on long-term relationships that are critical for the actors involved, where the network is seen from a holistic perspective rather than from an unilateral lens (Vaart and Donk, 2008; Henke and Zhang, 2010; Wiengarten et al., 2010; Cao and Zhang, 2011; Soni and Kodali, 2011; Hillebrand and Biemans, 2011; Kleinaltenkamp et al., 2012).

Although there is a large body of literature on inter-organizational networks, literature on derived demand or multi-stage marketing (MSM) is quite limited. For example, Hillebrand and Biemans (2011) analyze how B2B firms address their marketing activities to both their direct and indirect customers. Kleinaltenkamp et al. (2012) analyzed how a manufacturer helps its direct distributing partner to sell its products to the distributor's customers. Geiger et al. (2015) investigated various types of MSM by a B2B supplier and concludes that MSM significantly increases purchasing agents' willingness to pay, mostly through their relationship value perception.

Cooperative involvement and a high level of integration between suppliers and customers are very important for the supply chain as well as for business performance (Wathne and Heide, 2004; Attaran and Attaran, 2007; Vaart and Donk, 2008; Nagurney, 2010). There is also literature regarding the importance of innovation and NPD involving supplier-customer relationships (Handfield et al, 1999; Petersen et al., 2003; 2005; Lages et al., 2009; Henke and Zhang, 2010), as well as how interaction and transmissive capabilities are important in dyadic relationships (Johnsen and Ford, 2006; 2008; Moreira, 2009). There is also some literature on multi-stage marketing activities (e.g. Hillebrand and Biemans, 2011; Kleinaltenkamp et al., 2012; Grewal and Lilien, 2012; Vedel et al., 2012; Homburg et al., 2014; Dahlquist and Griffith, 2014; Geiger et al., 2015), however, there is no literature acknowledging the importance of innovation and NPD in MSM dealing with downstream customers. As such, this chapter seeks to complement the knowledge on supplier-customer relationships analyzing both upstream and downstream relationships. First, analyzing how downstream customers influence the NPD activities of the (focal) firm, and second, analyzing how the (focal) firm involves its suppliers in the development of new product. Accordingly, this chapter explores firms' relationships with their (equipment and raw materials) supplier and their customers through derived demand.

The chapter is organized in six sections. The rest of this chapter is structured as follow: in section 5.2 we develop the theoretical framework and a set of three propositions. In subsection 5.3 we explain the methodology of this study. The section 5.3 characterizes the supply chain of the plastic industry. Insection 5.4 we explain the objectives and the methodology of this chapter. Section 5.5 presents and discusses the seven case studies analyzed, helping our understanding of the relationships between the firm and its suppliers and customers, and their importance for product innovation and for the indirect demand in international markets. The last section includes the main conclusions of this study, as well as the managerial implications.

5.2. Theoretical framework

Upstream and downstream relationships allow firms to create interdependencies with suppliers and customers, opening the way to new competitive advantages (Porter and Millar, 1985).

The study of inter-organizational network is not new. Various studies, typologies and functions, characteristics and evolutionary perspectives have been put forward (Poop et al, 2014; Bergenholtz and Waldstrøm, 2011; Franco et al, 2011). Although several studies have emphasized the factors that support successful inter-organizational networks (Simatupang and Sridharan, 2002; Vickery et al., 2003; Vaart and Donk, 2008; Wiengarten et al., 2010; Soni and Kodali, 2011; Chang et al., 2012), there is no common definition regarding the multidimensional nature of inter-organizational relationships in the supply chain (Wiengarten et al., 2010).

Vaart and Donk (2008) analyzed partnership orientation, supplier and customer vision as an extension of the firm, joint responsibility, integrated production planning, shared information and shared inventory management. They conclude that collaborative relationships may be seen differently understood by all actors involved. Vickery et al. (2003) defend that collaborative arrangements need to include practices and attitudes that reinforce supplier-buyer partnerships.

Soosay et al. (2008) analyzed how continuous innovation was used to enhance networks in the supply chain. They demonstrated that maintaining standardized operations, joint planning, sharing knowledge and information, sharing processes, joint investing, and synchronizing and interfacing are very important for continuous innovation to take place in vertical cooperative strategies.

Simatupang and Sridharan (2002) have analyzed the main sources of asymmetric information, which creates a mistrusting climate. Trust and commitment among players in the supply chain is essential (Henke and Zhang, 2010; Nyaga et al. 2010). From the innovation generation perspective, the lack of a relational perspective in supplier-customer relationships hinders the firms' capability to share goals, information, knowledge, problem-solving activities, and joint improvement planning activities (Henke and Zhang, 2010). Moreover, as Nyaga et al. (2010) claim, there are two different perspectives for suppliers and for customers regarding satisfaction measures: one focuses on satisfaction with the relationship and the other with the satisfaction of the results. Nyaga et al. (2010) also show that trust and commitment have important

consequences for satisfaction and performance in collaborative relationships, namely involving relational perspectives. Finally, they also highlight that customer and supplier perspectives have more similarities than differences.

Commitment in their search for profit and survival in global competitiveness has led firms to adopt close, long term relationships, not only in upstream but also in downstream activities, namely for those who compete in B2B contexts (Holmlund and Kock, 1995, 1996, 1998; Nagurney, 2010). In these close, long-term relationships, players might behave as partners, as this type of relationship generates knowledge and benefits for all players with competitive positions in the NPD process (Ragatz et al., 1997; 2002; Handfield et al., 1999; Petersen et al., 2003, 2005) and creates valuable capabilities for all firms involved (Johnsen and Ford, 2006).

Lambert et al. (1998), Lambert and Cooper (2000) and Wathne and Heide (2004) focus on the relationship between the focal firm and upstream and downstream activities. They claim that the focal firm has the ability to make strategic choices, keeping different relationships with its suppliers or customers in terms of its trading transactions, activities or relative power influence.

The constant changes in the global trends for materials, product design, requirements and consumer preferences mean that downstream retailers (level one) have to show themselves to be sufficiently flexible as intermediaries in the relationship between the end consumer and the manufacturer, which subsequently influences the upstream relationship (level two). In this sense, and in-line with the literature on relational marketing, dyadic relationships affect the whole supply chain (e.g. Johanson and Vahlne, 2003; Anderson et al., 1994; Håkansson and Snehota, 1995; Wilkinson, 2001; Min and Zhou, 2002; Wathne and Heide, 2004). In other words, the manufacturer, its suppliers and its customers are all affected by and have an effect on business relationships (Anderson et al., 1994). The links between the activities, the dependencies between the resources and the ties between the actors that evolve in this relationship, all develop in connection with a wide network of actors, patterns of activity and a set of resources. Together, these make up the business network reflected in the supply chain of the firm, where each actor takes on a different role in the success of the chain as a whole (Trkman and McCormack, 2009; Popp et al., 2014). This encompassing network facilitates access to knowledge, shared relations, the flow of information, motivation, productivity and innovation (Porter, 2000; Bergenholtz and Waldstrøm, 2011; Popp et al., 2044), supporting the competitive advantage of firms and bolstering their strategic positions (Johanson and Vahlne, 2003).

In networks, players are willing and expected to show cooperation, ease access to information, technical know-how and financial support, be a source of competitive advantage and knowledge capabilities. As such, NPD activities are expected to play an important role in B2B markets dictating the innovation strategy of the firm, which is reflected both in its upstream relationship (with implications for suppliers of raw materials and equipment), as well as in its downstream relationship with its customers (who try to expand their activities in international markets).

Co-operation, power and dependence are important to these relationships throughout the supply chain, as identified in the typology presented by Johnsen and Ford (2008). Experience and inclusion of suppliers/customers in co-operative projects, as well as the influence exercised by the customer and the supplier on the network in areas of knowledge, capabilities, skills, technical aspects, or even the NPD activities and strategies, capitalize the benefits of working together. These relationships also affect the performance of the firms involved (Lemke et al., 2003). According to the power of relationship between the focal firm and its upstream and downstream partners, Chang et al.'s (2012) research focused on strategies actions adopted by firms to capitalize the benefits of supply chain network. Chang et al. (2012) proposes a typology, featuring the relationship between focal firm and its upstream and downstream, into four types: (1) focal firm dominance; (2) upstream network dominance; (3) focal firm obedience; and (4) downstream network dominance. According to them, the firm's strategy depends on these specific relationship types, which takes place in different contexts/environment within a specific structure of supply chain network.

B2B suppliers have to deal with relationships with not only their direct customers but also those customers' customers (Dahlquist and Griffith, 2014), which leads to valuable information on market characteristics, creates product preferences among customers and stimulates derived demand (Webster, 2000). A multi-stage awareness of multi-stage marketing is important in B2B markets as the proximity of relationships between suppliers and direct and indirect customers have positive results to each other, avoiding essentially further adjustments of the product (Homburg et al., 2014). As such, the customer relationship management has to shift to a supply chain network management, consistent with the pull-push strategy (Homburg et al., 2014). Moreover, customers further along in the supply chain are often disregarded by marketers (Kleinaltenkamp et al., 2012), although they are very important in terms of brand satisfaction (Dahlquist and Griffith, 2014) and direct customers' willingness to pay (Geiger et al., 2015). As such, new insights on multi-stage

marketing strategy are necessary as the landscape of the inter-organizational network, marketing activities and relationship among players change (Gundlach et al., 2006; Homburg et al., 2014).

Taking into account the importance of upstream and downstream activities in the international competitive environment in defining the firms' advantages and competitive position in inter-organizational networks, this chapter proposes the following propositions:

Proposition 1: Downstream indirect customers play an important role for the (focal) firm in the creation of new products to serve downstream customers new needs in international new market influencing how the (focal) firm expands to new international markets.

Proposition 2: The NPD needs of the (focal) firm's customers strongly influences the (focal) firm's upstream activities with its suppliers.

Proposition 3: It is the success of the (focal) firm in upstream activities in the development of new products that underpins the success of its success in downstream activities, supporting the (focal) firm in its expansion to new international markets.

5.3. Characterization of the plastic industry

Plastics are everywhere and play an essential role in our lives and the economy in the twenty-first century. As an industrial sector, it has been continuously growing by an average of around 9% per year (Plastics, 2010).

The supply chain in the plastics industry can be divided into seven major segments: (1) suppliers of raw materials (petrochemicals, chemicals and additives); (2) plastics manufacturers (manufacturing different types of plastic resins); (3) plastics compounders (preparing the plastic formulations, mixing grain polymers and additives ready to use); (4) machinery manufacturers for the plastics sector (manufacturing equipment used in the industry); (5) plastics processors (transforming plastic resins and compounds into finished products); (6) distributors of plastic products/users (OEMs that employ plastic components in their final product; retailers that offer plastic products on the market); (7) end-of-life plastics firms (waste management firms, recycling and waste energy operators), specifically used plastics (used for the purpose which they were created) or virgin finished products (plastic not used, which for some reason have a defect and

cannot be used for the purpose for which they were produced, and are then sent for recycling) (Plastics Europe, 2016).

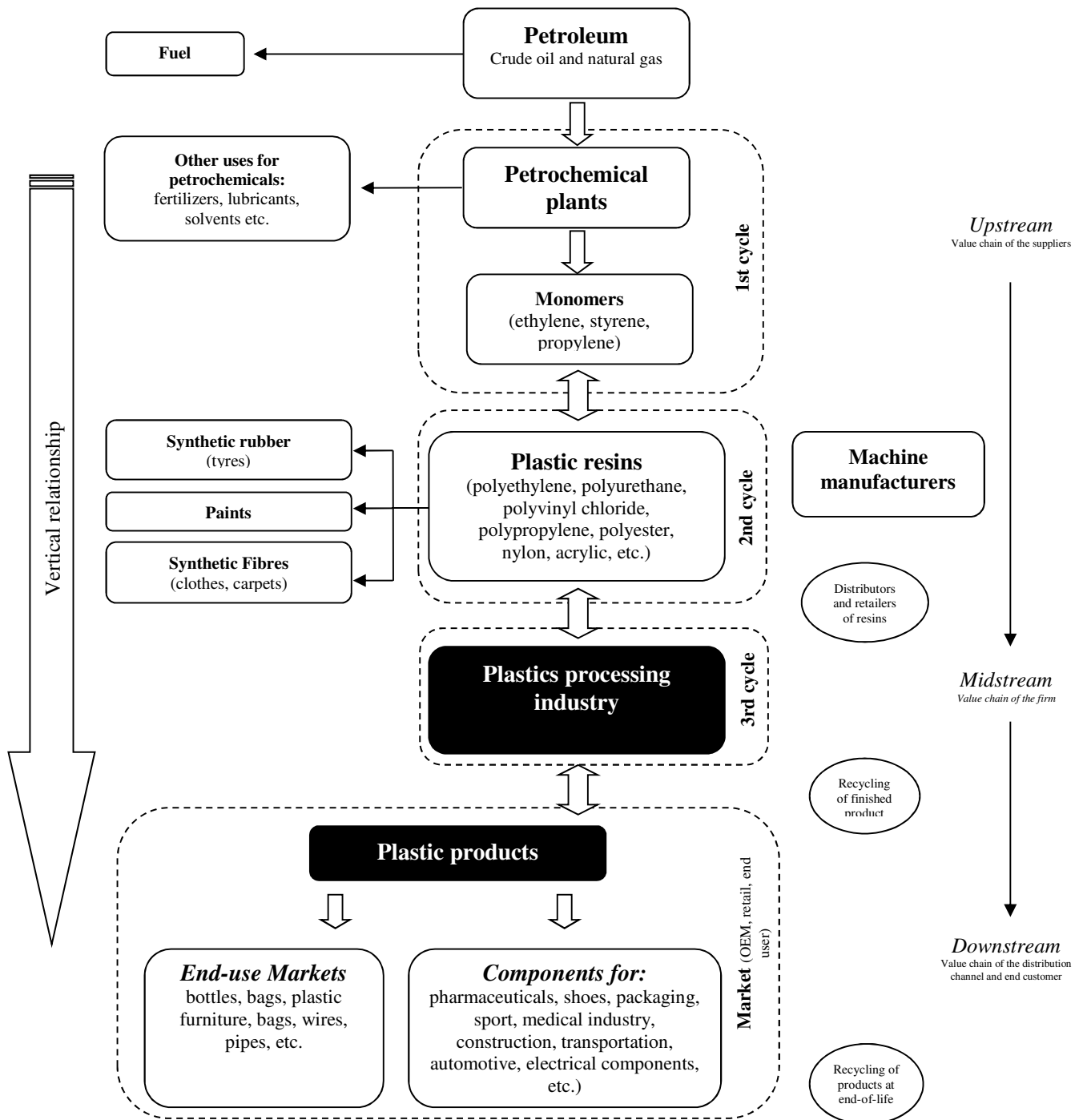
Figure 2 identifies three stages, namely: (1) the primary cycle (where refiners break down naphtha or natural gas, transforming them into basic petrochemicals such as ethylene, propylene, styrene); (2) the secondary cycle (it is normal for this cycle to be composed of a larger number of firms than the first cycle – it is at this stage that the producers of thermoplastic resins transform basic petrochemicals in high and low density polyethylene, polypropylene, polyvinylchloride, thermosetting resins, elastomers, polyurethanes, polymers for synthetic fibers, bases for synthetic detergents and paints, etc.; this cycle includes raw material suppliers as well as equipment suppliers); (3) the tertiary cycle (firms that transform the polymers in a variety of plastic products) using different technologies, such as (a) extrusion; (b) (molding by) injection; (c) extrusion blow molding; (d) calendering; (e) immersion; (f) thermoforming; (g) rotomolding; (h) slush molding; (i) (molding by) compression.

Alongside the flow of materials, the supply chain in the plastics industry also covers the supply of equipment: different machines for different segments of the tertiary cycle of the industry. These equipment manufacturers play an important role in the supply chain by searching out new ways to process polymers, optimizing important variables of the design and development of the plastic product. This may include, for example, the speed of the production cycle by the machine, the quantity produced in relation to the time taken, waste reduction, the quality of the output from the machine, the savings in the raw material used and the type of material used in the production, energy consumption, the labor skills and number of employees needed per machine, and the associated technological requirements that relate to different plastics products.

The second and the third cycle may be bridged by firms involved in the distribution and reselling of resins and thermoplastics.

Customers and end-users come at the end of the supply chain. The former can be divided into two main types: (1) what are known as OEMs (Original Equipment Manufacturers), product manufacturers which use plastic components in their final product, such as the automotive and transport industry, firms in the construction industry, and product manufactures from a range of sectors (industrial, domestic, food, electrical and electronic), the cosmetics industry, hospitals, leisure and sport, food, solar, different packages, etc; (2) the traditional distribution chain (distributors, wholesalers and retailers) and modern outlets (superstores).

Figure 2- Integrated supply chain of the plastic industry



Source: Own preparation based on input from CPIA, CAVIRC, Plastic Cluster and ABIPLAST.

The two main stages cover the second and the third cycles with the resin producers and the plastic manufactures respectively. However, final products are the not the result at this point. This

vertically integrated relationship can be seen from a value system perspective in Figure 2, including all the elements of the value system.

The relational flows in this vertical network are both varied and bi-directional, including not only the flows of raw materials and products, but also the intangible elements that appear in relationships, which may be either cooperative or conflictual, covering prices, contracts, projects and investments among others. Each of the actors in this chain is characterized by relationships that have different levels of proximity, making it more or less favorable for value generation.

In this competitive environment in the plastics sector, the market plays an important role. The interaction with customers and end users allows, among other things, product performance problems to be identified, new solutions to be proposed, and tendencies and usage habits to be uncovered.

In terms of recycling, two fundamental points stand out in the value chain for plastics: (1) recycling of finished products; (2) recycling of products at end-of-life. The recycling of end-of-life plastics requires the collection for recycling, sorting, and reprocessing, extending the production chain to the whole lifecycle of the product and involving relatively structured industrial activities. Finished products (which for whatever reason were rejected from the normal production process) can be recycled at an internal recycling unit or sent to specialized external re-processors through outsourcing.

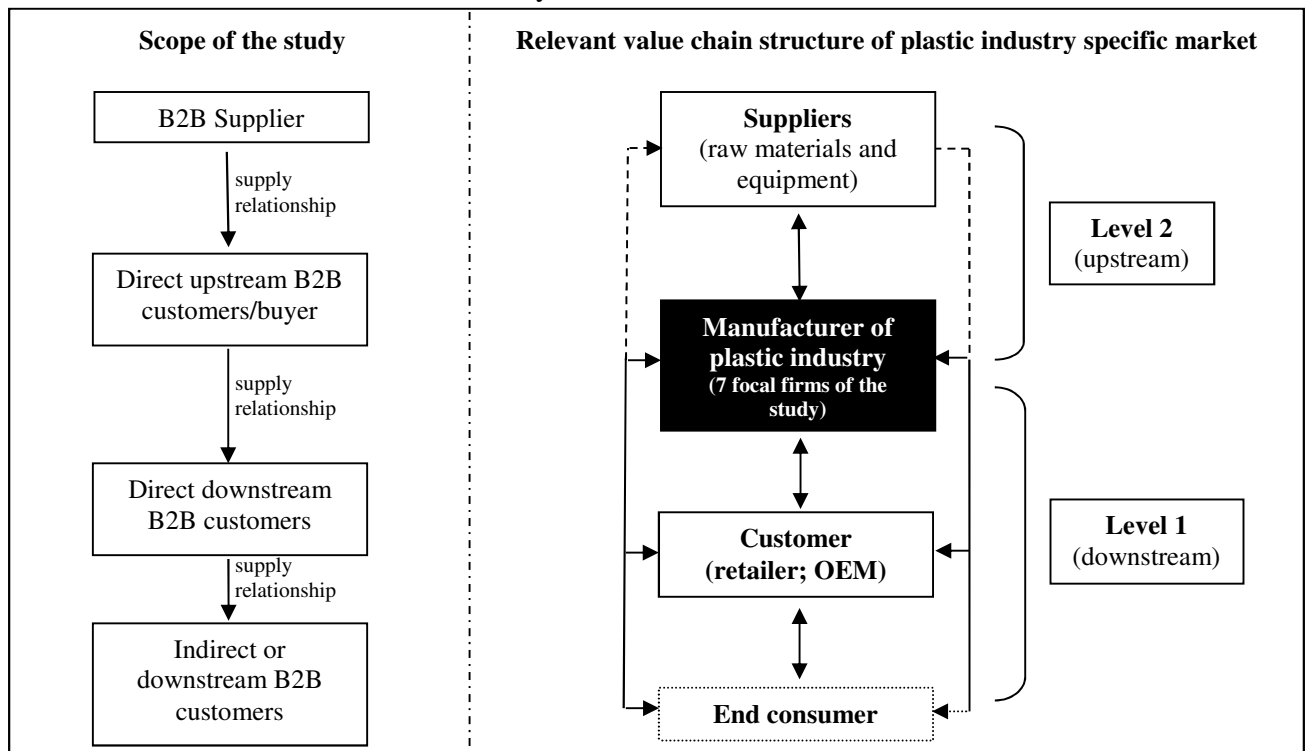
5.4. Research methodology

This work involves qualitative analysis, based on a multi-case design among seven firms of the plastics industry. This approach was considered to be the most appropriate for studies that are at the same time explanatory and exploratory (which center on the ‘why’ and ‘how’), and most appropriate for uncovering relational aspects which develop over time (Yin, 2008), around B2B interactions among the focal firm and its suppliers and clients. On the other hand, the case study is the most common choice for qualitative research in international business (Marschan-Piekkari and Welch, 2004). We aimed to compare the cases in a systematic way (Ghauri, 2004).

The case study firms were selected based on judgmental/purposive sampling (Patton, 2005), which involves the selection of cases that meet a set of criteria important to the research. Seven case studies were selected based around four requirements: (1) experience with the idiosyncrasies associated with international business activities; (2) active in B2B relationships; (3) manufacture firm operating in the plastics industry (transforming polymers in a final plastic product: focal firm of this study); and (4) involved in the 3rd cycle of plastics manufacturing. As no substantial further insights appeared to emerge from the addition of other firms, we decided that the seven cases would be sufficient, as there would be no point in carrying out interviews in other firms following the point of theoretical saturation (Eisenhardt, 1989).

Based on Chang et al. (2012), Figure 3 shows the inter-organizational network under analysis: (1) between the manufacturer (focal firm) and the customer (direct and indirect B2B customers); (2) and between the manufacturer (focal firm) and the supplier. The focal firm is the target firm under study (manufacturer of plastic industry).

Figure 3 - Illustration of the study scope: supply relationship and example of plastic industry value chain



We selected seven firms (focal firms) which agreed to take part in the study, and who were willing to respond to a set of questions previously devised for interview. These firms are representative of manufactures of the plastics industry essentially for two reasons: (1) they were indicated by plastics industry's stakeholders, having European representativeness on the technology segment used for transforming the polymers in a final plastic product; (2) they comprise a variety of technology segment. The firms included are from Portugal, Spain and Italy, giving a cross-border character to our study. In addition, the firms in this study represent the two most common productive processes in the plastics industry (injection and extrusion). For confidentiality reasons, the firms taking part in this study remain anonymous, being identified by the letters A to G. The firms produce a diverse set of products aimed at different segments of the market.

Data collection involved multiple sources, comprising primary data collection through interviews and secondary data through public sources, such as the websites of the firms, marketing information and observation. The different sources are important for triangulation, in order to ensure the validation and reliability of data (Andersen and Skaates, 2004; Ghauri, 2004). First, secondary data were collected (websites and different documents of the firm such as catalogues, flyers, etc.; public sources, such as government and specific plastic industry associations websites, etc.). Then, primary data were collected from semi-structured, in-depth interviews in order to understand the relationship across the supply chain, focusing on specific aspects connected to upstream activities (suppliers of raw materials and machinery/technology) and downstream activities (service activity to the customers). The face-to-face interviews took place with the person responsible for handling the relationships with suppliers and customers, namely privileged informants with the information required: general managers, heads of R&D, export, commercial, and exports departments.

The interviews began by explaining the research, guaranteeing anonymity, and requesting authorization to tape-record the interview. The questionnaire contained a number of structured questions designed to triangulate the information obtained by informants with the additional information obtained through the website of the firms and public sources (e.g. firm size, age, internationalisation experience, export ratio, export markets, current markets, etc.). The interview script began by exploring the policies used by the firm in their product innovation process, identifying the degree of intervention by either the customer or by the supplier in the process; characterizing the upstream and downstream relations as well as the characterization of the firm

within the plastics industry. From the seven firms analyzed, four of them are from Portugal, two from Spain and one from Italy. The interviews lasted between one and a half to three hours. In the case of the Portuguese firms, the interviews took place at the informant's sites, and we had the opportunity to visit the manufacturing plants. This procedure helped make the interviewees feel more comfortable while speaking in their own environment. The interviews with the representatives of the Spanish and Italian firms took place at the university (we invited the international market representatives to grant us an interview while they were visiting Portugal on one of their business tours). All the interviews were type-recorded and subsequently verbatim transcribed; two researchers conducted the interviews in order to reduce observer bias (Voss et al., 2002), increase the study potentiality and enhance the reliability of the findings (Eisenhardt, 1989).

The visits to the manufacturing plants helped gain an understanding of the environment through contact with production units and familiarization with the products produced. In this way, the researchers were able to improve their understanding of the examples given by the interviewees. After each visit, the researchers' impressions were attached to the summary of each interview.

Data from all sources were collated and transcribed into single case stories, helping identify missing information. Data were then analyzed in two stages: initially each case was analyzed separately by building single case studies and only then was a comparison between the cases carried out in order to answer to the research questions (Eisenhardt, 1989). We used prudent qualitative data analysis techniques, so the information obtained through interviews and other sources was cross-verified for validity and reliability and integrated into tables with a summary of each case.

After collecting data from each firm, we performed a within-case analysis based on categories reported in Table 11, Table 12 and Table 13. We conducted the cross-case analysis, looking at the similarities and differences among the cases.

5.5. Presentation and discussion of the case studies

Case A is a firm founded 47 years ago. The firm produces plastics using extrusion, making pipes and hoses for household and garden products, agriculture, industry and construction. It was recognized for its success in internationalisation by AICEP¹ in 2010 and for the last seven years it has been awarded PME Leader status².

Case B is a firm that has been operating for 62 years, producing sanitary ware for the construction sector (notably plastic cisterns). It is known as the largest producer of cisterns in Europe and in 2013 it received 1st prize for Total Flow Management by the Kaizen Institute in the area of “Excellence and Productivity”. This award seeks to recognize continuous improvement and process innovation in firms.

Case C manufactures plastics using a variety of processes: extrusion blow molding, injection and injection blow molding. Their products include stiff packaging for the pharmaceutical and cosmetics industry. Firm C was nominated for the PME Leader award and PME Excellence³ between 2012 and 2013.

Case D is a corporation made up of four firms which manufacture flexible packaging (film and plastic bags) using extrusion cast and blow molding. Founded 34 years ago in Portugal, they produce for the industrial, commercial/services, agriculture and construction sectors. This group is the leader in the Iberian Peninsula in the production of flexible packaging, with a place among the Top 15 in the European producers.

Cases E, F and G are part of the plastics industry that makes flexible hoses. Case E is a firm that has been making flexible hoses since 1995 in Spain. Case F is involved in the same core business as case F and also based in Spain, using extrusion and co-extrusion of plastics to manufacture pipes and hoses for applications in industry, agriculture, construction and gardening

¹ AICEP Portugal Global - Trade & Investment Agency is a government business entity focused on encouraging the best foreign firms to invest in Portugal and helping Portuguese firms succeed abroad in their internationalization processes or export activities.

² The status of PME Leader is awarded by IAPMEI (Public Agency for Competitiveness and Innovation, tasked with promoting competitiveness and growth among SMEs, with a basis in innovation and entrepreneurship) using criteria fundamentally related to competitive support and growth strategies.

³ The status of PME Excellence is awarded by IAPMEI using criteria related primarily to profitability, financial autonomy and growth in the volume of business.

since 1972. Finally, the firm behind case G is located in Italy; it was founded in 1952, making it the oldest case in this study.

A brief profile of each of the case study is presented in Table 11. The results are brought together in Table 12 and Table 13, relating the interaction between the principal elements of the upstream and downstream networks in the plastics industry, along with other elucidative variables from the study for each of the firms studied. Although there are specific factors relating to each of the firms analyzed, there are clear patterns, which will now be discussed.

The ability to establish long-term relationships with international customers creates a flow of technological skills and changes in the production process of the firm. This is then reflected in widening usage of the product across different markets; new customized products are included in the standard range, which impacts on the ability to enter new segments of the market, as in the case of firm A, or simply creating a new product to order for a specific customer, as is the case for example with firm C.

The relationships of the firms studied are at different stages/states: not all the customers display an active/dynamic relationship at a technical level (i.e., in acquiring skills and technical changes to the products and the firm). There is a relational interaction, although it is more common that international customers are more actively/dynamically involved in innovation projects and technical development of the product. The role of the customer is essential in this process as part of the value creation chain, helping drive the internationalisation of the plastics firm. This occurs when the plastics firms manages to develop/adapt the new product to the need of its international client (however this internationalisation gain was not measured).

Price is the primary factor underlying international competition in the plastics industry. In the international context, firms operate in a market where aggressive pricing is normal. This is reflected in a high level of investment in technology and modernization of industrial equipment, helping maintain control over the cost structure and release enough margin for the firm to be more competitive in the international market. The competitive market pressures – particularly in the international market – require technical differences and technological innovation, such that the production equipment is capable of optimizing the production process so that the product is competitive on a cost basis, while also meeting the technical innovation requirements.

Table 11 - Characterization of the cases

	Firm A	Firm B	Firm C	Firm D	Firm E	Firm F	Firm G
Years since inception	47	62	16	34	21	44	64
Sales volume (M €)	12 €	40 €	2.4 €	160 €	16 €	6 €	70 €
% of export	50%	80%	95%	35%	60%	33%	70%
Average N° of employees	130	418	30	460	68	45	460
N° of workers in the export department	5	12	1	2	3	5 (total)	10 (total)
N° of workers in the R&D department	3	24	1	5	1	1	5
Country of origin	Portugal	Portugal	Portugal	Portugal	Spain	Spain	Italy
Plastics manufacturing process	Extrusion and co-extrusion	Injection	Extrusion blow molding, injection and injection blow molding	Extrusion blow molding and cast extrusion	Extrusion	Extrusion and co-extrusion	Extrusion and co-extrusion
Products	Pipes and hoses	Sanitary ware	Stiff packaging	Flexible packaging	Flexible hoses	Flexible hoses	Flexible hoses
Major international markets	Spain, France, Morocco, Angola and Mozambique	Europe, Russia, Africa, Middle East and South America	Spain, France, Germany and Angola	Spain, Ireland, England and France	France, Africa and East European countries	Germany, England and Portugal	Germany, Sweden, Norway, Holland, Belgium, and France, Spain, Denmark and Finland
Customer segments (types of international customers)	Distributors, wholesalers, major end users and OEMs	Modern distribution channel (DIY), professional market (distributors) and OEMs	Pharmaceutical and cosmetic industries	Industrial sector (film); agriculture (film); trade and services sector (bags); construction (geo-membrane)	Large wholesalers and OEMs	Large wholesalers, distributors and OEMs	Large wholesalers, distributors and OEMs

Source: Own preparation.

Table 12 - The main results of Portuguese firms

	Firm A	Firm B	Firm C	Firm D
Relational perspective in the supply chain	Works in partnership with a close relationship with raw materials and equipment suppliers, helping generate innovative new products and improve international competitiveness (based on price), which influences and motivates the relationships that the firm fosters, primarily with international customers that are more demanding at a technical level and in terms of price.	Establishes a relational contract with the supplier of raw materials, while the relationship with equipment suppliers is reactive (resulting from an internal need for the firm to engage in production optimization). This means that the upstream relationship with equipment suppliers involved in NPD activities only occurs occasionally. Depending mainly on the complexity of the raw material used in the innovation, the relationship established with the supplier influences the relationship with the customer, especially in international markets. Customer intervention even extends to the development of innovation audits at the firm (ranging from the upstream to the downstream elements in the value chain). The international customer is more demanding at a technical level and in terms of price.	Establishes a relational contract with the customer. The customer defines all intrinsic details of the product, including the raw materials. Because these are very specific details, the relationship with the raw materials supplier is fundamental in achieving the contract with the customer and fulfilling the customer's requirements. Equipment development occurs in partnership with the equipment supplier and is approved by the customer. This helps optimize production and fulfil customer requirements. The customer controls the entire process with audits of the firm's functions: the quality management system, production process, packaging, logistics and environmental conditions, and health and safety in physical facilities. The firm, customer and supplier form an interlocking chain, driven by the market. This is central to the internationalisation of firm C, whose bargaining power, both upstream and downstream, are important in the supply chain.	The upstream relationship (with raw materials and equipment suppliers) is essential in allowing the firm to achieve a controlled cost structure and sufficient technological capabilities to reach the competitiveness necessary (on a price basis) to trade with the customers. The upstream relationship works on a relational basis, however, it is characterized by wide ranging negotiations in terms of price. The firm, the customer and the supplier create a grouping, mutually influencing each other with a focus on the ability to negotiate both upstream and downstream over the supply chain.
Customization	Characterized by a range of standardized and customized products reflecting customer requirements, particularly for international customers with more extensive technical requirements.	Characterized by a range of customized products, while the standard product lines are of limited importance. This is more the case in the international market where the customer is more technically demanding.	Characterized by a range of fully customized products.	Characterized by a range of fully customized products.

Source: Own preparation.

Table 13 - The main results for firms E, F and G

	Firm E	Firm F	Firm G
Relational perspective in the supply chain	<p>The upstream relationship (primarily with raw material suppliers) is fundamental to the value chain. The partnership is essentially based on finding a raw material (capable of being extruded on the existing production lines, avoiding investment in equipment) at the lowest possible cost, and meeting the technical requirements of international customers. The effectiveness of this relationship is dependent on how close the relationship is between firm E and its main raw material provider. At an international level, a close relationship with the buyer is essential: the relationship, primarily with international OEMs, works on a relational basis, where the contracts contain exclusivity clauses for customized products. The relational perspective is based on trust and the commitment to find new customized solutions for the customer. To be able to provide new products, the firm has a solid relationship with the main suppliers of raw materials.</p>	<p>The upstream relationship is fundamental in creating value, stimulating the firm's capacity to serve international customers based on their customers' needs. This is because it is imperative that the firm adapts to the specific requirements of each market, which essentially requires more adaptation of the raw materials of the products than the introduction of new production technologies. The upstream relationship in place, primarily with raw material suppliers, is sustained by the relationship built up with the customers (primarily international OEMs). The customers demand customization, leading to innovative products (mainly through a need for new materials), requiring more flexibility to adapt materials to the requirements of the international customer and instigating an equally close and stable exchange with the supplier.</p>	<p>The innovation process is largely based on alterations to the raw materials (around 70%) rather than acquiring new technology, in order to adapt the product to the requirements of the international customers. In this respect, the close and long lasting relationship that is established with the supplier of the raw materials when developing new products helps encourage differentiation in the market. This relationship depends on the ability to negotiate and potential shown by the project (understood as an opportunity to increase the sales volume). The upstream relationship of this firm (mainly in terms of raw materials) depends on the relationship with the customers, primarily OEMs that are responsible for around 80% of new products. As such, the relational capabilities, both upstream and downstream, are vital to creating value. As a firm with a long history, it has wide-ranging internal capabilities for technological development, which it employs in the relationship with the equipment supplier.</p>
Customization	<p>They have a range of personalized products aimed primarily at the international market. This range can be adapted to be part of the standard range, depending on the agreement made with the customer. International customers demand more customized products, signaling an individualized relationship (for each customer and each product) so as to meet the technical demands of each customer.</p>	<p>Adapting the product to the customers' customer needs is essential to gain international market share. OEMs represent around 70% of the R&D projects in this firm, which does not mean that they are a significant share of business. However, they potentially represent a new product that can become part of the catalogue and increase the portfolio of customers, increasing sales volume to levels that are more acceptable to the business. The relational contract and the partnerships with the customers (distributors, wholesalers or OEMs) are fundamental, especially in the international context. This is especially true for international OEMs who more readily drive the development of new products.</p>	<p>Internationalisation requires that the product is adapted to the needs of the market and customers, implying adaptation, primarily of raw materials. Wholesalers and distributors are the most important customers in terms of the sales volume. However, OEMs introduce more product innovations, implying new technology (although this is not always the case) and/or the need for new materials. While the innovation driven by international OEMs is responsible for only a small share of the sales volume across the portfolio of customers, it leads to an increase in the sales volume after having been publicized in the firm's catalogue, increasing the range of the firm and appealing to a wider group of customers. At all times in this process, the existence of a relational, individualized relationship with the OEMs is essential, with implications for the current stable and long-lasting relationships.</p>

Source: Own preparation.

Opinion was unanimous regarding the Portuguese firms: adequately serving the international market – primarily in terms of the more stringent technical demands – allows the new range of products to be subsequently adapted to the international market. In this way, success in serving international customers and adopting the new products to their customers' customer needs open a window of opportunities to the national market; it then becomes essential that there are close relations with the suppliers of raw materials and equipment to generate new internationally competitive products. When this successful feedback takes place Portuguese plastics producers were able to add the new product range to the international market, giving them a competitive edge.

The most valuable differentiating characteristics in this core business, which are decisive in the purchasing decision, can be summarized by: the technological and productive capability of the firm and the flexibility of the customer-oriented NPD process (which includes the guarantee of functionality, innovation and product quality); reduced delivery times, ability to compensate for a lack of price competitiveness in the international market (due to the additional transport costs), which all firms in the study cite; product quality and reliability; product safety, product guarantee and technical support; as well as the follow-up given to the customer. In some segments, as in the case of firms C and D, environmental policy, or criteria of hygiene and safety are also considered at time of purchase. However, the first set of factors drive the ability to build relationships (based on trust) between the plastics industry and its customers. This helps encourage close relationships with suppliers and the international presence of the firm.

Customized products are normal in this core business. This encourages a set of relational partnerships between the firm, the customer and the supplier, built on long lasting and stable foundations. The relationship in place between the firm and the customer for customized products is closer than relationships with customers when they purchase products from the standard range. It is important to note that the product price is very important – although this is truer for the standard ranges than for customized products. The output in this industrial sector is varied, but for the most part the plastic product involves significant technological input, to the point that emphasis in the marketplace is placed on customer support and assistance, with differentiation through the level of service and delivery times. In this respect, the strategic positioning of the plastics industry seems to be supported by a supply chain that maximizes customization and service. As such, relationships based on mutual commitment are made possible by providing solutions at the development stage to customized products.

The firm's bargaining power with the raw materials supplier is essential to creating value in the plastics industry. The cost of the raw materials in this type of industry is intrinsically linked to the price of oil, a factor that is beyond the control of the firm. As such, the relationship forged with the raw material supplier becomes fundamental when planning purchases subject to oil price fluctuations, in obtaining the quantities and grades required, in guaranteeing the quality of the raw materials and in developing chemical compounds as part of the customization and development of new plastic products.

The bigger the size of the firm the easier it is to forge partnerships with large international suppliers of raw materials. This provides a competitive edge in the process of value creation from innovation and customization of the plastics products. This collaboration in the R&D and NPD process becomes easier when projects have more potential, as shown by the amount of business they represent for upstream firms. All this stimulates plastic producers to the point that they gain size allowing them to improve their upstream bargaining power. It is only in this way that the supplier becomes actively involved in the NPD process, rather than just supplying standard raw materials. This is something that is visible in firms B, D and G, where reference was made to the fact that (unlike some competitors) they were able to develop a special relationship with raw material and equipment suppliers based on the relationship that they can develop upstream.

In terms of innovation, there are particular features in terms of the product and the process. The firms E, F and G state that process innovation is important for their competitiveness and that they have the internal capabilities to develop their products, notwithstanding the work they do together with the raw material suppliers. The situation for Portuguese firms is rather different: all of them seek to work together with raw material and equipment suppliers when developing new solutions for their customers. Process innovation is also important in the search for keeping costs as low as possible. As such, it can be stated that Portuguese firms place more emphasis on product innovation than process innovation in this type of industry. This may be the result of differences in the level of technical endowments between Portuguese and foreign plastic producers.

There are certain differences among the technological endowments of the firms, as is the case of the industrial plastics producers or polymer producers. However, one can claim that knowledge of the characteristics of the different segments of the market will also affect the innovation structure in this type of industry, stimulating the development of external relations with downstream markets. External relations (both upstream and downstream) give this sector a continual capacity for product-based innovation and learning, based on economies of scale and on

serving indirect customers in international markets. As relationships are built up covering the production flows a firm has with all the actors (i.e. suppliers), the industry sector is energized and evolves. This is reflected in the networking activities upstream and downstream in the supply chain, and from a wider perspective, in its international presence.

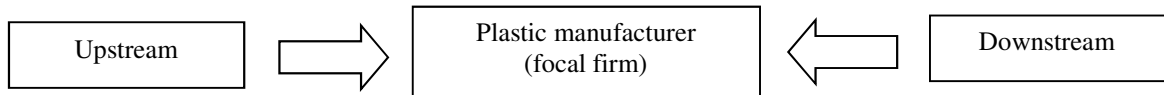
The number of workers in R&D compared to the sales volume and the level of customization suggests that the plastics industry relies on the upstream relationship. However, there are differences between Portuguese and foreign firms, in particular, raw material suppliers are seen as important among Portuguese firms, given that access to process innovation based on technology/machinery is similar in this industry (or at least it is dependent on in-house know how).

The international market for plastics is more diversified than the Portuguese market. This implies a higher level of competition in the international market, particularly at the market entry point. However, after entry it is easier to maintain the relationship with international customers. There is a common characteristic shared by all the international customers in the plastics industry: customized tight requirements both technically and for delivery times. In order to respond to specific needs, international customers try to develop trust-based relationship with their plastic suppliers. Because of this indirect demand plastic suppliers tend to their upstream to develop specific raw material and equipment. This may to either radical innovation (a completely new product, which may imply a new production process with a high degree of complexity and technical requirements), or incremental innovation (requiring a change in the mix of the raw materials used). As such, to gain entry to international markets and be competitive the plastic producer needs to be able to show responsiveness and flexibility in adapting the products to the technical demands of different markets. In this respect and based on the findings, both upstream and downstream relationships are crucial when considering international acceptance.

Based on these findings and according to Chang et al.'s (2012) framework, the plastics manufacturer can be categorized as an obedient focal firm, the weakest position. These kind of firms have highly customized products and depend on both suppliers and customers, as such one can claim that the centers of the network are located both upstream and downstream where the main network actors are located. The focal firm is constrained by both upstream and downstream actors and plays a complementary role on this supply chain network, as the downstream customers are few but significant, which leads the focal firm to establish customized products based on long-

term contracts as a means of having access to a long array of new indirect customers and products. Figure 4 presents a brief summary of the supply chain network of the plastic manufacturer.

Figure 4 - Supply chain network: focal firm obedience



The upstream and the downstream levels enjoy a relatively high degree of power. The downstream firms have a power advantage over the focal firm not only because they have a high share of sales, but also because they serve and know the end customers' needs. Both the upstream and the downstream levels of the network are highly consolidated industries.

Focal firm's upstream strategies	Focal firm's downstream strategies
Strengthen bi-directional knowledge-sharing routines. Avoid lack of resources.	Obtain a long-term contracts. Customize products for critical customers. Provide product information to customers.

Focal firm Upstream and Downstream strategies

- Promote the development of complementary resources and capabilities to both upstream and downstream networks.
- Adjust focal firm resources and capabilities to being committed to its upstream or downstream partners.
- Modify and open its organizational structure to join boundary-spanning activities.
- Aim for collaboration.

A differentiating characteristic between the Portuguese firms (A, B, C and D) and the Spanish and Italian firms (E, F and G) relates to the fact that the latter group saw their national markets as having similar requirements to the international markets. The Portuguese firms, however, were clear in their view that the national market was significantly less demanding than the international market, particularly in terms of the technology used, which is associated with the complexity of the products being produced. In addition, Portuguese firms unanimously stated that their presence in international markets leads to improvements in the range of products offered to the national market. In this respect, while the highly competitive national markets in Spain and Italy helps their national firms to break into international markets, Portuguese firms use price to compete at this level, allowing them to adopt a new competitive position in the national Portuguese market.

5.6. Conclusions and implications

The supplier (raw materials and equipment) and the international customers are the fundamental elements of the supply chain. A strong position with good relationships on a competitive footing, both upstream and downstream in the supply chain, helps firms to produce a more competitive final product, maintaining the quality requirements demanded by the most stringent international customers. This is due to a feedback effect, or in other words, the partnership that the focal firm forges with its suppliers is reflected downstream in the customer, and vice-versa. This then reinforces the trust that the firm communicates to the market when developing new products and in stimulating the relational partnership established with the customer, based on its customers' needs.

This symbiosis leads to a more technically innovative final product, which encourages more relational contact with the customer, giving rise to an indirect form of internationalisation of the firm, extending networking activities with international customers and strengthening its competitiveness.

The plastics manufacturing (focal) firms look to their raw material and equipment suppliers as a way of developing and innovating their products. However, they do not forget the importance of the market's demands and the opportunities and needs of the end customer in the decision making process (direct and indirect downstream customers).

The plastics industry is highly characterized by the vertical relationship between the suppliers and the customers. In other words, the downstream relationship stimulates the upstream relationship, which in turn leads to more involvement in the downstream relationship. This ensures that the focal firm develops an increased level of loyalty to the customer in international markets.

It is possible to conclude that all firms analyzed validate proposition 1, which underpin their international path based on the customer customers' needs. This international demanding environment sparks off an upstream relationship with suppliers validating proposition 2. However, it is the creation of new products and solutions in upstream activities successfully deployed with indirect customers in international markets that give focal firms a competitive edge validating proposition 3.

Using the concepts of the supply chain and multi-stage marketing, this chapter highlights the importance of suppliers and customers as a means of competitive positioning for an exporting firm and defining the strategies of product innovation.

From a theoretical point of view, this exploratory research sheds new light to multi-stage marketing activities as firms need to bear in mind two important ideas: they need to build relational links and to create close ties with their partners as a way of ensuring more effective product innovation and increased success in serving international customers. This work also supports literature on inter-organizational networks and NPD by presenting power-based relationships among actors in the network. It also provides a comprehensive analysis of B2B supplier approaches to direct and indirect downstream customers within a specific industry, enriching previous research findings by presenting seven case studies, which provide a more comprehensive strategic consideration of the relationship of B2B firms with its suppliers and its customers in a multi-level perspective.

This study has managerial implications. The first one reinforces the idea that by stimulating close relationships, with either the customer or the supplier, the firms will be facilitating the entry process into international markets. We also provide a comprehensive understanding of the complex structure of B2B networks on plastics industry, whose players seek to reduce the uncertainty of their low technology endowments competing successfully in international markets. The interaction with downstream-customers and upstream-suppliers along the supply chain, in which regular information is exchanged, helps firms in their learning and decision-making process and could be considered a window of opportunities to new businesses.

This study focuses on relationships and is based on seven case studies. While the results cannot be generalized, they open doors to other potential studies in the area (namely quantitative studies using multivariate techniques) which might shed light on the importance of the upstream and downstream network for the supply chain when the firm moves into international markets. On the other hand, this study was not concerned with how radical the product innovation was at the seven firms. As such, it would be interesting for future studies to assess the level of product innovation to understand how downstream and upstream involvement/relationships influence the level of radical innovation. Similarly, it would be interesting to define a metric for a firm's level of internationalisation, as a way of understanding if there is an association with the level of involvement, as well as the 'character' of the innovation (radical/incremental) in relation to the internationalisation (reactive/proactive).

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6. SMES INNOVATION CAPABILITIES AND EXPORT PERFORMANCE: AN ENTREPRENEURIAL ORIENTATION VIEW

ABSTRACT:

The aim of this chapter is to present the impact of a set of internal innovation capabilities on export performance of manufacturing firms, with the mediating role of entrepreneurial orientation with proactive or reactive external stimuli. The study involves the analysis of 362 questionnaire-based survey of managers from small and medium-sized-plastic manufacturing firms (SMEs) operating in Portugal that were subjected to a structural equation modelling analysis.

The results shows that proactive firms to external stimuli are not only better at innovating but also their entrepreneurial orientation capabilities underpin a better performance in international markets when compared with firms that react to external stimuli. This study has implications for SMEs aiming at increasing their export performance and innovativeness. For practitioners the findings of this study should enable SMEs owner/managers to better understand the possible impacts of innovation capabilities and entrepreneurial orientation on export performance, and thus lead to more effective SMEs management.

KEYWORDS: Internationalisation; SMEs; Performance; International strategy; International entrepreneurship; Innovation Capabilities.

[Part of this chapter was submitted to an ISI indexed journal]

6.1. Introduction

Internationalisation and innovation can leverage the success of firms (Onetti et al., 2010; Golovko and Valentini, 2011; European Commission, 2010), especially small and medium-sized firms (SMEs), which are creative, innovative, and entrepreneurial. They use resources and capabilities based on an entrepreneurial orientation that lead the firm to superior profitability, taking strategic opportunities in foreign markets and sustaining their competitive advantages (Jantunen et al., 2005).

The literature relating internationalisation and performance is vast (e.g. Lu and Beamish, 2001, 2006; Guan and Ma, 2003; Lages et al., 2009; Lee et al., 2012; D'Angelo et al., 2013; Zucchella and Siano, 2014; Cui et al., 2014; Lohrke et al., 2015), but Ruigrok and Wagner (2003) and Oesterle et al. (2008), reviewing those two constructs, suggest there is a positive relationship between them, and emphasise the need for empirical studies with academic and managerial implications.

On the other hand, we can find various studies that specifically link internal innovation capabilities of firms and export performance. Jantunen et al. (2005) conclude their empirical research on manufacturing and service firms with the observation that entrepreneurial behaviour combined with organisational reconfiguring capabilities are a potential source of competitive advantage. Lages et al. (2009) focused on the influence of a set of capabilities (organisational learning innovation, relationship and quality) on product strategy and export performance. Meliá et al. (2010) studied the influence of innovation orientation on the internationalisation of service-based SMEs. Hortinha et al. (2011) focused on the impact of strategic customer and technology orientations on innovation capabilities and export performance. Lisboa et al. (2011a) studied how entrepreneurial orientation, exploitative and exploratory capabilities affect the performance of a multi-sector industry, and Lisboa et al. (2011b) analysed how innovative capabilities influence present and future performance. Finally, Guan and Ma (2003) classified innovation capabilities into seven dimensions (learning, R&D, manufacturing, marketing, resources exploiting, organisational and strategic capabilities) and analysed how those capabilities influence the export

ratio of manufacturing firms in several industries. They concluded that export growth is related to the improvement in innovation capabilities (but not manufacturing capability).

The mainstream international business literature reports that firms only venture abroad when they are established in their domestic market, which is not always the case, as seen with “born globals” (Ribau et al., 2015). For most SMEs, the first steps abroad typically have reactive motivations; they respond to unsolicited export orders which can be a means of shortening the firm’s export development process (Katsikeas, 1996; Etemad and Wright, 2003; Bell et al., 2003). This reactive behaviour is quite common as a response to external pressures (e.g. pressure from competitors, decreases in domestic sales, excess capacity, overproduction, proximity to customers), whereas proactive motivations are based on management choices and entrepreneurial orientation to expand the business to an international level based on the firm’s competitive advantage (Bell et al., 2003; Verisan and Achimescu, 2011).

Taking into account the various studies cited above, there is a need to examine how internal innovation capabilities influence the export performance of SMEs, about which there is little evidence in the literature. Moreover, in order to extend this area of study, and taking into account the importance of entrepreneurial orientation (Lee et al., 2001), this study seeks to complement previous studies and analyse how entrepreneurial orientation mediates the innovation-export performance relationship.

To date the study of innovation capabilities has not included two different perspectives that are very common among SMEs: the influence of external stimuli in their active and passive behaviour in the internationalisation process (Westhead et al., 2004). Furthermore, the study of the role of innovation in SME internationalisation has been limited on literature (O’Cass and Weerawardena, 2009).

Finally, as most of the studies on innovation analyse large firms (e.g. Lee, 2010; Terziovski, 2010; Reilly and Scott, 2014; Michailova and Zhan, 2015), this chapter complements previous studies by analysing international industrial SMEs, which have relatively fewer assets, especially tangible resources (technology, equipment, financial) when compared with multinationals (MNEs) (Julien et al., 2004). In their internationalisation process, SMEs have shown several limitations in what pertains to their financial, human and intangible resources (limited resources and capabilities; financial restrictions; general management limitations; limited language skills, intercultural knowledge and international strategies awareness). However, SMEs have intangible resources that allow them to survive, compete and grow (Mejri and Umemoto, 2010; Love and

Roper, 2015). With less resources (essentially financial) and international experience (Karlsen and Nordhus, 2011), SMEs can be expected to be more reactive than proactive to external stimuli of international markets.

This study focuses on a set of internal innovation capabilities (learning, R&D, manufacturing, marketing, resources exploiting, organisational and strategic capabilities) as strategic elements of international entrepreneurship orientation and the export performance of SMEs. The main objective of this research is to answer to the follow research questions: (a) How do firm-related innovation capabilities impact export performance of international SMEs? (b) How important is the mediating effect of entrepreneurial orientation on the innovation-export performance relationship? and (c) How do firms that are proactive and reactive in relation to external stimuli behave in their innovation-export performance relationship?

As the literature indicates, there are few empirical studies that report a positive relationship between firm-related innovation capabilities and export performance of SMEs, so this study fills that gap. Moreover, as the mediating effect of the entrepreneurial orientation on the relationship between a set of firm-related factors such as innovation capabilities and export performance has not been fully studied, we aim to show how SMEs behaves in the relationship between innovation capabilities, entrepreneurial orientation and export performance.

The chapter is organised as follows. After this introduction, the hypotheses are developed in the second section, which presents the theoretical background for firm-related innovation capabilities, covering the relationship between entrepreneurial orientation, innovation capabilities and export performance. The third section presents the research method, followed by the fourth section which presents the results. The chapter ends with conclusions and a review of its limitations and future research paths.

6.2. Theoretical background and hypothesis development

In order to achieve competitiveness in international markets, SMEs need to develop firm-specific resources and capabilities, founded on the resource-based paradigm that sees firms as a unique and heterogeneous pack of tangible and intangible resources (Wernerfelt, 1984). This is a challenge for SMEs because of their lack of resources to compete in areas such as marketing, production, innovation and international strategy (Villar et al., 2014).

From the firm's point of view, internationalisation is a means to increase performance, which is implicit in almost any theory of internationalisation (Ribau et al., 2015). According to Lages et al. (2009), the resource-based view of the firm is used objectively in studies analysing export performance. It is from this perspective that firms approach international markets as a vital resource, although it may imply risks to earnings (Oesterle et al., 2008).

Innovation represents one of the main avenues for building firm-specific advantages (Zucchella and Siano, 2014) and is critical to firms' growth and success (Guan and Ma, 2003; Lisboa et al., 2011a), and high performance levels (Garcia-Morales et al., 2006). Innovation capabilities are an important asset of the firm in the face of market competition (Guan and Ma, 2003; Zahra et al., 2006), underpinning the firms (a) innovation and new product development capacity, (b) the deployment of new managerial and production processes, and (c) promoting the entrepreneurial spirit so that the firm can venture into international markets.

Innovative resources and capabilities are recognised as a major driver of firm growth, both in domestic and international markets (Teece et al., 1997). This is an area that is little explored in the literature on exports (Lisboa et al., 2011b). Business growth and success depend on the joint effect of internationalisation and innovation (Onetti et al., 2010). Moreover, a firm's internationalisation process is in itself an innovation process (Andersen and Kheam, 1998) and an entrepreneurial act for most SMEs, so that an entrepreneurial attitude has a positive impact on export performance (Beamish and Dhanaraj, 2003).

The literature on innovation-performance relationship has focused on technology, product development capabilities and R&D activities (e.g. Adler and Shenbar, 1990; Christensen, 1995; Lumpkin and Dess, 1996; Lisboa et al., 2011a; Lisboa et al., 2011b; Azar and Ciabuschi, 2016). However, innovation is also related to marketing and organisational capabilities (Gunday et al., 2011), requiring the combination of more than one of these capabilities for firms to internationalise successfully (Guan and Ma, 2003). In this research, we extend the domain of innovation capabilities to other aspects. Capabilities are a set of special assets, skills and knowledge that, over time, become a firm's routines and practices and enable it to use resources efficiently and achieve superior performance (Teece et al., 1997; Peteraf, 1993; Barney, 1991; Guan and Ma, 2003; Gunday et al., 2011). Taking into account the strong positive relationship between innovation activities and exporting in SMEs (Golovko and Valentini, 2011; European Commission, 2010; Guan and Ma, 2003), we propose the following hypothesis:

H1: Innovation capabilities have a direct positive effect on export performance.

Entrepreneurship is a very broad concept (Shane and Venkataraman, 2000) encompassing (a) strategy, (b) opportunity seeking behaviour leading to aggressive new product development and responses to competitive threats, and (c) a strong predisposition to assume risk taking behaviour in unknown contexts.

The promotion of entrepreneurship behaviour is a key concern for policy makers and businessmen who aim to give firms, especially SMEs, a more international entrepreneurial orientation. International entrepreneurship is a process of discovering and exploiting opportunities in foreign markets (Zahra and George, 2002). SMEs have an advantage because smaller firms are more flexible, less bureaucratic and generally have internal capabilities that encourage innovativeness (Lewin and Massini, 2003).

Entrepreneurial orientation (EO) affects a firm's strategic orientation and decision-making style, practices and methods, and can be viewed as a combination of proactiveness, innovativeness and risk-taking (Miller, 1983; Miller and Friesen, 1983; Covin and Slevin, 1988; Covin and Slevin, 1989; McDougall and Oviatt, 2000; Lee et al., 2001) with autonomy and competitive aggressiveness (Lumpkin and Dess, 1996) in order to obtain and sustain competitive advantage.

Entrepreneurial orientation provides SMEs the ability to identify new opportunities, which differentiates them from other firms in the way they compete (Wiklund and Shepherd, 2005) and in the way they seek potential rewards (Kropp et al., 2006). International entrepreneurial orientation involves a proactive approach to identifying overseas markets, and is linked to managers' global vision and competitive posture (Covin and Miller, 2014; Knight and Cavusgil, 2004). Zhang et al. (2009) introduced the concept of international entrepreneurship capability, arguing that it enables firms to leverage resources and exploit opportunities in international markets. International entrepreneurial orientation is positively related to international performance and one of the most critical resources for venture performance (e.g. Covin and Slevin, 1991; Zahra and Covin, 1995; Lumpkin and Dess, 1996; Knight and Cavusgil, 2004). This conclusion is consistent with the resource-based view.

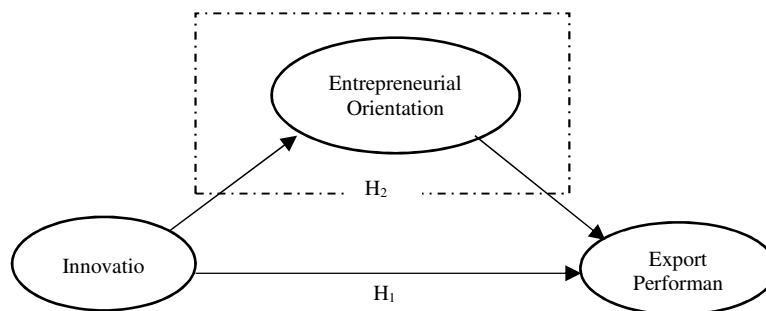
The EO-performance relationship is not simple. Although some authors claim that more EO leads to better performance (Wiklund, 1999; Zahra, 1991) some claim otherwise (Smart and Conant, 1994; Lumpkin and Dess, 1996; Covin and Slevin, 1989; Zahra and Covin, 1995). It is clear that there are some specificities that are relevant to the EO-performance relationship that need to be analysed from a different perspective.

The relationship between innovation and EO is not yet clear. Lisboa et al. (2011a), based on a resource-based view of the firm, argue that EO is a precursor of exploitative and exploratory product development capabilities and exploitative and exploratory market-related capabilities. Alegre and Chiva (2013) analysed the role of innovation performance as a mediator of EO and firm performance. Balan and Lindsay (2010) analysed business performance in small hotels in Australia with innovation capabilities and EO as antecedents. Innovation capability had a positive relationship with business performance, but EO was found to have no impact. Hult et al. (2004) focus on the antecedents and consequences of organisational innovativeness and claim that entrepreneurial orientation is an incremental process within the firm through which innovation results. However, they define innovativeness as the firm's capacity to create new processes and to introduce new products into the market.

As we are dealing with SMEs, we use the seven innovation capability dimensions (learning, R&D, manufacturing, organisational, resource allocating and strategy planning) proposed by Guan and Ma (2003), as antecedents of export performance in order to analyse how those capabilities influence internationalisation. We also propose to use EO as a mediator between innovation capability and export performance. This is different from the approach used by Alegre and Chiva (2013), who saw innovation performance as a consequence of EO. This is also different from what Hult et al. (2004) propose, as we are focusing on firms' internal innovation capabilities and not on firms' capacity to introduce new products into the markets. We study these relationships in SMEs and contend that these capabilities influence export performance and also that EO mediates innovation capabilities and export performance. We propose the following hypothesis:

H2: Entrepreneurial orientation positively mediates the relationship between innovation capabilities and export performance.

Based on the above discussion on EO, innovation capabilities and export performance, we propose the conceptual model shown in Figure 5.

Figure 5 - Research model

Source: Own elaboration

There are several models that attempt to describe the process of entry into foreign markets based on strategy and EO perspective. Cavusgil (1982) and Verisan and Achimescu (2011) proposed a model of export behaviour as a process that leads the firm to internationalisation with reactive or proactive involvement and motivations. In a reactive strategy, the firm reacts to changes in its operational conditions and perceives internationalisation as an answer to that change (competitive pressure, unsolicited foreign orders, seasonal effects of demand, saturation of domestic market or its limited size, geographic proximity and reduced psychological distance are some examples). When using a proactive strategy, firms initiate the internationalisation process drawing on its own internal competencies or market opportunities (growth, technological competences, unique products, economies of scale, or foreign market opportunities).

Many manufacturing SMEs, as part of the supply chain, supply MNEs (normally those SMEs are subcontracted by large international clients) very efficiently and competitively. However, due to the lack a deep knowledge of the international market typically react to external stimuli of their international clients (Bilkey and Tesar, 1977; Katsikeas, 1996; Etemad and Wright, 2003; Bell et al., 2003) rather than proactively seeking new international markets because they have limited resources (Lages and Montgomery, 2004). In contrast to SMEs, large firms have many resources to develop their innovation capabilities; as such we seek to analyse how EO mediates the innovation-performance relationship of two different types of SMES: those with proactive and reactive behaviour to external market stimuli, as EO is expected to influence the firms' profile (Avlonitis and Salavou, 2007). Based on the fact that manufacturing SMEs have fewer resources than large firms and their innovation capabilities are relatively static, we expected that EO have an important role between innovation capabilities and export performance mainly in SMEs proactive to external stimuli.

SMEs that are proactive in relation to external stimuli behave differently from reactive SMEs. As a consequence, we propose the following hypotheses about proactivity in SMEs:

H_{1a}: Innovation capabilities have a positive direct effect on export performance.

H_{2a}: Entrepreneurial orientation positively mediates the relationship between innovation capabilities and export performance.

For reactive SMEs, we propose the following hypotheses:

H_{1r}: Innovation capabilities have a positive direct effect on export performance.

H_{2r}: Entrepreneurial orientation does not mediate the relationship between innovation capabilities and export performance.

The contention of our model is that the effect of innovation capabilities on export performance is mediated by EO, and that the mediation effect of EO is much more important in proactive firms than in reactive firms. With these hypotheses we hope to explain performance differences in a particular industry based on EO and proactive/reactive behavior in SMEs.

6.3. Research Methodology

To understand how innovation capabilities influence export performance, we have opted for a cross-sectional study using the partial least squares method of structural equation modelling (PLS-SEM) using the SmartPLS 2.0 software. PLS-SEM is a second generation structural equation modeling technique, which is robust (a) with structural equation models that contain latent variables and a series of cause-and-effect relationships (Gustafsson and Johnson, 2004); and (b) when research is at an early stage of theoretical development, i.e. when it aims to test and validate an exploratory model (Chin, 1998a; Henseler and Chin, 2010).

PLS has three major advantages over other covariance-based SEM techniques: first, constructs may be measured by less than four items, which is not the case in traditional SEM techniques; second, PLS accounts for measurement error and should provide more accurate estimates of interaction effects such as mediation (Chin, 1998b).

The universe of research: the plastics industry in Portugal

The target population of this research study consists of SMEs in the plastic manufacturing industry in Portugal, which is composed of highly competitive industrial SMEs in which innovation plays a key role. In order to analyze the influence of innovation capabilities on export performance of SMEs we included SMEs that fulfill the following criteria: (1) SMEs belonging to the plastics industry; (2) SMEs with facilities in Portugal; and (3) SMEs operating in international markets at the time of sending the questionnaire. Our SME indicator is based on employment, using the cut-off of 250 employees to distinguish SMEs from large firms. Using these criteria, we gathered information from a universe of 650 firms from data available from INE e APIP (2015).

Data collection

Data was collected through a questionnaire, consisting of scales adapted from other, previously validated, research, as shown in Table 20.

One of the difficulties of conducting empirical research into firm performance is obtaining information from firms' financial statements (Guan and Ma, 2003). We implemented a Likert-type scale in order to measure export performance and used six objective and subjective indicators taken from Jantunen et al. (2005), Kuivalainen et al. (2007), Aulakh et al. (2000), Zou et al. (1998), Cavusgil and Zou (1993) and Matthyssens and Pauwels (1996). EO was measured using four items from Jantunen et al. (2005), Naman and Slevin (1993), Covin and Slevin (1988) and Miller and Friesen (1982). The reactive/proactive distinction was measured using four items from Westhead et al. (2004). Innovation capabilities were measured using the method developed by Guan and Ma (2003).

Export performance (Exp_Perf), entrepreneurial orientation (Entre_Ori) and reactive and proactive responses to external stimuli were measured with unidimensional scales. Innovation was measured with a multidimensional scale comprised of three items from learning capability (Learn_Cap), three items from marketing capability (MKT_Cap), three items from manufacturing capability (Manuf_Cap), three items from organizational capability (Org_Cap), three items from R&D capability (R&D_Cap), three items from resources exploiting capability (Res_Cap), and four items from strategic capability (Strat_Cap).

Export performance was measured based on a 5-point Likert scale, anchored in 'very unsatisfied' and 'very satisfied', and 'totally disagree' and 'totally agree'. Reactive and proactive response to external stimuli was measured based on a 5-point Likert scale, anchored in 'not important at all' and 'very important'. The remaining constructs were measured based on a 5-point Likert scale, anchored in 'totally disagree' and 'totally agree', as shown in Table 20.

The questionnaire was pre-tested on a convenience sample to verify its organization and formatting, proper use of language, respondents' understanding of questions, response time and errors. As a result of the pre-test, some changes were made in the terminology of the scales in order to facilitate the respondents' understanding. Also, the number of items per variable was reduced to a minimum to keep the questionnaire to a manageable size.

The on line questionnaire, based on Lime Survey, was emailed to the firms' top management team (CEO, export/sales/commercial manager, R&D or marketing manager, according to information obtained from the firms). The 650 firms in the plastics industry were contacted first by phone in order to explain the objectives of the research. Subsequently the questionnaire was emailed. We sent two e-mail reminders, three weeks apart. Overall, the questionnaire was on line for four months.

A response rate of 55.69% (362 valid answers) was achieved, of which 17.85% (116) of the sample are non-exporting firms and 37.85% (246) are exporting firms. We eliminated 48 incomplete responses (7.38%) and four firms declined the invitation to participate. However, only firms with more than 20 employees were analyzed, or a total of 147 firms representing 22% of the industry.

Data treatment

To separate active from reactive firms a dichotomous variable was created in which the average value was used as the threshold value. Firms with reactive to external stimulus values larger than the average value were described as reactive. Firms with reactive to external stimulus values lower than the average value were described as proactive. We identified 64 proactive and 83 reactive firms.

PLS is particularly well suited to the study of mediation, i.e, the effect of an independent variable on a non-observable (mediator) variable, which in turn influences the dependent variable, in our case export performance. Mediation effects take into account relationships between the

independent variable (innovation capabilities) and the mediator (entrepreneurial orientation), and between the mediator and the dependent variable.

As PLS employs bootstrapping to test the significance of relationships, it works well when dealing with non-normal variables, which is usually the case when multiplying two normally distributed variables (Efron, 1988; Bollen and Stine, 1990). Consequently, PLS performs well in analysis of mediation (Hair et al., 2014).

When testing mediation effects (Hair et al., 2014), first a direct significant effect between the independent and dependent variable must be established when the mediator variable is excluded. Second, the indirect effect of the mediator variable (EO) must be significant when the mediator variable is included in the path model. Finally, the relationship between the independent and dependent variables must be significantly reduced when the mediator is added. These three steps will be performed in this study using PLS. In order to determine the extent of the indirect effect in relation to the total effect we use the variance accounted for (VAF) (Hair et al., 2014).

The Sobel test is a traditional method of testing the significance of mediation effects (Sobel, 1982). Bootstrapping was used to evaluate the significance of the path coefficients and estimate the standard error. In order to test if the paths coefficients are statistically different between the active and reactive behavior we used the PLS-Multigroup-Analysis (PLS-MGA) as suggested by Henseler et al. (2009), which does not require any distributional assumptions and is used with the help of the bootstrapping results.

6.4. Results and discussion

The average age of the firms in the sample is 31 years, the average sales volume is € 17 million (in 2014), the average number of employees is 85, the average international sales as a percentage of total sales is 45%, and the firms operate in an average of 15 countries.

Table 14 - Loadings and cross-loadings

Scale items	T Statistics	Loadings (bold) and cross-loadings								
		Entrep. Ori.	Exp. Perf.	Learn. Cap.	MKT Cap.	Manuf. Cap.	Org. Cap.	R&D Cap.	Res. Cap.	Strat. Cap.
EO1	8.354	0.732	0.444	0.243	0.248	0.232	0.260	0.123	0.255	0.318
EO2	5.196	0.716	0.304	0.262	0.195	0.321	0.225	0.154	0.378	0.368
EO3	6.434	0.672	0.360	0.202	0.101	0.192	0.249	0.127	0.322	0.247
LC2	10.415	0.291	0.121	0.825	0.287	0.148	0.226	0.209	0.303	0.242
LC3	4.915	0.245	0.182	0.783	0.136	0.359	0.043	0.201	0.237	0.258
MC2	5.261	0.317	0.263	0.236	0.220	0.822	0.152	0.205	0.262	0.350
MC3	2.954	0.242	0.239	0.260	0.145	0.776	0.079	0.086	0.291	0.373
MKTC2	19.547	0.297	0.111	0.345	0.876	0.193	0.260	0.452	0.271	0.308
MKTC3	5.056	0.095	0.026	0.035	0.725	0.181	0.260	0.374	0.175	0.177
OC1	6.556	0.282	0.208	0.052	0.216	0.074	0.747	0.199	0.217	0.271
OC2	13.330	0.279	0.095	0.207	0.292	0.154	0.860	0.319	0.284	0.265
RDC2	8.541	0.074	0.088	0.179	0.404	0.205	0.239	0.753	0.215	0.211
RDC3	9.006	0.215	0.159	0.218	0.402	0.092	0.274	0.809	0.292	0.310
REC2	7.569	0.264	0.120	0.304	0.186	0.330	0.223	0.259	0.798	0.318
REC3	6.111	0.443	0.326	0.227	0.264	0.212	0.274	0.257	0.782	0.282
SC2	4.706	0.335	0.234	0.077	0.152	0.342	0.210	0.145	0.300	0.727
SC3	4.669	0.310	0.271	0.223	0.229	0.378	0.199	0.238	0.293	0.714
SC4	8.353	0.312	0.204	0.345	0.281	0.262	0.297	0.328	0.235	0.722
SI2	4.788	0.337	0.703	0.176	0.082	0.244	0.072	0.120	0.265	0.289
OSI2	9.113	0.465	0.839	0.122	0.065	0.246	0.189	0.130	0.182	0.229

Validity and reliability instrument

The measurement model was evaluated in terms of reliability, convergent validity and discriminant validity. Table 14 presents the item loadings and T-values, which were obtained by bootstrapping with 5,000 iterations. With the exception of MC3, all outer loadings are statistically significant at the 1% level ($|t\text{-values}| \geq 3.291$). With the exception of EO3, all other items have higher loadings than the minimum recommended threshold of 0.7 (Götz et al., 2010). We decided not to eliminate EO3 because it was very near the cut-off point. Results support the reliability of the measurement indicators. We dropped items EO4, LC1, MC1, MKTC1, OC3, RDC1, REC1, SC1, OSI1, OSI3, SI1 and SI3 as they had loadings below 0.7.

Table 15 describes the average variance extracted (AVE), the composite reliability (CR), and the correlations of each first order latent variable. CR values are higher than the recommended minimum of 0.6 (Götz et al., 2010), indicating that all constructs have adequate internal consistency. Moreover, the AVE of each construct is greater than the expected minimum threshold of 0.5 (Götz et al., 2010), which ensures convergent validity. Finally, discriminant validity was obtained for each construct, as the square root of the AVE is greater than the absolute value of all

correlations with other constructs. Furthermore, as shown in Table 14, cross-loadings are lower than outer loadings on all the metrics, which confirms discriminant validity (Götz et al., 2010).

Table 15 - Discriminant validity

	AVE	CR	Correlations									
			1.	2.	3.	4.	5.	6.	7.	8.	9.	
1. Entrepreneurial Orientation	0.500	0.750	0.707									
2. Export Performance	0.599	0.748	0.525	0.774								
3. Learning Capability	0.647	0.785	0.334	0.186	0.804							
4. Marketing Capability	0.647	0.784	0.262	0.093	0.267	0.804						
5. Manufacturing Capability	0.639	0.780	0.352	0.314	0.309	0.231	0.800					
6. Organizational Capability	0.649	0.786	0.346	0.177	0.172	0.319	0.147	0.806				
7. R&D Capability	0.610	0.758	0.190	0.161	0.255	0.515	0.186	0.329	0.781			
8. Resource Exploiting Capability	0.624	0.769	0.445	0.280	0.337	0.284	0.344	0.314	0.327	0.790		
9. Strategic Capability	0.520	0.765	0.441	0.327	0.310	0.312	0.451	0.330	0.337	0.380	0.721	

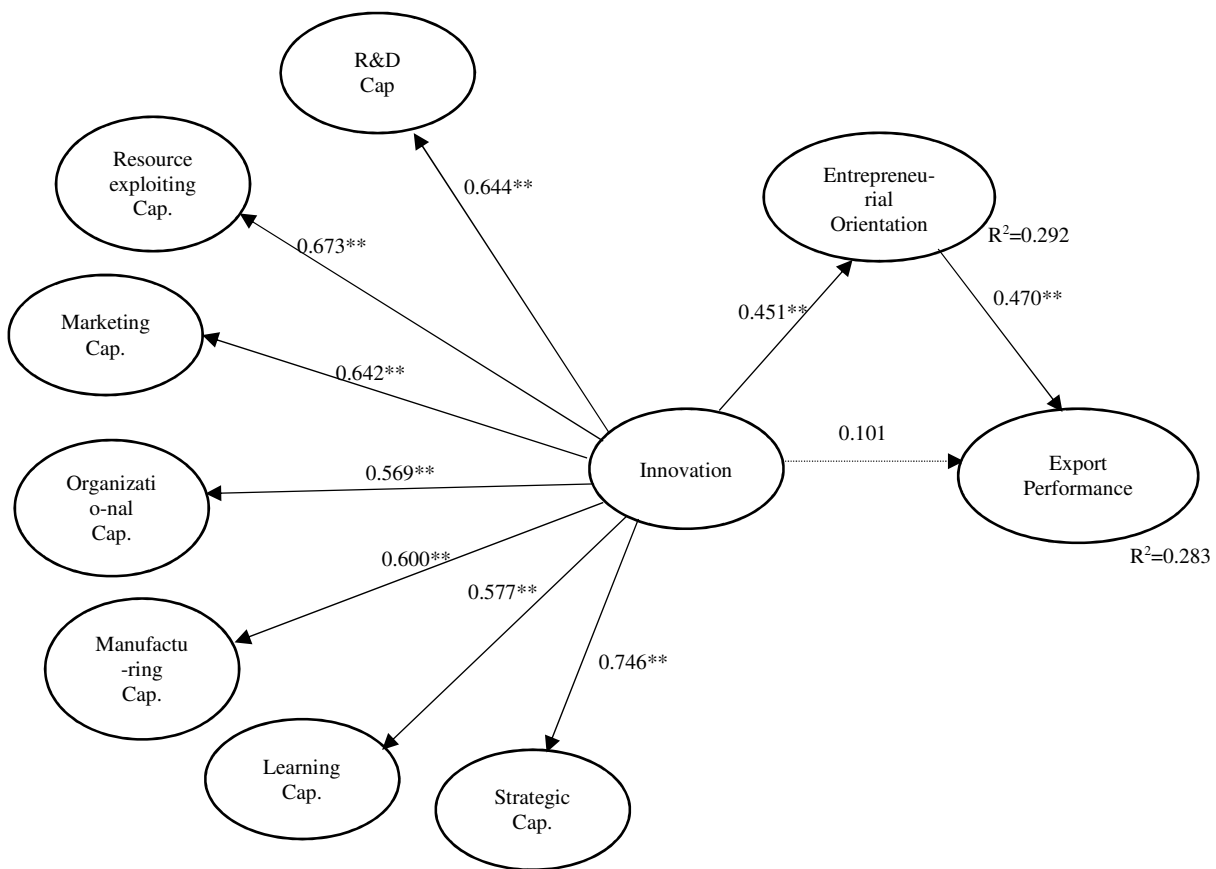
Note: the values of the diagonal (in bold) are the square root of AVE

The model for the whole sample

The structural model shown in Figure 6 was evaluated by (a) the sign, magnitude, and statistical significance of the parameters of structural relations, and (b) the explained variance (R^2) of the endogenous latent variable (Götz et al. 2010). All structural relationships have parameters compatible with the assumptions made in the research model. The results indicate that export performance explains 28.3% of the variation of variables included in the model.

Table 16 presents the results of mediation analysis. As the direct path between innovation and export performance shows a significant impact ($\beta = 0.357$), the relationship between innovation and export performance is statistically significant, which therefore validates H_{1a} . The direct path was subsequently reduced ($\beta = 0.101$) after EO was introduced as a mediator. The significance of the mediation effect was assessed using the Sobel test, which was statistically significant at the 0.01 level. The relationship between innovation capabilities and EO and between EO and export performance are both statistically significant at the 1%, confirming H_2 . Moreover, as the VAF is larger than 20% and lower than 80%. However, as the direct path between innovation and export performance is not statistically significant after introducing EO as mediator, we are before a full mediation effect.

Figure 6 - Structural model



Note: * p-value<0.05; ** p-value<0.01
 Source: Own elaboration

Table 16 - Mediation analysis

	Whole sample		
	Path coefficients	T-values (p-values)	Standard Error
Innovation → Exp_Perf (no mediation)	0.357	2.218 (0.027)	-
Innovation → Exp_Perf (with mediation)	0.101	0.857 (0.391)	-
Innovation → Entrep_Ori	0.541	3.590 (0.000)	0.151
Entrep_Ori → Exp_Perf	0.470	4.706 (0.000)	0.100
Sobel Test	-	2.849 (0.004)	-
VAF	0.739		

Table 17 shows information about direct, indirect and total effects. It can be seen that there is an important indirect (mediated) effect between innovation capabilities and export performance

which exceeds the direct effect, giving an important role to EO when SMEs try to deploy their innovative capabilities in international markets.

Table 17 - Direct, indirect and total effects

		Direct effects		Indirect effects		Total effects	
		Path coefficients	T-values (p-values)	Path coefficients	T-values (p-values)	Path coefficients	T-values (p-values)
Whole sample	Entrep_Ori. → Exp_Perf	0.470	4.706 (0.000)	–	–	0.470	4.706 (0.000)
	Innovation → Entrep_Ori	0.541	3.590 (0.000)	–	–	0.541	3.590 (0.000)
	Innovation → Exp_Perf	0.101	0.857 (0.391)	0.254	2.630 (0.009)	0.355	1.969 (0.049)

Comparison between active and reactive firms

Table 18 presents an overview of path coefficients for both groups using PLS-MGA and the Sobel Test.

Table 18 - Mediation analysis for groups 1 and 2

	Group 1			Group 2			Differences between Group 1 – Group 2	
	Path coefficients	T-values (p-values)	Standard Error	Path coefficients	T-values (p-values)	Standard Error	Path coefficients	p-values
Innovation → Exp_Perf (no mediation)	0.625	3.716 (0.000)	–	-0.199	1.360 (0.174)	–	–	–
Innovation → Exp_Perf (with mediation)	0.249	1.510 (0.131)	–	-0.278	1.877 (0.061)	–	0.526	0.014
Innovation → Entrep_Ori	0.708	4.377 (0.000)	0.162	0.234	2.059 (0.040)	0.245	0.474	0.042
Entrep_Ori. → Exp_Perf	0.535	3.667 (0.000)	0.146	0.372	0.995 (0.340)	0.181	0.163	0.207
Sobel Test	–	2.808 (0.002)	–	–	0.835 (0.404)	–	–	–
VAF	0.665			Not applicable			–	

Table 19 presents information of the direct, indirect and total effect for both groups analyzed. Taking into account the results, H_{1a} is supported and H_{1r} is not validated.

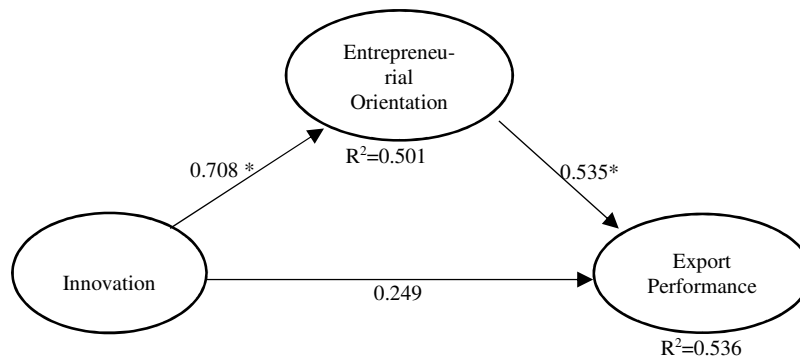
The results obtained for Group 1 (Figure 7) (proactive firms) explains 53.6% of the variance of the model, whereas Group 2 (Figure 8) (reactive firms) explains only 16.7%. As with the whole sample, Group 1 (active) shows an indirect effect of EO on the direct effect between innovation capabilities and export performance ($\beta = 0.379$), which leads to a total effect ($\beta = 0.627$) that is 80% larger than the total direct coefficient ($\beta = 0.355$) for the whole sample. The influence is

outstanding when we compare it to the results obtained for Group 2 (reactive) ($\beta = -0.191$), although the result for the group of reactive firms is not statistically significant.

Table 19 - Direct, indirect and total effects for groups 1 and 2

		Direct effects		Indirect effects		Total effects	
		Path coefficients	T-values (p-values)	Path coefficients	T-values (p-values)	Path coefficients	T-values (p-values)
Group 1	Entrep_Ori. → Exp_Perf	0.535	3.662 (0.000)	—	—	0.535	3.662 (0.000)
	Innovation → Entrep_Ori	0.708	4.323 (0.000)	—	—	0.708	4.323 (0.000)
	Innovation → Exp_Perf	0.249	1.510 (0.131)	0.379	2.801 (0.005)	0.627	3.362 (0.001)
Group 2	Entrep_Ori. → Exp_Perf	0.234	2.059 (0.040)	—	—	0.234	2.059 (0.040)
	Innovation → Entrep_Ori	0.372	0.995 (0.340)	—	—	0.372	0.995 (0.340)
	Innovation → Exp_Perf	-0.278	1.877 (0.061)	0.087	0.922 (0.357)	-0.191	1.281 (0.200)

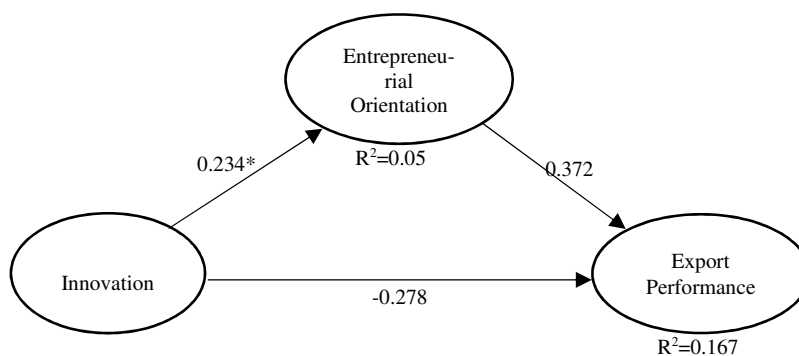
Figure 7 - Structural model: Group 1 (proactive external stimuli)



Note: * p-value<0.05; ** p-value<0.01

Source: Own elaboration

Figure 8 - Structural model: Group 2 (reactive external stimuli)



Note: * p-value<0.05; ** p-value<0.01

Source: Own elaboration

When we analyze the mediation effect for Group 1, the Sobel test is statistically significant at the 0.01 level, validating H_{2a}. Although the VAF accounted for is 66.5%, we are before a full mediation effect as after the introduction of the EO as mediator, the direct effect between innovation and export performance is not statistically significant. The Sobel test is not statistically significant for Group 2, validating H_{2r}. As such, we can conclude that firms from Group 1 and Group 2 behave differently.

6.5. Conclusions, limitations and future perspectives

There overall purpose of this study was to investigate how innovation capabilities impact export performance, how important the mediating effect of EO is and how differently active and reactive firms behave, as mentioned above.

Generally, it is possible to conclude that innovation capabilities are important for export performance. However, the mediation effects of EO exceed the direct effects of innovation on export performance.

Although innovation capabilities are a major driver of competitiveness (Lisboa et al., 2011; Onetti et al., 2010), they are used differently by firms that are actively looking for new markets abroad when compared with firms that react passively to the external environment.

It is not a new idea that entrepreneurship orientation is very important. EO suggests that proactive firms are not only better at innovating but also their EO capabilities underpin better performance in international markets when compared with firms that react to external stimuli. This difference is quite obvious when we compare the differences in the coefficient of determination of both groups – R² of 53.6% for active firms and R² of 16.7% for reactive firms.

Although some literature deals indistinctively with innovation and entrepreneurship (e.g. Garcia-Morales et al., 2006), it is known that EO positively impacts international performance (e.g. Covin and Slevin, 1991; Zahra and Covin, 1995; Lumpkin and Dess, 1996; Knight and Cavusgil, 2004). Our research complements previous studies of innovation and export performance showing that EO mediates the innovation-export performance relationship. Moreover, when we compare proactive and reactive firms to external stimuli, EO also mediates the innovation-export performance relationship of the former group, but does not mediate that of

the latter group. The analysis of the direct, indirect and total effects shown in Table 17 makes it clear that EO is an important variable to take into account in innovation studies, especially in firms that proactively seek to embrace new opportunities abroad.

The negative relationship between innovation capabilities and export performance, among reactive firms, was not expected in the light of previous studies (e.g. Guan and Ma, 2003; Onetti et al., 2010; European Commission, 2010; Golovko and Valentini, 2011). However, one can conclude that innovative capabilities are not as powerful in reactive firms as they are in proactive firms. Moreover, when we analyze the indirect effects of EO in Group 2, we can see that they are much less than for firms of the Group 1 and for the whole sample. It seems that reactive firms do not rely on innovation to compete in international markets, which might explain the huge difference between the coefficient of determination of proactive and reactive firms. Moreover, while proactive firms deploy their innovation capabilities to compete successfully and to underpin export performance activities, reactive firms not only lack those innovation capabilities – relying in unsolicited orders and pull strategies from firms abroad – but also investing on those innovation capabilities could divert their scarce resources to riskier activities.

This chapter contributes to both theory and practice. Academically, the relationships among firms innovation capabilities, entrepreneurial orientation and export performance still need further analysis, taking into account the behavior of SMEs in less favored countries, of service firms, and comparing firms from sectors with different of technology endowments.

We have provided an empirical study analyzing the relationship between innovation-export performance in manufacturing SMEs, for which there is little evidence in the previous literature (e.g. Love and Roper, 2015; Lisboa et al., 2011b; Terziovski, 2010; Ruigrok and Wagner, 2003; Oesterle et al., 2008; Chiao and Yang, 2011). We also examine the influence of proactive and reactive firms in response to external stimuli on their internal innovation capabilities and export performance, which have not been much explored in the literature.

This study also has managerial implications for SMEs aiming to increase their export performance and innovativeness. In order to develop their internationalisation process, SMEs and public policy makers need to understand that there is an important difference when firms behave proactively or when they merely react to external stimuli. SME managers need to develop more EO skills to take on new opportunities and not just react to external orders from abroad. At the same time, public policy should be developed to provide new training programs so that reactive firms can embrace the intricacies of internationalisation and proactiveness. Therefore, this chapter

may help firms to understand the impact of innovation capabilities and EO on export performance, and thus lead to more effective management of SMEs.

Future research should combine capabilities of firms and their export performance with market orientation metrics to reveal how firms that have a proactive orientation to foreign markets differ from firms that are reactive in their innovation capabilities. It would also be interesting to know how firms behave in relation to their proactive-reactive orientation to internal stimuli. Another important aspect that deserves investigation is a cross industry comparison taking into account the technological intensity and the life cycle of the firms' products.

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Table 20 – Appendix: scales items

Variables and Items	Adapted from
Export performance	Jantunen et al. (2005) Kuivalainen et al. (2007) Aulakh et al. (2000) Zou et al. (1998) Cavusgil and Zou (1993) Matthyssens and Pauwels (1996)
Objective (financial) and subjective (strategic export performance indicators, satisfaction with/success of international operations) on export performance	
<i>Five-point Likert scale: 1 = 'very unsatisfied' and 5 = 'very satisfied'</i>	
<i>(SI1) Sales export volume</i>	
<i>(SI2) International Market share</i>	
<i>(SI3) Export Profitability</i>	
<i>Five-point Likert scale: 1 = 'totally disagree' and 5 = 'totally agree'</i>	
<i>(OSI1) Exporting has contributed to the sales growth of our firm</i>	
<i>(OSI2) The export venture has achieved rapid growth</i>	
<i>(OSI3) Our export activity has strengthened our strategic position</i>	
Reactive-external stimuli	Westhead et al. (2004)
<i>Five-point Likert scale: 1 = 'not important at all' and 5 = 'very important'</i>	
<i>(RES1) Being contacted by foreign customers who place orders</i>	
<i>(RES2) One-off order from a foreign country</i>	
<i>(RES3) Domestic customers are internationalised and we 'pulled' our business abroad with them</i>	
<i>(RES4) Importance of membership of the European Union</i>	
Innovation Capabilities	Guan and Ma (2003)
<i>Five-point Likert scale: 1 = 'totally disagree' and 5 = 'totally agree'</i>	
Learning capability	
<i>(LC1) Systematically monitoring technology development trends</i>	
<i>(LC2) Re-innovation ability facing international market based on mainland using</i>	
<i>(LC3) Cultivating learning consciousness and investing on learning</i>	
R&D capability	
<i>(RDC1) Choosing special personnel or building organization to collect various innovation ideas</i>	
<i>(RDC2) Facilitating communication among R&D personals</i>	
<i>(RDC3) Communication between R&D department and marketing department</i>	
Resource exploiting capability	
<i>(REC1) Attaching importance to human resource</i>	
<i>(REC2) Steady capital supplement in innovation activity</i>	
<i>(REC3) Making fully use of external technologies</i>	
Manufacturing capability	
<i>(MC1) Technological level of manufacturing equipment</i>	
<i>(MC2) Production regulations and system</i>	
<i>(MC3) Total quality management</i>	
Marketing capability	
<i>(MKT C1) Long-term customer relationship for understanding diverse customer requirements</i>	
<i>(MKT C2) Controlling and managing distribution network</i>	
<i>(MKT C3) After service and technological assistance</i>	
Organizational capability	
<i>(OC1) Adjusting organization structure flexibly according to new innovation projects</i>	
<i>(OC2) Centralizing resources on innovation activity quickly</i>	
<i>(OC3) Overlap between R&D, marketing and manufacturing functions</i>	
Strategic capability	
<i>(SC1) Support from top management</i>	
<i>(SC2) Connection between technological strategy and business strategy</i>	
<i>(SC3) Advanced decision system</i>	
<i>(SC4) Adjusting innovation strategy accordingly</i>	

Variables and Items	Adapted from
Entrepreneurial orientation	Jantunen et al. (2005) Naman and Slevin (1993) Covin and Slevin (1988) Miller and Friesen (1982)
<i>Five-point Likert scale: 1 = 'totally disagree' and 5 = 'totally agree'</i>	
<i>(EO1) We are among the first ones to implement progressive and innovative production processes and practices</i>	
<i>(EO2) The management of our firm supports the projects that are associated with risks and expectations for returns higher than average</i>	
<i>(EO3) We actively internalize the new practices developed in other sectors and exploit them in our business</i>	
<i>(EO4) We are able to take on unexpected opportunities</i>	

7. THE ROLE OF EXPLOITATIVE AND EXPLORATORY INNOVATION IN EXPORT PERFORMANCE: AN ANALYSIS OF PLASTICS INDUSTRY SMES

ABSTRACT:

Innovation capabilities are important for firms to compete in the market. However, the literature has rarely examined how exploitative and exploratory innovation influences the export performance of small and medium-sized firms (SMEs). As exploitative and exploratory innovation plays different roles in sustaining SMEs' competitive advantages, this chapter presents an analysis of how four specific firms' innovation capabilities (i.e. marketing, strategy, research and development and manufacturing capabilities) impact these SMEs' export performance. Moreover, this chapter analysed how exploitative and exploratory innovation capabilities mediate the relationship of the four firms' internal innovation capabilities and export performance.

The results indicate that exploitative innovation positively influences SMEs' export performance, but exploratory innovation does not. Another interesting finding is that strategy and manufacturing capabilities are important antecedents of both exploratory and exploitative innovation. Furthermore, the results reveal that only manufacturing capabilities have a direct impact on export performance, whereas strategy and manufacturing capabilities are the antecedents that most influence exploitative innovation and export performance.

KEYWORDS: SMEs; Export performance; Innovation capabilities; Exploratory innovation; Exploitative innovation.

[Part of this chapter was submitted to an ISI indexed journal]

7.1. Introduction

Internationalisation and export performance are critical issues for both entrepreneurs and government authorities (Xie et al., 2009; Papadopoulos and Martín, 2010). However, few studies have analysed the factors affecting firms' performance in emerging economies (Xie et al., 2009), and the patterns of firms' internationalisation in these economies vary (Mockaitis et al., 2006; Zhou et al., 2007). At the same time, not only do researchers know little about how innovation affects the performance of small and medium-sized firms (SMEs) but also studies analysing firms' performance tend to focus on firms' profitability, thereby neglecting other important subjective aspects (e.g. Pattnaik and Elango, 2009; Xie et al., 2009).

Although SMEs do not have abundant resources, they represent a large share of the world's businesses (IFC, 2016). Contrary to large firms, SMEs have lean, flexible and organic structures that allow them to adapt more easily to foreign markets (Lubatkin et al., 2006; Abidi et al., 2011; Toulova et al., 2015). SME managers and owners play a crucial role during innovation processes. Unlike what happens among large firms, SME managers and/or owners accumulate the role of operational managers, staying quite close to day-to-day operations and extremely familiar with their firms' internal capabilities, as well as being aware of when to exploit these internal capabilities. Moreover, these firms are also close to the market, which allows them to discover and evaluate new market opportunities more directly and play a strategic role by improving exploratory activities (Bougrain and Haudeville, 2002; Lubatkin et al., 2006). Chandler (1990) argues that the competitiveness of firms depends on two sets of capabilities: strategic and functional or operations capabilities. However, firms might lose innovation capabilities if they are too focused on market-oriented competences (Im and Workman, 2004), or they may lose their market focus if they are too wholeheartedly focused on technological capabilities (Zhou et al., 2005).

If a trade-off between internal capabilities and market-focused activities is sometimes necessary, the same applies to short-term and long-term innovation capabilities, as the balance between exploratory and exploitative innovation capabilities is of key importance for firms' long-term competitiveness (Jansen et al., 2005, 2006; Gupta et al., 2006). When firms have resources

available – beyond those needed to maintain their existing technology, which are used to meet current market needs and serve current customers – firms have to decide how to allocate resources between exploitation and exploration activities (Brady and Davies, 2004).

According to Jansen et al. (2005, 2006) and Gupta et al. (2006), few studies have examined exploration and exploitation innovation capabilities. Moreover, even though SMEs in the manufacturing sector contribute significantly to economic growth, most research on innovation in the manufacturing sector has focused on large firms (Terziovski, 2010). Exploration and exploitation innovation competences enhance firms' ability to gain and sustain competitive advantages, and these capabilities are directly influenced by the marketing, strategy, research and development (R&D) and manufacturing capabilities of each firm (Danneels, 2002; Zhou and Wu, 2010). As such, it is important to understand: (a) how SMEs' internal capabilities influence their performance, (b) what impact each of these four internal capabilities has on firms' exploitative and exploratory innovation and (c) how they can leverage SMEs' export performance. Thus, we proposed a model and tested 14 hypotheses, thereby exploring the capabilities of SMEs and filling a gap in the literature on how internal innovation capabilities of SMEs influence export performance and what specific role exploratory and exploitative innovation plays in this relationship.

Many models of firm-level innovation have attempted to improve the consistency of research results. These models have been shaped by a variety of theoretical positions. Starting from the premise that a strong relationship exists between SMEs' internal innovation capabilities and performance, the present study's approach was based on resource-based theories. It focused on export performance and capability-building and organisational learning and strategy (Brady and Davies, 2004; Jansen et al., 2005, 2006; Wang and Rafiq, 2009; Rhee et al., 2010), innovation (e.g. Lawson and Samson, 2001; Lee et al., 2003; Jansen et al., 2005, 2006; Rosenbusch et al., 2011) and entrepreneurship (Garcia-Morales et al., 2006; Avlonitis and Salavou, 2007; Teece, 2007; Varis and Littunen, 2010). This approach was mainly shaped by the concepts of exploration and exploitation innovation (March, 1991).

The present chapter extends the literature on SME internationalisation by providing an answer to the following research questions:

- How important are each of the internal innovation capabilities of SMEs for export performance?

- How important is exploratory and exploitative innovation as a mediator of the relationship between internal innovation capabilities and export performance?

This chapter makes several other contributions. On an academic level, the study sought to analyse the direct and indirect effect of four internal innovation capabilities (i.e. marketing, strategic, R&D and manufacturing capabilities) on SMEs' export performance. Moreover, regarding the mediating effect of exploratory and exploitative innovation between the aforementioned internal capabilities and export performance, the results help to explain how specific firms' innovation capabilities affect SMEs' export performance. This chapter also fills a gap in exploratory and exploitative studies on SMEs.

This chapter is divided into six sections. After this introduction, section two presents review of the relevant literature along with the hypotheses development, in which we examine the relationships between manufacturing, strategy, R&D and manufacturing capabilities and exploratory and exploitative innovation and export performance. The research methodology and the model are discussed in section three. Section four reveals the most significant results. After section five presents the discussion and implications of results, section six details the main conclusions, limitations and future lines of research.

7.2. Literature review and hypotheses

In order to achieve competitiveness in international contexts, SMEs need to develop unique firm-specific assets that arise from distinctive resources and capabilities – a strategy rooted in a resource-based paradigm that sees firms as unique and heterogeneous collections of tangible and intangible resources (Barney, 1991). In general, it is a challenge for SMEs that lack the resources to compete in areas such as marketing, production, innovation and internationalisation strategies (Villar et al., 2014).

Innovation represents one of the main routes to building firm-specific advantages (Zucchella and Siano, 2014), and it is critical to firms' growth and success (Guan and Ma, 2003; Lisboa et al., 2011a). Innovative resources and capabilities are recognised as major drivers of firm growth in both domestic and international markets (Teece et al., 1997), but these drivers have seldom been explored in the literature on internationalisation (Lisboa et al., 2011b). Businesses' growth and

success depend on the joint effects of internationalisation and innovation (Onetti et al., 2010). Moreover, not only is the internationalisation process among SMEs in itself a process of innovation (Andersen and Kheam, 1998) but also the academic community has accepted that a strong positive relationship exists between sales growth abroad and innovation (European Commission, 2010; Golovko and Valentini, 2011).

Although performance is an essential indicator by which firms analyse their level of success, the international marketing literature defines performance in different ways, either conceptually or operationally. As Bonoma and Clark (1988) observe, perhaps no other concept in international marketing literature has been so resistant to a consensus on a definition that can be broadly accepted and implemented (Lages, 2000; Lages and Montgomery, 2004).

Performance is a complex construct (Greve, 1998; Lages, 2000; Lages and Montgomery, 2004), and it has proven extremely difficult to develop an unanimously accepted financial measure to assess performance (Madsen, 1998). Therefore, the use of multiple measures is advisable (Cavusgil and Zou, 1993; Mathyssens and Pauwels, 1996; McDougall and Oviatt, 1996; Westhead and Cowling, 1997; Zou et al., 1998; Aulakh et al., 2000; Lu and Beamish, 2001, 2005, 2006; Westhead et al., 2004; Jantunen et al., 2005; Kuivalainen et al., 2007).

A subjective approach to export performance has frequently been used, especially when export performance is subject to management decisions (Katsikeas et al., 2000). In addition, a variety of performance measures have been proposed and evaluated in the literature on export performance. A common finding in most research is that multiple results are needed to account for the various facets of export performance (Shoham, 1998; Zou et al., 1998; Diamantopoulos, 1999; Katsikeas et al., 2000).

Internal innovation capabilities are the basis of SMEs' uniqueness, as these capabilities underpin firms' competitiveness and help them to stand out in the market. Although internal innovation capabilities are important, firms need to not only to be market-oriented but also integrate and utilise market knowledge to thrive in the market (Morgan et al., 2003, Lisboa et al., 2013). As such, these internal capabilities need to be explored and exploited in the market (Levinthal and March, 1993). Exploitation and exploration are interdependent and complementary, as firms have to find a balanced combination of both factors in order to achieve short-term efficiency and long-term success, as well as superior performance (Floyd and Lane, 2000; Katila and Ahuja, 2002; Lubatkin et al., 2006; Lisboa et al., 2013). Exploitative and

exploratory innovation, thus, has a positive effect on performance (Lubatkin et al., 2006). In this way, firms must combine the experimentation implicit in exploration with the potential for results through exploitation (Tushman and O'Reilly, 1996; Lubatkin et al., 2006; Wang and Li, 2008). This is particularly important when supporting SMEs' export teams seeking to increase their firms' international presence in a globalised world in which the competition is extremely intense.

On the one hand, exploitation strategies seek to respond to current environmental conditions by adapting firms' current level of experience and technologies to satisfy the needs and demands of existing customers (Harry and Schroeder, 2000). Firms must incrementally refine their existing technological or marketing trajectories (Nonaka, 1994), which leads to incremental innovation (Hortinha et al., 2011). Exploitation refers to routine behaviours involved in refining firms' current innovation capabilities and improving the performance of existing routines (March, 1991).

On the other hand, exploration strategies seek to respond to latent environmental trends by creating innovative technologies and new markets (Lubatkin et al., 2006). That is, new technological or marketing trajectories are developed (Nonaka, 1994), including innovative behaviours that involve risk-taking and experimenting with unfamiliar new technologies (March, 1991). Exploring new ideas, markets, relationships and technologies brings longer-term rewards, but it has more uncertain outcomes and diffuse effects than the further development of existing capabilities does, since the latter exploits firms' current innovation capabilities (i.e. shorter-term returns) that may appear to be unprofitable (March, 1991). Market exploitation strategies allow firms to seek greater efficiency and short-term success, whereas market exploration strategies enable firms to adapt and review their portfolio of products and competences in their quest for a long-term market perspective (Garcia et al., 2003; Lisboa et al., 2013). As a result, we hypothesised that:

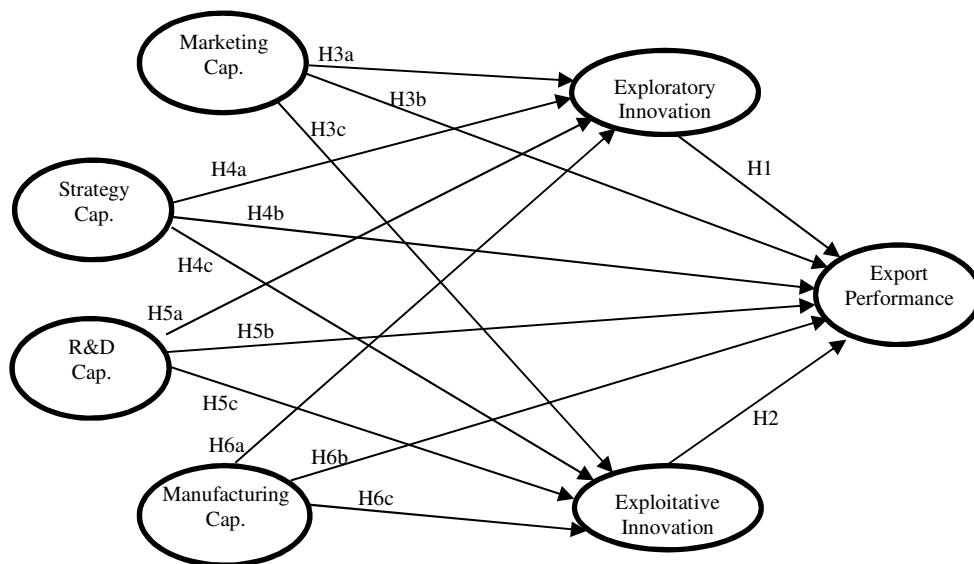
H1: Firms' exploratory capability has a positive impact on their export performance.

H2: Firms' exploitative capability has a positive impact on their export performance.

According to the resource-based view, firms' capabilities are the bedrock of their competitive strategy (Barney, 1991) as these capabilities are valuable, rare and difficult to imitate and substitute. Based on Adler and Shenbar's (1990) approach to innovation capabilities, Guan and Ma (2003) proposed dividing innovation capabilities into the following seven dimensions: learning, R&D, manufacturing, marketing, organisational and strategic.

The literature tends to distinguish between core innovation assets (i.e. R&D, manufacturing and marketing capabilities) and supplementary innovation assets (i.e. learning, organisational and strategic capabilities) (Teece, 1986; Adler and Shenbar, 1990). However, in the present study, manufacturing, marketing, R&D and strategic capabilities were used independently since the objective was to address how a combination of these competences affects exploratory and exploitative innovation and export performance, as can be seen in Figure 9.

Figure 9 - Research model



SMEs' marketing activities tend to be more pragmatic, practical and reactive rather than proactive in terms of responding to customers' needs (Carson and Gilmore, 2000). Zou et al. (2003) found a positive relationship between export marketing capabilities and export ventures' financial performance. However, SMEs still rely on traditional marketing strategies because of these firms' reduced financial resources, and SMEs tend to have limited marketing resources, incentive and reward programmes, as well as well-recognised brands (Day, 2000; Hayami, 2009; Jasra et al., 2011). Although these factors are essential for the growth of SMEs and their long-term success, a short-term operational perspective is more common, and these firms tend towards a more exploitative orientation. The literature on SME marketing reports that this relationship has not been empirically proven.

Although the relationship between marketing and performance is well grounded in empirical research done in the context of domestic markets, the results reported in the international literature are fragmented (Cavusgil and Zou, 1994). Nonetheless, several studies show a positive relationship between marketing and performance in specific dimensions. For example, Berthon et al. (2008) conclude that brand management practices are associated with business performance. Homburg et al. (2010) report that brand awareness significantly drives market performance in firms in business-to-business contexts. Cretu and Brodie (2007) studied the brand image and reputation of small manufacturing firms, concluding that these aspects have an important influence on buying processes. Michell et al. (2001) argue that corporate branding strategies and the marketing management of industrial products are key contributors to successful performance as a source of competitive advantage. Industrial firms, in specific, assign their brand's strength partly to its intangible associations. Thus, based on the gap existing in the literature on SME marketing and the definition of marketing capability as the ability to publicise and sell products while accessing and understanding consumers' current and future needs and competitors' knowledge (Guan and Ma, 2003), we hypothesised that:

H3a: *Firms' marketing capability has a positive impact on their exploratory innovation.*

H3b: *Firms' marketing capability has a positive impact on their export performance.*

H3c: *Firms' marketing capability has a positive impact on their exploitative innovation.*

In many SMEs, strategic planning is often limited (Gilmore et al., 1999; Orser et al., 2000, Huang et al., 2002), resulting in SME owner-managers performing not only the key process of decision making but also a broader set of activities within their firms, such as banking, advertising and human resources management (Berthon et al., 2008). However, a globalised world requires that firms change their strategy in order to adapt to new realities and foreign markets (McDougall and Oviatt, 1996). Strategic capabilities do not directly lead to better performance (Hortinha et al., 2011), but they have an important impact on both the exploratory and exploitative innovation activities of SMEs.

In the present study, strategic capabilities were seen as enabling firms to adopt different types of strategies, thereby allowing SMEs to adapt to rapid changes in highly competitive environments (Guan and Ma, 2003). Based on Guan and Ma (2003), Hortinha et al. (2011) and Lisboa et al. (2013), we hypothesised that:

***H4a:** Firms' strategic capability has a positive impact on their exploratory innovation.*

***H4b:** Firms' strategic capability has a positive impact on their export performance.*

***H4c:** Firms' strategic capability has a positive impact on their exploitative innovation.*

Evidence has been found that indicates R&D, innovation and exportation are mutually reinforcing (e.g. Barrios et al., 2003; Cho and Pucik, 2005; Harris and Li, 2009; Harris and Moffatt, 2011). Moreover, foreign markets may provide grounds for the exploitation of firms' innovations in order to enhance their performance (Filipescu et al., 2009; Love and Mansury, 2009; Hortinha et al., 2011). Innovative firms have a greater tendency towards entering international markets in order to increase sales and spread these firms' fixed costs over a larger number of markets (Zahra et al., 2000; Pla-Baber and Alegre, 2007). Although SMEs have limited funds for R&D or new product development activities (Jasra et al., 2011), these initiatives can help firms to adopt new technological assets (Guan and Ma, 2003). Based on Guan and Ma (2003), Hortinha et al. (2011) and Lisboa et al. (2013), our fifth hypothesis was developed as follows:

***H5a:** Firms' R&D capability has a positive impact on their exploratory innovation.*

***H5b:** Firms' R&D capability has a positive impact on their export performance.*

***H5c:** Firms' R&D capability has a positive impact on their exploitative innovation.*

A positive relationship exists between firms' technological innovation and internationalisation, more particularly in exporting activities (e.g. Basile, 2001; Bianchi, 2009; Filipescu et al., 2009; López and García, 2005; Filipescu et al., 2013). Investment in technological resources enhances firms' knowledge and learning capabilities, which in turn are critical for firms' ability to develop cost- and differentiation-based international competitive advantages and international expansion (Eriksson et al., 1997; López and García, 2005; Filatotchev and Piesse, 2009). Despite their limited resources, SMEs investing in new technologies increase their production capacity and efficiency and stimulate the growth of exports. Previous research has found a positive correlation between new technologies and business success (Jasra et al., 2011). In the present study, manufacturing capability is defined as firms' capacity to transform R&D results into products based on market needs and, thereby, provide economies of scale (Guan and Ma,

2003). Thus, based on Guan and Ma (2003), Hortinha et al. (2011) and Lisboa et al. (2013), we proposed the following hypothesis:

H6a: *Firms' manufacturing capability has a positive impact on their exploratory innovation.*

H6b: *Firms' manufacturing capability has a positive impact on their export performance.*

H6c: *Firms' manufacturing capability has a positive impact through their exploitative innovation.*

7.3. Methodology

Two important constructs involving exploratory and exploitative innovation were based on Lubatkin et al. (2006) and Hortinha et al.'s (2011) research. The set of independent variables of marketing, manufacturing, R&D and strategic capabilities were drawn from Guan and Ma (2003).

The data were collected with a questionnaire consisting of adapted scales validated in previous research, as shown in Table 24. One of the difficulties of carrying out empirical research involving the analysis of firms' performance is obtaining information disclosed in firms' financial statements, as noted by Guan and Ma (2003). We, therefore, implemented a Likert-type scale in order to circumvent the need to analyse export performance and used two items for objective and subjective indicators based on measures used in previous research (i.e. Cavusgil and Zou, 1993; Mathysens and Pauwels, 1996; Zou et al., 1998; Aulakh et al., 2000; Kuivalainen et al., 2007). Innovation capabilities were measured with a multidimensional scale developed by Guan and Ma (2003) comprising three items for marketing capability (MKT_Cap), three items for manufacturing capability (Manuf_Cap), three items for R&D capability (R&D_Cap), four items for strategic capability (Strag_Cap), three items for exploratory innovation (Exploratory_Innov) and three items for exploitative innovation (Exploitative_Innov). All constructs were measured based on a five-point Likert scale, ranging from 'totally disagree' to 'totally agree'.

The questionnaire was subjected to a pre-test conducted with a convenience sample of 30 people in order to verify the questionnaire's organisation and formatting, proper wording, the ways respondents understood questions and response time needed, as well as to eliminate errors. As a result of the pre-test, some changes were made in the terminology to facilitate respondents'

understanding. Moreover, the number of items per variable was reduced to a minimum to keep the questionnaire to a manageable size.

The questionnaire's final version was made available online via a Google Drive LimeSurvey for four months. Respondents were asked to fill it out through emailed messages and social networks.

The target population of this study consisted of SMEs in the plastic manufacturing industry, constituting a universe of 650 firms based in Portugal. The sample was composed of 362 surveyed firms. However, only firms with more than 15 workers were analysed, for a total of 165 firms representing 25.4% of the entire industry population of manufacturing SMEs that export. The main reason for setting aside firms with less than 15 workers was that small firms in the plastic industry lack the competences and size to compete in international markets.

The statistical data analysis was carried out using the partial least squares method of structural equation modelling using the SmartPLS 2.0 software. This methodology was justified by its robust results when non-normal data is used and when research is at an early stage of theoretical development, that is, when researchers seek to test and validate an exploratory model (Chin, 1998; Henseler and Chin, 2010).

7.4. Results

The measurement model was evaluated in terms of reliability, convergent validity and discriminant validity. Table 21 presents the items' loadings and t-values. The t-values were obtained by bootstrapping with 2,000 iterations, indicating that all loadings are statistically significant at the 1% level of significance (t -values ≥ 3.291). With the exception of the item OSI2, all other items have higher loadings than the minimum recommended threshold of 0.7 (Götz et al., 2010). However, we decided not to eliminate this item because it is quite near the cut-off value and, without it, the export performance scale would be in jeopardy. The results support the reliability of the measurement indicators.

Table 21 - Loadings and cross-loadings

Scale items	t-values	Loadings (bold) and cross-loadings						
		Exploitative Innov	Exploratory Innov	Manuf Cap	MKT Cap	Performance	R&D Cap	Strag Cap
EryI1	4.423	0.246	0.718	0.258	0.279	0.117	0.216	0.219
EryI2	11.015	0.177	0.836	0.351	0.188	0.217	0.204	0.324
EveI1	8.119	0.718	0.164	0.244	0.125	0.313	0.104	0.287
EveI2	9.551	0.725	0.266	0.301	0.158	0.264	0.051	0.231
EveI3	9.093	0.749	0.147	0.294	0.061	0.200	0.101	0.268
MC1	10.085	0.317	0.295	0.814	0.220	0.362	0.193	0.291
MC2	6.912	0.283	0.330	0.759	0.112	0.255	0.062	0.262
MKTC1	5.494	0.149	0.255	0.152	0.830	0.131	0.462	0.149
MKTC2	3.855	0.098	0.200	0.191	0.743	0.153	0.313	0.084
OSI1	9.343	0.280	0.154	0.337	0.144	0.813	0.164	0.239
OSI2	5.998	0.263	0.183	0.256	0.126	0.693	0.117	0.174
RDC1	4.894	0.093	0.176	0.197	0.399	0.171	0.763	0.027
RDC2	4.293	0.090	0.239	0.070	0.384	0.126	0.804	0.124
SC1	9.797	0.270	0.226	0.235	0.066	0.220	0.024	0.766
SC2	18.234	0.311	0.339	0.329	0.170	0.229	0.126	0.856

Table 22 shows the average variance extracted (AVE), composite reliability (CR) and correlations of each latent variable. The CR values are higher than the recommended minimum of 0.6 (Götz et al., 2010), indicating that all constructs have adequate internal consistency. Moreover, the AVE of each construct is greater than the expected minimum threshold of 0.5 (Götz et al., 2010), which confirms their convergent validity. Finally, discriminant validity was verified for each construct, as the square root of their AVE is greater than the absolute value of all correlations with other constructs. Furthermore, as shown in Table 21, the cross-loadings are lower than loadings on all the metrics, which reinforces the constructs' discriminant validity (Götz et al., 2010). We dropped items MC3, MKTC3, SC3, RDC3, SC3, SC4, OSI3, and ERYI3 due to the outer loadings being below 0.7.

The structural model shown in Figure 10 was evaluated, first, by the sign, magnitude and statistical significance of the parameters of structural relations and, second, by the explained variance (R^2) of the endogenous latent variables (Götz et al., 2010). The results reveal that not all structural relationships have parameters compatible with the assumptions made in the research model, with values ranging between -0.008 and 0.279. Moreover, the relationships of manufacturing capabilities with explorative and exploitative innovation, as well as with export performance, are all significant at the 5% level, which confirms Hypotheses 6a, 6b and 6c. In contrast, the relationships of marketing and R&D capabilities with explorative and exploitative innovation, as well as with export performance, are not statistically significant. The relationships

between strategic capabilities and explorative and exploitative innovation are statistically significant at a 5% level, thereby confirming Hypotheses 4a and 4c. Finally, the relationship between exploitative innovation and performance is statistically significant, validating Hypothesis 2, whereas the relationship between exploratory innovation and export performance is not significant, which fails to support Hypothesis 1.

Table 22 - Average variance extracted, composite reliability and correlations among latent variables

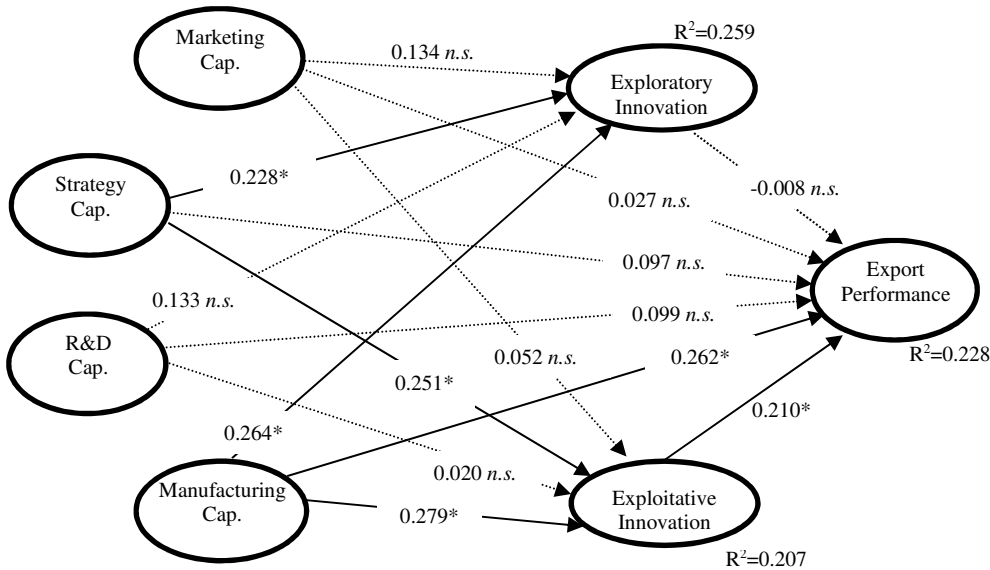
	AVE	CR	Correlations						
			1	2	3	4	5	6	7
1. Explorative Innov	0.534	0.775	0.731						
2. Exploratory Innov	0.608	0.755	0.264	0.780					
3. Manuf Cap	0.619	0.765	0.381	0.395	0.787				
4. MKT Cap	0.621	0.765	0.159	0.291	0.214	0.788			
5. Export Performance	0.571	0.726	0.358	0.220	0.396	0.179	0.756		
6. R&D Cap	0.614	0.761	0.117	0.266	0.167	0.499	0.189	0.784	
7. Strag Cap	0.660	0.775	0.359	0.354	0.352	0.151	0.276	0.099	0.812

Note: the values of the diagonal (in bold) are the square root of AVE

The results also indicate that exploratory innovation explains 25.9% of the variation of manufacturing, marketing, strategic and R&D capabilities. In contrast, these capabilities only explain 20.7% of the variation of exploitative innovation. Finally, 22.8% of the variation of export performance is explained by all its antecedents, among which manufacturing capabilities and exploitative innovation are the most important.

The results show that, among the direct relationships between capabilities and export performance, manufacturing capabilities are the only ones with a statistically significant impact ($\beta = 0.262$). However, when the direct relationship between capabilities and exploitative innovation is analysed, strategic capabilities ($\beta = 0.251$) and manufacturing capabilities ($\beta = 0.279$) are shown to be statistically significant. This also holds true when analysing the direct relationship between capabilities and exploratory innovation, although less strongly.

Figure 10 - Structural model



Note: * p-value<0,05; n.s. – non significant

Marketing and R&D capabilities do not directly influence exploratory and exploitative innovation or export performance, which was an unexpected result. As shown in Table 23, support was found for the conclusion that the indirect effects between manufacturing, marketing, R&D and strategic capabilities are not statistically significant, which might be explained by the statistically non-significant relationship between exploratory innovation and export performance. However, when the total effects are analysed, the situation changes. First, the total effect of manufacturing capabilities on export performance is statistically significant ($\beta = 0.318$) at 0.001, which shows the important mediating effect of exploitative innovation among plastic industry SMEs. Second, the total effect of strategic capabilities on export performance is statistically significant ($\beta = 0.148$) at a level of significance of 10%, which reflects the importance of the mediating effect strategic capabilities have on explorative and exploitative innovation.

Table 23 - Direct, indirect and total effects

	Direct effects		Indirect effects		Total effects		Hypotheses	
	loadings	T-values (p-values)	loadings	T-values (p-values)	loadings	T-values (p-values)	References	Validated
Exploitation Innov → Perform	0.210	2.343 (0.019)			0.210	2.343 (0.019)	H2	✓
Exploratory Innov → Perform	-0.008	0.082 (0.935)			-0.008	0.082 (0.935)	H1	
Manuf Cap → Exploitation Innov	0.279	2.766 (0.006)			0.279	2.766 (0.006)	H6c	✓
Manuf Cap → Exploratory Innov	0.264	2.821 (0.005)			0.264	2.821 (0.005)	H6a	✓
Manuf Cap → Perform	0.262	2.879 (0.004)	0.056	1.459 (0.145)	0.318	3.606 (0.000)	H6b	✓
MKT Cap → Exploitation Innov	0.052	0.511 (0.609)			0.052	0.511 (0.609)	H3c	
MKT Cap → Exploratory Innov	0.134	1.395 (0.163)			0.134	1.395 (0.163)	H3a	
MKT Cap → Perform	0.027	0.277 (0.782)	0.010	0.339 (0.734)	0.037	0.383 (0.701)	H3b	
R&D Cap → Exploitation Innov	0.020	0.199 (0.842)			0.020	0.199 (0.842)	H5c	
R&D Cap → Exploratory Innov	0.133	1.447 (0.148)			0.133	1.447 (0.148)	H5a	
R&D Cap → Perform	0.099	1.1470 (0.242)	0.003	0.116 (0.907)	0.103	1.193 (0.233)	H5b	
Strag Cap → Exploitation Innov	0.251	3.192 (0.001)			0.251	3.192 (0.001)	H4c	✓
Strag Cap → Exploratory Innov	0.228	2.983 (0.003)			0.228	2.983 (0.003)	H4a	✓
Strag Cap → Perform	0.097	1.079 (0.281)	0.051	1.435 (0.151)	0.148	1.704 (0.089)	H4b	

Finally, neither marketing capabilities nor R&D capabilities are directly or indirectly statistically significant on their relationship with exploratory and exploitative innovation and export performance. Thus, the total effect of marketing capabilities is the least important of the four types of capabilities analysed ($\beta = 0.037$), as shown in Table 23.

7.5. Discussion of results and implications

Resources and capabilities have been found to be extremely important for exporters. However, little attention has been paid to the relationship between resources and explorative and exploitative innovation and export performance. Although innovative firms are known to be able

to use their capabilities to improve their competitive advantage, this study contributes to the literature on international marketing by addressing how capabilities directly influence export performance and how explorative and exploitative innovation mediates the relationship between capabilities and export performance.

This study was developed based on the premise that internal capabilities are important for the competitiveness of SMEs and exploratory and exploitative innovation has different outcomes among SMEs – although their antecedents and consequences remain rather unclear. An analysis of the present results supports the conclusion that SMEs focus much more on exploitative innovation than on exploratory innovation, which differs from previous research results. For example, March (1991) advocates that entrepreneurial firms have to balance exploration and exploitation innovation. Abidi et al. (2011), in turn, assume that global SMEs start creating knowledge by undertaking more exploitative activities than exploratory ones.

According to Table 23, of the 14 hypotheses, only six were validated. Strategy capabilities impact both exploratory and exploitative innovation, and, as such, they have an indirect effect on the export performance of SMEs. This confirms what Hortinha et al. (2011) report, namely, that strategic capabilities do not directly lead to better performance. Manufacturing capabilities are the only ones with both a direct and indirect positive impact – through exploitative and exploratory innovation – on export performance.

As predicted, our findings demonstrate that manufacturing capabilities have the most important effects, among all the proposed antecedents, on exploratory innovation, exploitative innovation and export performance. In contrast, marketing and R&D capabilities do not influence explorative and exploitative innovation or export performance. The literature proposes that manufacturing and marketing capabilities are often the key to firms' success – with organisational processes built around stability, efficiency and profitability in order to generate cash-flows (Lawson and Samson, 2001). However, our results show that plastic industry SMEs in Portugal are not oriented towards marketing but instead are much more focused on production processes, seeking to respond to current market conditions in order to adjust firms and their existing technology to the immediate needs of current customers. This reflects a short-term perspective. One possible explanation for this result is that the plastics industry is composed of specialised industrial firms more focused on economies of scale than on new product development skills. Therefore, plastic manufacturing SMEs in Portugal are increasingly dependent on external sources

of technical, R&D activities since the generation of new technologies is becoming an increasingly complex process (Bougrain and Haudeville, 2002). These firms also rely on relationships with international clients to circumvent their lack of marketing capabilities.

These results are clearly different to Guan and Ma (2003) and Hortinha et al.'s (2011) findings, which can be explained by the type of industry. Hortinha et al. (2011) studied manufacturing exporters in the AICEP Portugal Global database, while Guan and Ma (2003) analysed the main manufacturing exporters based in Beijing, China. However, our analysis included only manufacturing firms from the Portuguese plastic industry, thereby providing an industry-wide perspective and focusing on more than just firms that export. When the size of the firms involved in these studies is compared, the average size of the firms we sampled is clearly smaller than the average size of the two cited studies.

According Lawson and Samson (2001), innovative firms are able to link their core technology strategies with innovation and business strategies. This alignment generates a powerful mechanism for developing competitive advantages. In our research, significant differences exist between core innovation assets (e.g. R&D, marketing and manufacturing capabilities) and supplementary innovation assets (e.g. strategic capabilities).

This contrasting result could be explained by several factors. The first is the small size of plastic manufacturing firms compared to the size of the firms studied by Guan and Ma (2003) and Hortinha et al. (2011). The second factor is the history of manufacturing specialisation of plastic manufacturing firms that tend to focus their activities on process improvements in order to reduce costs (Wheelen and Hunger, 1999; Bessant and Tidd, 2007). Third, the typical supplier-customer relationship of plastic manufacturers within supply chains is restricted by large multinational firms as suppliers and customers, which compels plastic producers to be extremely focused on activities that enhance manufacturing competence (Wheelen and Hunger, 1999; Bessant and Tidd, 2007).

Contrary to our predictions and the extant literature, marketing and R&D capabilities do not significantly impact either export performance or exploitative and explorative innovation. It appears that the plastic industry also has to focus on R&D and marketing and even more on strategy in order to thrive in international markets.

From a different perspective, an analysis of the plastic industry reveals that, in upstream and downstream relationships in value chains, large multinational firms affect the competences and capabilities of plastic manufacturing SMEs. This includes their relationships with: a) raw-

materials suppliers – affecting, for example, new product development; b) capital equipment manufacturers – affecting technological innovation and process improvement innovations and c) customers – normally large original equipment manufacturers or distributors that constrain the development of new products. As such, external relationships, including both upstream and downstream activities in supply chains, give the plastic industry a continual capacity for learning and innovation focused on products, based on economies of scale and a cumulative capacity for progress and commercialisation, as noted by Cesaroni et al. (2004) and Montobbio (2004).

For SMEs, the lack of expertise, specialisation, R&D resources and internal innovation capabilities has been seen as the main barrier to innovation (Konsti-Laakso et al., 2012; Raposo et al., 2014). The present study's results suggest that SME managers need to coordinate daily mainstream operations while also cultivating innovation and change within their firms, that is, their ability to pursue both types of innovations (i.e. exploration and exploitation) simultaneously. As such, in their quest for competitiveness in international markets, plastic manufacturing firms have to embark on a journey that prioritises exploitative innovation, allowing exportation to current markets through efficiency and short-term success, as opposed to exploratory innovation that may result in portfolio renewal and long-term survival.

Previous research has found that explorative and exploitative innovation has an important role in the success and even in the survival of firms (e.g. Lawson and Samson, 2001; Jansen et al., 2005, 2006; Gupta et al., 2006; Rosenbusch et al., 2011). The present study's findings complement other research focused on innovation capabilities and provide support for viewing exploitative innovation as a mediating variable between capabilities and export performance.

These results also have managerial implications in terms of how exploitative innovation can positively affect SMEs' export performance. More specifically, the present findings suggest that manufacturing SMEs of the plastic industry can increase their export performance by pursuing exploitative innovation in existing products, markets and technologies despite studies in the literature that support the view that both exploitative and exploratory innovation capabilities have a positive effect on performance (Lubatkin et al., 2006). In addition, although strategic capabilities positively influence exploratory and exploitative innovation, they do not directly support export performance as previously predicted. Taking into account the different roles identified for exploratory and exploitative innovation, plastic manufacturers appear to be more reactive than

proactive in their new product development processes and quest for technology, as well as when seeking to identify new technological trends.

7.6. Conclusions, limitations and future research

SMEs currently have to use a variety of innovation capabilities, deploying innovation not just as a way to use scarce resources to achieve uncertain outcomes but rather as a mechanism for creating new products and technologies tuned to new markets in order to sustain these firms' competitive advantage. This chapter describes a proposed model relating six internal innovation capabilities (i.e. marketing capabilities, strategy, R&D, manufacturing and exploratory and exploitative innovation) to export performance. This study fills a gap in the literature on how internal innovation capabilities of SMEs influence export performance and what role exploratory and exploitative innovation plays in this relationship.

We found an essentially positive relationship between manufacturing capability, exploitative innovation and export performance, thereby confirming six hypotheses. However, contrary to our predictions, we found no relationship between marketing, R&D, strategy and exploratory innovation and export performance. Strategic capabilities have an indirect impact on export performance through exploitative innovation. Dissimilar to research reported in the literature in which both exploitative and exploratory innovation has a positive effect on firms' performance, the present study found that only exploitative innovation has a positive impact.

Evidently, marketing and R&D activities are not as relevant as manufacturing activities among SMEs of the plastic industry, which are able to operate successfully in foreign markets by expanding current products and defending existing markets and technology through exploitation innovation, such as new operational roles. However, in order to balance the importance of both exploitation and exploration innovation activities so that firms are able to sustain their competitive advantages, plastic industry firms in Portugal need to develop a more long-term perspective as a way to fine tune their R&D and marketing capabilities. This will enable them to explore innovation so that they can develop new products and diversify their technologies to stimulate a greater capacity to compete in international markets.

To understand fully the relationships between the aforementioned six internal innovation capabilities, future research needs to examine whether these capabilities vary across industries, including a comparative study with several manufacturing firms at the international level to generalise the present findings further. This would provide a fuller picture of innovation within SMEs and develop a better understanding of core and supplementary innovation capabilities and the ways they underpin export performance among SMEs.

Future research could also consider the diversification of export performance scales, as well as their adaptation to new industrial sectors. By extending the present study to other industrial sectors and including a comparison between large and small firms, researchers can discover whether the focus on exploitation innovation activities identified in the present study is restricted to the plastics industry or common to other industrial sectors – or whether this focus is more common among SMEs or it also involves large firms.

Although the present research provides new insights into exploratory and exploitative innovation antecedents and consequences, it has not addressed how SMEs administrators manage and coordinate exploratory and exploitative innovation. It would therefore be useful to conduct further in-depth studies to understand better how these processes happen and how they affect export performance.

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Table 24 - Appendix: scales items

Constructs	Variables and Items	Adapted from
Export Performance	Objective and subjective indicators on export performance (financial – objective - and strategic export performance - subjective)	Kuivalainen et al. (2007); Cavusgil and Zou (1993); Mathysens and Pauwels (1996); Aulakh et al. (2000) and Zou et al. (1998)
	<i>Five-point Likert scale: 1 = 'totally disagree' and 5 = 'totally agree'</i>	
	<i>(OSI1) Exporting has contributed to the sales growth of our firm</i>	
	<i>(OSI2) Our export activity has strengthened our strategic position</i>	
Innovation capabilities	<i>(OSI3) The export venture has achieved rapid growth</i>	Guan and Ma (2003)
	<i>Five-point Likert scale: 1 = 'totally disagree' and 5 = 'totally agree'</i>	
	R&D capability	
	<i>(RDC1) Choosing special personnel or building organization to collect various innovation ideas</i>	
	<i>(RDC2) Facilitating communication among R&D personals</i>	
	<i>(RDC3) Communication between R&D department and marketing department</i>	
	Manufacturing capability	
	<i>(MC1) Production regulations and system</i>	
	<i>(MC2) Total quality management</i>	
	<i>(MC3) Technological level of manufacturing equipment</i>	
	Marketing capability	
	<i>(MKTC1) Controlling and managing distribution network</i>	
	<i>(MKTC2) After service and technological assistance</i>	
	<i>(MKTC3) Long-term customer relationship for understanding diverse customer requirements</i>	
	Strategic capability	
	<i>(SC1) Support from top management</i>	
<i>(SC2) Connection between technological strategy and business strategy</i>		
<i>(SC3) Advanced decision system</i>		
<i>(SC4) Adjusting innovation strategy accordingly</i>		
Exploratory and Exploitative Innovation	Exploratory innovation	Hortinha et al. (2011) and Lubatkin et al. (2006)
	<i>(EryI1) We look for novel technological ideas by thinking 'outside the box'</i>	
	<i>(EryI2) We create products or services that are innovative to the firm</i>	
	<i>(EryI3) We base our success on our ability to explore new technologies</i>	
	Exploitative innovation	
	<i>(EveI1) We commit to improve quality and lower cost</i>	
	<i>(EveI2) We continuously improve the reliability of our products and services</i>	
<i>(EveI3) We fine-tune what we offer to keep our current customers satisfied</i>		

8. FINAL REMARKS

The relationship between internationalisation and performance is a very controversial topic, either on general management or specifically on international management, still requiring more studies, which was a positive challenge in the present research.

The internationalisation of the SMEs has been growing on interest, either by politicians and economists, as well as entrepreneurs and firms' managers, who are devoting increasingly more attention on this issue.

Many voices arise for the internationalisation strategy of SMEs. It is imperative to invest, to be proactive and to draw all attention to foreign markets as a collective awareness that it is the only way to improve the country's performance. It is a common issue in countries that are going through economic difficulties, but it is a tendency which does not exclude countries, firms and consumers. Everyone is involved in a world that is turning more and more global.

With the globalisation of markets, everything has changed. The market is no longer just domestic, it has become international. These are the rules of today's businesses. SMEs have to think global, which implies to rethink, analyse their internal skills, resources and enhance their competitive advantages. This research study was based on this necessary and important change, to operate in the business fabric.

On the context of internationalisation versus performance, we contributed for the clarification of the importance of innovation on export performance of SMEs, reinforcing the entrepreneurial orientation on internationalisation of SMEs.

8.1. Main conclusions

This Phd study is part of a background of growing changes in the economic and business environment, with special emphasis on the internationalisation of SMEs. This scenario demands

for greater efficiency mainly in the internationalisation processes. Thus, it is important understanding the factors affecting internationalised firms.

As the central figure of this study is a model which allows not only to describe, but also explain the key factors affecting the export performance of manufacturing SMEs. This study reinforces the international research on SMEs, as the literature states that there are few studies on the performance of internationalised SMEs. Most of the research is based on multinationals companies in developed countries, with focus on a process view which was avoided on our research. We give a special attention to the knowledge-based perspective (with focus on innovation capabilities of SMEs) and network view (concerned to firms which act on business-to-business context).

The contributions of this research are both theoretical and practical in nature. Academically and in general terms, the literature research claims the need of more studies on internationalisation of SMEs, encouraging the improvement of a structured body of knowledge in this area. The in-depth approach with the literature review offers a framework overview of the internationalisation theories by identifying the main schools of thought – ranging from economics-based to integrative models – using an analysis that begins in the eighteenth century and ends in the twenty-first century with the most recent trends in internationalisation theories. This schematic and integrative analysis supports the academic community in their research on business internationalisation.

The systematic literature review of empirical and conceptual published studies of SMEs internationalisation provides a significant contribution to knowledge in this field, improving the understanding of the relevant research to date. The analysis revealed some general trends: empirical research focuses mainly on Europe, and it is characterised by a multi-topic diversity that identifies 74 different topics.

The conceptual model which fits on the latter trend of internationalisation theories (holistic models) contribute to better understanding the key factors affecting the export performance of SMEs and a better sedimentation of the literature on internationalisation of SMEs.

Among the many existing industrial sectors in Portugal, our focus in the empirical study was the manufacturing firms of plastic sector, which allows to support the literature review and to contribute to the deepening of knowledge of SMEs internationalisation.

We first analysed the relationships between B2B firms in supply chain of the plastics industry (supplier-customer) and their impact on product innovation and internationalisation process. We concluded that there is a feedback effect between the focal firm (plastics manufacturing firms), upstream suppliers and downstream customers, i.e. the relationship between the focal firm and the customers leverages the relationship between the focal firm and the suppliers. This symbiosis leads to a more technically innovative final product, which encourages more relational contact with the customer, giving rise to a more dynamic form of internationalisation. In this respect, the firms, which encourage close involvement – with both their customers and suppliers –, will make it easier to gain access to and do business in foreign markets, extending the relationship cycle with the customers and strengthening their competitiveness and international strategy.

The plastics industry is highly characterised by the vertical relationship between suppliers and customers. In other words, the downstream relationship stimulates the upstream relationship, which in turn leads to more involvement in the downstream relationship. This ensures that the focal firm develops an increased level of commitment to the customers in international markets. In the supply chain network, the position of the suppliers and the customers is important as a means of competitive positioning for an exporting firm and for defining product innovation strategies. This not only helps bolster the firm's competitiveness in external markets, but also helps to increase its agility (in various areas) in the domestic market.

We applied a questionnaire to Portuguese manufacturing SMEs of the plastics industry in order to analyse the impacts of internal-innovation capabilities of internationalised firms on export performance. We concluded that these firms are much more focused on production process (manufacturing capability), operational and immediate aspects than on strategic ones, not assigning a long-term perspective to the business. SMEs of the plastics industry improve their export performance only through manufacturing activities with exploitative orientation, as the plastics industry is part of the value chain of multinationals companies. By pursuing exploitative innovations of existing products, markets and technologies, these firms export to current markets through efficiency and short-term success, jeopardising their exploratory, long-term market perspective.

The empirical research shows also that the SMEs are internationally entrepreneurial, by investing on internal innovation capabilities to compete in foreign markets and succeed proactively. The proactive SMEs to external stimuli are not only better at innovating but also their entrepreneurial orientation capabilities underpin a better performance in international markets when compared with firms that react to external stimuli. Innovation capabilities are important for export performance of SMEs, however the mediation effects of entrepreneurial orientation exceed the direct effects of innovation on export performance. Entrepreneurial orientation is an important variable to take into account in innovation studies, especially in firms that proactively seek to embrace new opportunities abroad.

We concluded also that almost 18% of SMEs of manufacturing plastic industry do not have export activity. It is a traditional industry sector, with a strong foothold in Portugal, which have a long way to evolve in terms of internationalisation.

8.2. Limitations and suggestions for future research

This research study is the beginning of a long path and naturally incurs on limitations, which may and should be observed as a starting point for further investigations.

The research is of cross-sectional nature, focusing on a single industrial sector and on a particular theme based on entrepreneurial orientation as innovation capabilities and export performance, neglecting the intrinsic characteristics of a longitudinal research. It would be interesting to extend the scope of the analysis, which may be the focus of future research.

Although the target of this study is a 'closed' and traditional industrial sector, concerning performance as a 'taboo' theme, which affected the survey information, it would be interesting to explore in future research other performance indicators.

The lack of credible and reliable information, as for example market shares in the plastics industry, the characterisation of this sector in Portugal, was another limitation to the implementation of this investigation.

Although we took into account the questionnaire size and the intrinsic characteristics of the selected universe, the questionnaire was long which influenced its total completion, motivated also

by the inclusion of performance variables. We made use of privileged contacts within those firms; we used telephone contact and, in some situations, we did face-to-face contact. In spite of all, we felt little receptiveness in providing information.

Thus, we could not test all the variables of the conceptual model since it would extend the questionnaire and decrease the response rate.

Future research may consider a longitudinal research design to better assess how internal-innovation capabilities as antecedents affect export performance of SMEs over time. Future studies may benefit from gathering performance data that span more than one year. Moreover, it would enable analysing performance implications at different points in time to contrast the effects of different activities based on innovations capabilities.

Future research needs to examine whether the internal innovation capabilities vary across industries, involving a comparative study with several manufacturing firms at international level to further generalise the findings. This would provide a fuller picture of innovation within SMEs, and further develop our knowledge on core and supplementary innovation assets or capabilities and how they underpin export performance among SMEs. Extending this study to other industrial sectors, including a comparison between medium and micro-small firms and using more scales for export performance, is a way to realise the emphasis on manufacturing capabilities, a proactive strategy and orientation to exploitative or exploratory innovations are transversal to manufacturing SMEs or if there is a distinct tendency for the plastics industry, or whether it is more common among micro-small or medium firms. Plus, it would be interesting to make the same analysis not only by the number of employees, but also by the sales annual turnover.

A multisectorial study could confirm if SMEs can be oriented to exploitative innovations and at the same time be proactive. These seem to be contradictory concepts, as exploratory innovations seem to be implicit to proactivity, rather than exploitative innovations, which are more oriented to long term strategy. It is expected that firms on fashion industry for instance, will be more reactive, as their product cycle change more rapidly in harmony with the market tendencies. Multisectorial studies are required to provide broader conclusions. Plus, it is necessary also change the focus to firms which do not have a strong presence in the value chain of multinationals as the SMEs of Portuguese plastics industry, to conclude if the relationship supplier-customer is also crucial in the process of internationalisation and innovation of firms,

capturing trends and generalisations with implications on the relationship of innovation capabilities and export performance.

Beside the fact that this empirical study has been developed on one sector only, it was also developed on one country. It would be interesting in future research to make both monosectorial and plurisectorial studies comparing several countries. We believe that there is also a relationship between the conclusions on our empirical study and the socio-cultural, economic and geographic aspects. The literature states that SMEs have limited financial resources and are typically reactive. In our research, the Portuguese manufacturing SMEs of plastic industry tend to be proactive. SMEs of this industrial sector are part of the value chain of multinationals companies, which are normally outsourced by international clients. Theoretically, these firms limited their export activities to what they produced. It would be predictable that innovation had a reactive-external approach (from the downstream and upstream relationship in supply chain) than proactive. Our research proves the opposite of what we anticipated.

SMEs are a distinctive and heterogeneous reality, which may include international new ventures or even born globals. Our study revealed that innovation capabilities are an important asset for internationalised SMEs. It also revealed that more important than innovation is entrepreneurship. The various educational institutions have, on these conclusions, a future scope of action by engender entrepreneurial capacity among students who will be the future business men/women. Entrepreneurship is crucial to the decision-making process of SMEs, which is part of the intangible resources of firms and one of the most important resources for the success of SMEs, in contrast to the tangible resources which define the multinational companies.

