Portuguese Born Globals: An Exploratory Study

27th EIBA Conference at ESCP-EAP- Paris, France, December 13-15, 2001

Alliances and Confrontations: Globalization and the Logics of Trading Blocs

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Workshop Paper

Abstract

In the so-called Uppsala model internationalisation is envisaged as an incremental process where the acquisition of experimental knowledge acts as a catalyst for decisions of further resources commitment in international markets. In the last decade, however, a new host of firms emerged, significantly challenging established theoretical approaches. These firms, often labelled born globals, take a worldwide business approach since inception, and swiftly get a global reach, relying on a mix of different cooperative arrangements and modes of operation. Their organisational structures are usually less hierarchical than those prevailing in established multinational enterprises.

The present paper provides a conceptual framework to understand this phenomenon. It emerged in a business environment characterised by globalisation, liberalisation and technical change. Entrepreneurial capabilities, together with the management of knowledge intensive resources and relational capital, enable the design of a unique, distinctive concept which may be exploited through focussing in a global niche. The framework was applied to analyse the development of three Portuguese firms, two from the software and one from the footwear industry. It was found that born globals are not specific to technology-intensive sectors and that the framework is a good tool for better understanding born globals emergence and growth.

Key words: *born globals, internationalisation, Portugal, entrepreneurs*

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Introduction

The last few years have seen a resurgence of interest by researchers into the phenomenon of internationalisation. Traditional theory has been mostly based on the internationalisation process model developed by Johanson and Vahlne (1977), also known as the Uppsala model. It explains internationalisation as a process of acquiring experiential knowledge which acts as a decision-making catalyst for the commitment of additional resources to international markets. International company development tends to be gradual, following a pattern of growing psychic distance, defined as the set of “factors preventing or disturbing the learning about and understanding of a foreign environment” (Vahlne e Nordström, 1990:2), and based on the organic growth. As a result of "lateral rigidity" of managers, the start of the process is slow and reactive, often as a response to external orders (Luostarinen, 1979). Furthermore, assets on which ownership advantages are based are usually located in the domestic market, internationalisation being envisaged as the exploitation of the competitive advantages provided by these assets (Cantwell and Narula, 2001; Doz *et allii*, 1997).

In the last ten years, however, a number of studies have shown that a growing host of companies were involved in international markets from their beginning (Rennie, 1993; Oviatt and McDougall, 1994, 1995 e 1997; Bell, 1995; Coviello and Munro, 1997; Madsen and Servais, 1997; Autio and Burgel, 1999; Jones, 1999; McAuley, 1999; Autio, Sapienza and Almeida, 2000; Crick and Jones, 2000; Yli-Renko, Autio and Tontti, 2000; Andersson and Wictor, 2001). This strand of research includes examples from several countries; in sectoral terms, however, it is almost exclusively focussed on new technology-based firms (NTBFs). Their findings challenge the traditional Uppsala approach. In fact, they show companies to behave in a way that contrasted with Uppsala suggestions. In particular, those companies did not follow the incremental, gradual pattern of international expansion, some of them being born already with a worldwide perspective, having no single ‘lead’ market (Hamel, 1995). Simultaneously, they use different sorts of approaches to international activities, including a significant reliance on cooperative arrangements, while their internal organization is characterized by less hierarchical structures.

Rennie (1993) called these firms *born global*. Other authors have adopted this appealing label, although there seems to be no agreement so far on what a *born global* is. Tentatively, we will follow Andersson and Wictor (2001: 5) who defined them as “companies which have reached a share of foreign sales of at least 25% within three years after their birth and, from inception, seek to derive significant competitive advantage from the use of resources and the sales of outputs in multiple countries”.

The aim of the present paper is to develop a conceptual framework to understand the *born globals* phenomenon and to test it through the application to three case studies of Portuguese *born globals*. One of our main contributions will be to extend the analysis to firms in traditional sectors, such as footwear, and not to concentrate on NTBFs only. Without challenging the fact that the phenomenon is most widespread in high-tech industries – such as electronics, software, biotechnology, and medical instruments –, we contend that it also affects traditional industries, opening new possibilities for the international expansion of firms from countries like Portugal with a tradition of exporting more “mature” products.

The paper is organised in seven sections including this introduction. The second section provides a revision of the literature on internationalization processes, and particularly on *born globals*. Next, a conceptual framework is introduced, aimed at identifying the key factors behind the emergence of *born globals* and their interactions. The methodology used is presented in the fourth section. Then, a brief description of the three cases studies is provided. These will be discussed in detail in the sixth section. The paper closes with the conclusions and implications for further research.

Literature Review

Analysis of the process of internationalisation grew from the seminal work of the Uppsala school (Johanson and Wiedersheim-Paul, 1975; and Johanson and Vahlne, 1977) about the internationalisation of Swedish firms. They focussed on industrial firms from sectors which were not particularly high technology intensive. At that time, the competitive environment was characterized by the strong regulation of commercial and capital flows and direct investment which limited the role of international operations. Furthermore, international communication and transportation systems were less developed, contributing to a lower knowledge about external markets and to an increased perception of psychic distance. International expansion of firms into external markets was found to be an incremental process, both in terms of the time need to penetrate external markets, and in the resource commitment in these markets. As Madsen and Servais (1997) put it, expansion was from near and psychologically closer to more distant countries like "rings in the water". Outward activity was found to enable the acquisition of experiential knowledge which reduced uncertainty and performance risk, leading to an increase in the resource commitment in these markets.

Internationalisation may be also envisaged as a wider process, beginning before the launching of outward operations. As Luostarinen (1979 and 1994) pointed out, in many cases it begins when the company establishes linkages with foreign firms to develop activities in the internal market: imports, licensing, franchising agreements, relations with global clients or joint-ventures. These activities are based on the access to, or the acquisition of resources and capabilities, and encourage the development of international perspectives (Welch and Luostarinen, 1993; Kerhonen, Luostarinen and Welch, 1996; Simões, 1997b, 1997c), which lead to firms acting in external markets.

Although experiential knowledge may be a key element in the explanation of activities in international markets, it is not the only one. Ownership of idiosyncratic resources (Coviello and Munro, 1997; Young, Bell and Crick, 1999) also facilitates the development of ownership advantages that mobilise firms to adopt more pro-active and aggressive behaviour in the selection of markets as well as in the choice of operation modes. Moreover, managers' increased international experience favours the development of more risk-taking and outward-oriented company cultures, which enable a faster international expansion and a stronger commitment to investing abroad (Simões and Biscaya, 1997). Besides the influence of local environment and of the nature of the industry in international expansion, company characteristics play a paramount role shaping the strategies and modes of operation to adopt as well as the activities to perform abroad and the markets to enter. All these factors introduce a contingent character in the whole process (Welch and Luostarinen, 1988; Calof and Beamish, 1995; Bell and Young, 1998).

The Uppsala model emphasises organic growth. Nevertheless, the firm establishes a set of inter-relations with various actors in the market who may act as deterrents, stimulators or accelerators in the process of internationalisation (Johanson and Mattsson, 1988). Involvement in company networks and in cooperative arrangements may allow the firm not only to overcome certain weaknesses in their resources or competences, but also to have easier access to markets, as well as to skip stages in the internationalisation process (Welch, 1992; Simões, 1997b, 1997c).

The international growth of several NTBFs and of firms such as MTV, Acer or Body Shop raised doubts about the appropriateness of the Uppsala model to explain more recent internationalisation moves, in an increasingly globalised world. A new breed of firms, mostly from the new technology intensive industries was found to emerge. These are characterised by instant internationalisation, operating in international markets very early in their life cycles or even since inception. Researchers are paying increased attention to these born global firms: Oviatt and McDougall (1994, 1995, 1997 and 2000) and Andersson (2000) stressed the role of the entrepreneur in the fast internationalisation of new ventures; Coviello and Munro (1997) pointed out the relevance of networking in international reach; Crick and Jones (2000) refered to competence development through the involvement in international problems, as well as to the importance of entrepreneurs' relational capital in shaping internationalisation patterns; and Autio, Sapienza and Almeida (2000) suggested that born globals can escape to rigidities due to a long reliance on domestic markets, creating an international perspective since the beginning. *Born globals* seem to follow "supranational" (Hamel, 1995) strategies, avoiding the hindrances of the stages approach. Corporate and personal networking is very intense, and hybrid forms of operation, such as cooperative agreements and alliances, are widespread. Psychic distance appears to have had a reduced influence on their choice of locations, these being used not just to exploit competitive advantage, but above all as a source of that same advantage, with entrepreneurs being responsible for the orchestration of globally dispersed resources (Doz *et al*, 1997; Cantwell and Narula, 2001).

Although the behaviour shown by these firms challenges current theory on the process of internationalisation, a deeper analysis indicates that this is not always the case. For example, experiential knowledge appears to be a fundamental intermediary in the decisions of stronger commitment to external markets in the theory of the process of internationalisation. Even in of *born globals*, knowledge and the network of relations between entrepreneurs are found to be at the root of the whole process (Madsen and Servais, 1997). This knowledge, which is embodied in entrepreneurs, has two fundamental roles, as a source of competitive advantage for making the most of the windows of opportunity, and as a catalyser of a rapid international expansion (Yli-Renko, Autio and Tontti, 2000).

However, experiential knowledge is not the only, nor the most important, factor in explaining instant internationalisation. In this phenomenon, one cannot ignore the competitive context in which *born globals* have emerged (Andersson and Wictor, 2001). In the first place, one should acknowledge the liberalisation of the regulations on business activities, international investment and capital movements in the last 15 years, reducing obstacles in going abroad. Secondly, there were significant advances in information and communication technologies. Reduced communication costs, the ease of transmitting data and accessing information globally has "shrunk" the world and "accelerated" time (Simões, 1999). A third feature comes from the crucial role played by technological innovation and technology fusion. Finally, there is the enhanced ease of company access to information about external markets. Nowadays the Internet and government agencies make available basic information that companies need for their first contacts abroad. Furthermore, there are a large number of people with international qualifications helping in the acquisition of international knowledge, supplementing the weaknesses of experiential knowledge.

While the competitive context is different from that of the 1970´s, when the Uppsala model was developed, so the role of the entrepreneur has appeared as a decisive factor in the explanation of this phenomenon (Oviatt and McDougall, 1995; McAuley, 1999; Andersson, 2000; Crick and Jones, 2000; Teixeira, 2000; Andersson and Wictor, 2001). In most cases, entrepreneurs are strongly outward-minded: they know external markets either from working for multinationals through being placed in export departments or through experience abroad; they are people who have high-level academic qualifications, and speak foreign languages; and they maintain a network of extensive and intensive international contacts. From the beginning these characteristics provide them with the knowledge about external environments needed for an aggressive and quick entry in international markets. Market entry does not follow a pattern based on geographical distance, but rather it follows the entrepreneur's network of contacts (Crick and Jones, 2000). A careful analysis enables the identification of four basic capabilities in these global entrepreneurs who are involved in faster and more intensive international expansion. Firstly, and particularly in more knowledge-intensive sectors, they have a good basis of **scientific knowledge** about a technology or a process; this includes university researchers who start their own companies as well as researchers from public R&D institutions who launch spin-off firms. This knowledge makes the development of a distinctive idea possible, providing the emergent company with ownership advantages. This often happens in the context of profiting from the opportunities opened by the so-called digital economy (Teixeira and Laranja, 2001). Several of these cases may have the flavour of the intrepid entrepreneur described by Schumpeter. However, necessary as this capability is, it is not sufficient on its own to explain the international expansion of these firms (Fontes and Coombs, 1997). **Management and marketing capabilities** also become essential for a rapid international expansion, particularly in the coordination of globally dispersed resources. These capabilities come through academic qualifications and also, for the majority of entrepreneurs, through previous international experience, given that many of them have either lived abroad working for multinational companies or are familiar with international business affairs due to their former professional activities in the home country (Oviatt e McDougall, 1995; Crick and Jones, 2000). The existence of management and marketing capabilities may lead to a better grasp of business features and specificities, and to an increased knowledge of the management tools available for firms to coordinate their international activities; they may also lessen the level of ethnocentricity found in many firms during their first steps of internationalisation. As a consequence of the international experience of many entrepreneurs, there is an **accumulation of relational capital** in external markets, either on what concerns the knowledge about potential customers or through the institutional relationships they were able to establish (Welch and Welch, 1993; Fontes and Coombs, 1997; Simões, 1997c). This means that they can open doors more quickly than if they were trying to get into a market for the first time, making it easier to identify and take advantage of opportunities. These capabilities create the conditions for performing abroad and for rapid international expansion from the beginning. But there is still one ingredient missing: the **visionary capability** of the entrepreneur. This includes the clear definition of the business concept, the innate desire to implement it through the launching of a new company, the transmission of that vision to a team of people, and the perspective of the international market as a natural place for doing business (Andersson and Wictor, 2001; Oviatt and McDougall, 1995).

The competitive context and the role of the entrepreneur are not sufficient to understand the emergence and development of *born globals*. A third characteristic is relevant – the knowledge intensity of competitive resources in such firms. Usually these firms belong to industries where products have short life cycles, thus demanding constant innovation, and calling for specialised and difficult-to-imitate resources. In fact, these are firms which sell unique and specialised products or services (Oviatt and McDougall, 1995), as the only way of surviving without being imitated. Short life cycles compel firms to go abroad to rapidly exploit opportunity windows. Product uniqueness, in the other hand, attracts a global demand. In some cases, when dealing with specific resources, the internal market cannot fulfil a firm's needs, leaving no other alternative except internationalisation (Fontes and Coombs, 1997). Another common feature is the need for considerable investment in R&D which, in order to be profitable from the beginning, makes a company consider performance in external markets as something natural and necessary, whether it is done in the design phase with alliances and cooperation agreements to help spread costs and to access complementary resources, or in the commercialising phase (Madsen and Servais, 1997; Autio, Sapienza and Almeida, 2000; Zahra, Ireland and Hitt, 2000).

Although the majority of studies have concentrated in high technology industries, it is possible to find this phenomenon in older and less technology-intensive sectors (McAuley, 1999), with creativity and design being the points in common. This could suggest that a distinguishing feature in the emergence of *born globals* is the knowledge intensity of the resources exploited by firms, and not just the level of technological intensity of the industry. This means that the emergence of *born globals*, though more widespread in high-tech intensive industries, is not specific to them. The phenomenon may also be found in other business areas where there is an increasingly global demand and where companies can use creativity, design, fast motion and differentiation as sources of competitive advantage.

The relational nature of many of the activities developed by entrepreneurs and by their companies also helps explains the emergence of *born globals*. Moreover, the specific nature and scarcity of resources makes participation in cooperative networks almost unavoidable, with university cooperation, placements in science and technology parks, as well as forming partnerships in international programmes promoted by the European Union being of particular relevance (Fontes and Coombs, 1997; Crick and Jones, 2000). Previous studies have dealt with small and medium sized companies (SMEs) concentrating on sectors where the resource needs for R&D are high and in which innovation is central for survival, so the establishment of cooperative agreements or participation in networks with complementary resources or access to markets is crucial. It is also important to emphasise the specific nature of the goods or services that are produced and/or commercialised by these firms. Frequently, the disentangling between the product and the service components is very difficult, due to the high level of customisation, with an individual response to each client; this may lead firms to go after the clients or to "project" outward those relationships that were established in the internal market (Coviello and Munro, 1997; Simões, 1997c). Such relationships also lead to gaining a reputation, an indispensable resource in sensitive sectors where confidence building is crucial for establishing a business worldwide.

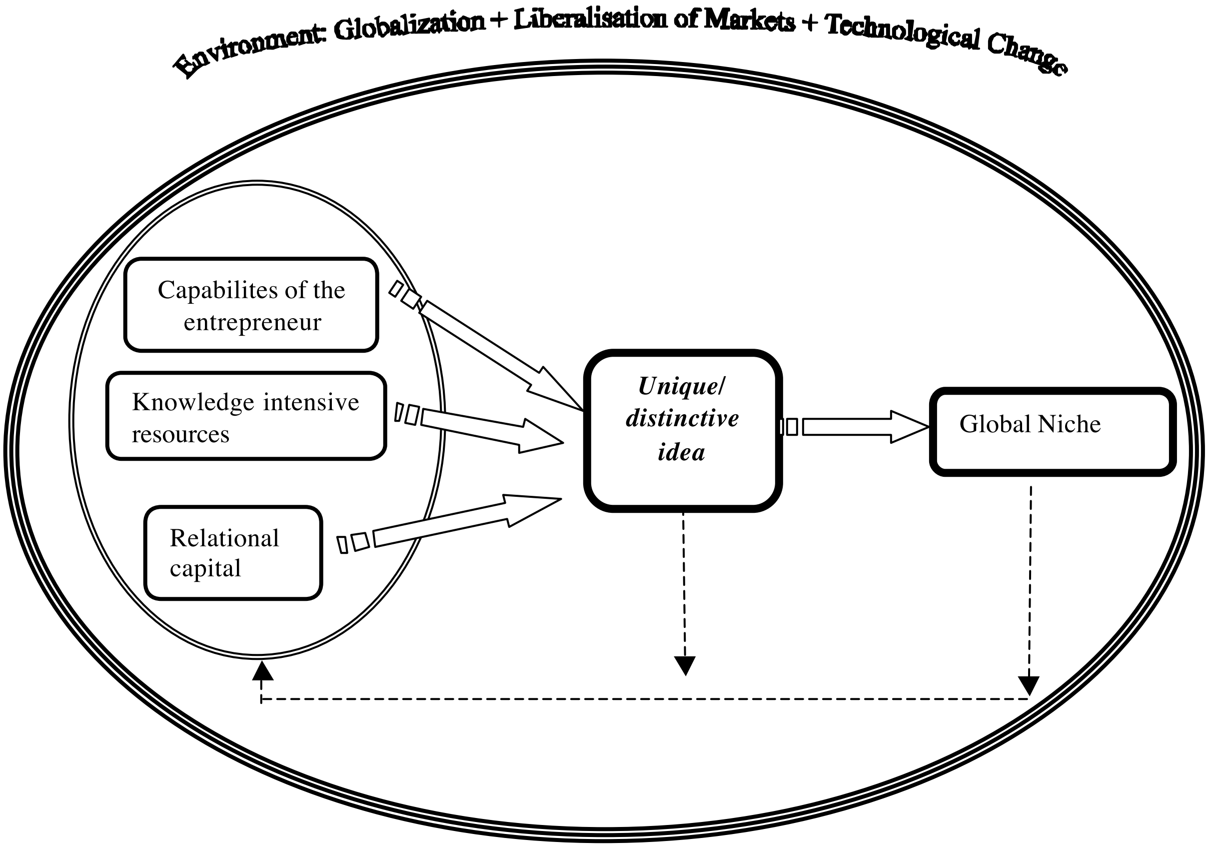
Both the exploitation of intangible resources and the particular characteristics of entrepreneurs leads to a quick entry in international markets. The restricted scope of most new firms, the intense competition in the markets, and the growing consumer power called for a new and different type of strategic response. This response is mostly demonstrated by a firm's performance in a global niche (Oviatt and McDougall, 1995; Teixeira, 2000; Teixeira and Laranja, 2001), where the only way to survive internationally is to overcome and/or avoid competition.

To sum up, it may be argued that the *born global* phenomenon could only emerge in a business environment where the world "shrunk" and time "accelerated" due to the increased similarity of consumption patterns and life aspirations, the liberalisation of markets and technological change, especially in communications and information processing. Within this context, the drive to launch and develop *born globals* is associated with a set of inter-related features concerning not only the resources held, namely knowledge and relational resources, but also entrepreneurial competences and commitment.

Conceptual Framework

On the basis of the findings of the literature revision undertaken above it is possible to design a conceptual framework to understand the emergence and development of *born globals*. Such a framework is illustrated in Figure 1.

Figure 1 - Creation and Development of Born Globals: An Interpretative Framework



Looking at the Figure, one should mention, first of all, the enabling environment which provided the basic conditions for *born globals* to emerge and prosper. Most probably, this phenomenon would not have been possible in the 1960's or 1970's. Putting it in a biology parlance, ecological conditions then were not ripe for this new kind of "animal" to develop. In fact, globalisation was decisive in shaping the competitive context in which *born globals* emerged. This new competitive environment is characterised *inter alia* by the following features: an increasing liberalisation trend, strengthened by the trade agreements in the context of the World Trade Organisation; developments in information and communication technologies reducing communication and transport costs, facilitating instant access to information, and enabling easier international contacts; and the growing importance of international operations in business strategy, which led to intensifying international competition and the setting up of trans-continental alliances. The relevance of orchestrating internationally dispersed resources as a source of competitive advantage is increasingly felt, leading to a new pattern of interactions between ownership and location advantages (Cantwell and Narula, 2001). Simultaneously, inter-firm cooperation of different sorts and durations expanded, leading Dunning (1995) to argue that the old "hierarchical capitalism" was to be substituted by a new "alliance capitalism". This is, in a nutshell, the current business environment, which promotes the emergence of *born globals*.

Such a business environment may be envisaged as a necessary condition for *born globals* to appear. It is not, however, a sufficient one. A number of firms struggle against this competitive backdrop and have never operated abroad. This could be explained by three main factors which are characteristic of *born globals*. The first concerns the distinctive features of entrepreneurs, namely their scientific knowledge, high level qualifications, business and international experiences-all stimulating bold and different forms of behaviour in the coordination of resources at a global level. For the most part these capabilities are complemented by a strong relational capital, associated with participation in R&D networks, privileged relationships with customers and even their personal and business contacts. The third factor is the knowledge-intensive nature of the key resources exploited by these firms, which act as levers of innovation and market differentiation.

These three elements are translated into the creation of a unique or distinctive business concept, difficult to imitate by the competition. The original innovation drive is then continued in an incremental fashion (Oviatt and McDougall, 1995), leading to the sustaining of the firm's competitive advantage.

The experience of entrepreneurs in business, their contact networks, as well as the scarcity of resources, leads them to exploit their distinctive idea through a global niche approach. This happen because of four reasons. The first comes from the global nature of demand (Oviatt e McDougall, 1995) as well as from the possibilities opened by the digital economy (Teixeira and Laranja, 2001). Secondly, given the intangible nature of resources, investment in R&D often becomes considerable, with international sales being an instrument for accelerating the writing off such an investment while providing financial resources for further R&D endeavours. Thirdly, finding a market niche enable the young, limited resources company to avoid intense market competition, and especially the challenges raised by large, resource-rich multinationals. Finally, performance in a global niche is a consequence of the entrepreneur's capacity to identify an, as yet, invisible opportunity.

It is important to recognise also that the explanation of *born globals* is a two-way feedback process, as illustrated by the dotted arrows in Figure 1. The framework shows how in responding market demands, firms may develop new sources of competitive advantage, which may in turn lead to enhanced competitive positions. For example, performance in a global niche with a strong focus on clients' needs, leads to an increase in relational capital and the growth of company networks. Moreover, a global presence helps in "monitoring" competition and the market, enabling a quick response to rivals or to anticipating their movements, and bringing about incremental innovations.

Method

As far as we know, this is the first study specifically focussed on Portuguese *born globals*. Interesting research exercises have been has been carried out on the neighbouring field of NTBF internationalisation (Fontes, 1996; Fontes and Coombs, 1997; Teixeira, 2000; Teixeira and Laranja, 2001). However, they focussed more on NTBF behaviour than on internationalisation processes as such, despite the excellent literature assessment by Teixeira (2000). Therefore, there is a need to open new avenues of research, specifically concentrated on *born globals*, but not just on NTBF *born globals*. We are thus undertaking an exploratory approch. In fact, this is more appropriate for studying a phenomenon which, at least in the Portuguese setting, has been so far little researched or analysed (Ghauri, Gronhag and Kristianslund, 1995; Eisenhardt, 1989).

The main criterion for the choice of case studies was the inability of the theory in use to explain internationalisation moves (Eisenhardt, 1989). The companies studied followed a pattern and exhibited an international behaviour very different from either most Portuguese firms or even their Portuguese competitors in the same industry. Furthermore, there is a need to contrast the more common breed of *born globals* – that is, NTBFs – with less researched cases of *born globals* in traditional industries. The aim is not so much that of contrasting "polar" cases (Eisenhardt, 1991), but rather to see whether "the idiosincratic detail can maximise our theoretical insight", as Vaughan (1992: 175) suggests. The three cases studied may be envisaged as collective cases (Stake, 1994), allowing us to identify the paths followed by firms in their internationalisation processes and the main factors behind taking those paths. Therefore, these explanatory cases are expected to lead to a better understanding of the *born globals* phenomenon. More specifically, this exercise is aimed at contributing to improve and specify the theory in use concerning internationalisation processes (Eisenhardt, 1989; Yin, 1994).

The three cases selected for research concern companies which exhibited swift internationalisation processes, with foreign sales reaching 25% of total in a period of three years after creation, and following non conventional[1] profiles regarding markets and modes of operation. Two cases refer to a knowledge-intensive industry – software –, while the other is from a traditional industry – footwear.

Information was collected from several indirect sources. The main sources were newspapers and specialised journals, the NETIE website[2], and companies' official documentation, including the websites. Special attention was given to the interviews granted by the people responsible for internationalisation in the companies concerned. Previous academic research on the firms was also scrutinised. Differences between sources were checked and subject to further analysis. Having in mind overall project design, no direct contacts with companies were undertaken so far.

Cases

The presentation of case studies will be brief, recognizing that there is a lot information making it difficult to summarize. Each case will be discussed in two ways. The first is a description of the firm's activities, particularly the underlying reasons for its creation, the first steps of internationalization, the forms of operation used and the markets entered. The second will be an explanation of the reasons for such behavior. All the cases will be discussed having in mind the conceptual framework proposed in Figure 1.

Altitude Software

In 1995 the company was officially set up with the name of Altitude. However, it has earlier roots[3], dating back from 1987, when the entrepreneur Carlos Quintas created another software company with the support of a financial organization. Mr. Quintas business experience came from working for various computer technology firms. In 1993, the

Portuguese subsidiary of Alcatel invited the company to develop software for automating the collection of invoices[4]. The entrepreneur, seeing that there was a small but growing segment of an emerging market, developed software for the management of call centers. Although the software was initially developed for the Portuguese subsidiary and for the Brazilian market, IBM also became a client. This was the first step in the internationalization of the firm, which managed to attract clients in Japan and USA.

The election of the software package as "product of the year" in 1997 by the North American magazine *Computer Telephony*, attracted US venture capital, bringing an investment of around 5 million Euros from Insight Capital Partner. This enabled the company founder (and the management team) to carry out a wider and more committed internationalization strategy. Easyphone reputation increased considerably when the company was chosen as supplier software for call center management by Sidney Olympiads. Its customer portfolio includes now firms like Coca-Cola and Shell.

In 1999, the company changed its name to Altitude, a word which has a similar meaning in many languages. This change was accompanied by an innovation that was central to foster the international growth of the company: the development of the concept of "Unified Customer Interaction" (UCI), which enables companies to manage all their contacts with clients using different types of support, including voice, e-mail, e-wap and the web. This package continues to be a unique product at a global level, giving the company a difficult-to-imitate advantage. Altitude innovation capacity was reinforced by a strong investment in R&D. The R&D department, based in Portugal, now accounts for around one third of the company's 400 workforce.

These developments led to a rapid growth in sales: (from 1 million euros in 1995 to 30 million in 2000), mostly based on external markets, which represent 82% of total sales. Altitude is now operating in 37 countries, from USA and Canada, to Japan and Australia. To support and enhance its international strategy, the company opened offices in some countries as a way of strengthening relationships with its clients. To coordinate the marketing strategy in USA and Canada, a new American subsidiary was created in Milpitas, Silicon Valley. This is envisaged as a "strategic leader" (Bartlett and Ghoshal, 1989), being expected to have a very significant role in Altitude's future.

Critical Software

The company was started in 1998 as a spin off from a technology transfer organization of the University of Coimbra (Instituto Pedro Nunes). It was started by three entrepreneurs (João Carreira, Diamantino Costa and Gonçalo Quadros) who carried out their doctorates in the University Department of Engineering at the University.

The company developed a software (*Xception*) for the evaluation and testing of highly critical situations and processes, allowing the detection of failures and recuperation of data. It was the result of 10 years of research in the Department of Computer Sciences at the University of Coimbra, and filled a market niche that was still undiscovered. In the first year, sales were 50 thousand euros, but they quickly rose to 1,5 million euros, for 2000. Foreign markets account for roughly a quarter of total turnover.

International recognition of the company begun with the publication of an article in the prestigious American magazine *Byte*, based on the doctoral theses of the founders. Here they described the potential of the software developed by the company through a case study applied to a Portuguese company. The article caught the attention of NASA who become one of the main clients of the company. Companies like Cisco, Siemens and Motorola are also included in its customer portfolio.

The USA is the most relevant foreign market for the company. It set up a virtual office in San José, California in the International Business Incubator, a base for technology firms without headquarters in the USA. This office works as a special link for supporting American clients. Later, the company opened a branch with several full-time staff, as a way of establishing a more direct line of connection with their clients and partners.

One of Critical Software priority areas of activity is the participation in R&D consortia. The company is currently active in various joint projects coordinated by Chalmers University, involving some of the leading information systems companies. Other partners are the Valencia, Coimbra and Friedrich-Axlexander Universities. This strategy has led Critical Software to participate in an international consortium which developed a project for the European Space Agency.

The company staff is now 40, a quarter of which exclusively devoted to R&D activities. The R&D is headquarterer in Portugal. However the American branch plays a very important role in Critical Software strategy. It is a key instrument for market networking, as well as a technology scanner to keep abreast of developments occurring in the Silicon Valley and, more generally, in America.

Calzeus

Unlike the other cases, Calzeus works in a traditional industry –footwear. Its international involvement and growth is, however, no less remarkable.

Calzeus history starts in 1994 when José Neves, a 20-year old student of economics, left University and decided to start the brand *Swear* which was aimed at the young, unconventional middle-upper market. He worked with his mother, a university teacher, and his father, the owner of a trading company who ran an agency putting in orders to Portuguese footwear companies. The family had been in the footwear business from the time of José Neves' grandfather, but very much in the area of subcontracting as was typical of many companies in the North of Portugal up to the 1990's. In most cases the business was limited to carrying out factory orders from external clients but without any say in product design and no knowledge at all about external markets (Simões, 1997a; Simões, Castro and Rodrigues, 2001).

From the beginning José Neves understood that the concept could have global potential for a young and unconventional segment of the market. So, still in its first year, the company had a stand at international fairs where it won its first external clients. It was a learning phase, still mostly focussed on distribution. The idea of *Swear* stood out from the beginning by its originality, design, innovativeness and irreverence. Its sports shoes were addressed to a market niche which, up until then, had been neglected by large companies. These characteristics led *Swear* shoes to the feet of the Spice Girls, REM and actors in the last film of the Star Wars saga.

Through their business travels, the entrepreneur quickly understood that London was an excellent location to both exploit and enhance the ingredients of the *Swear* philosophy. So in 1996 the company opened its first shop in a multicultural location in London, the "Mecca" of alternative fashion and an *avant-garde* place for new ideas. This shop performed a pioneering role, being a strategic antenna for the company to listen out for and anticipate fashion trends. Being there, enabled Calzeus *setting* and not *following* fashion trends. The shop also created an environment where clients could participate in the "*Swear* tribe" philosophy.

This original business concept was extended internationally through exports to distributors in five continents, which lead the *Swear* philosophy to 35 countries of the world.

Between 1988 and 2000, there was a new gale of international expansion both through Calzeus own shops and through franchising arrangements. Starting from Tokyo and Hong Kong, the company widened its international presence to South Africa, Egypt, Spain, Russia, Poland, France, Taiwan, Norway and the United States. In other countries, various retailers "copied" the shop concept under Calzeus authorization. This relatively akward and mixed process of internationalization enabled the company to learn and to increase awareness of potential of franchising, which is currently its main way of international expansion.

Simultaneously, the company has a Web site which plays several roles: a platform for electronic commerce; a marketing tool providing news and modern music; and a place for diffusing the *Swear* philosophy and promoting communication between fans. Furthermore, the site helps the company to keep its innovation drive by getting feedback, identifying the tastes and needs of its clients, enabling to anticipate trends in the unconventional footwear business.

In the year 2000, Calzeus turnover was around 6 million euros, five times more than in 1995, getting 90% from external markets. The critical links of the company value system are still controlled by the Neves family. Design, marketing and international distribution activities are located in London, while prototypes, manufacturing, final assembly and quality control are based in Portugal. Around 95% of the production is subcontracted to Portuguese and Asian firms.

Discussion

The three cases described above provide evidence of *born globals.* Taking a general perspective, four aspects are worth mention. First, they all started international activities in the first year of their existence. Second, their sales in foreign markets are high, representing 82% for Altitude, 25% for Critical and 90% for Calzeus. Moreover all these companies use different modes of operation simultaneously, from exporting and subsidiaries abroad, to franchising, participating in cooperation networks and international sub-contracting. Finally, their markets do not follow a pattern of increasing psychic and geographic distance: their pioneering markets abroad were all outside Continental Europe. International development patterns of the companies studied are very different from the mainstream internationalization strategies followed by Portuguese firms (Simões, 1997 a, 1997 b; Simões, Rodrigues and Castro, 2001; Dominguinhos, 2001). Those companies think global and use foreign activities both as an instrument to build and exploit competitive advantages and as scanning devices to improve their dynamic capabilities. To some extent they are akin to metanational firms (Doz *et allii*, 1997). Company routines have always been influenced by international perspectives and experiences. So, they don't need to go the painful, slow, resistant-to-change process of organizational unlearning which happens when companies start their internationalisation after a long experience in their domestic markets (Autio, Sapienza and Almeida, 2000).

Entrepreneurs are probably the most distinctive factor in international expansion. In all cases there was a combination of resources, mostly intangible, leading to outward activities from the start. The development of specific, difficult-to-imitate packages in the cases of Altitude and Critical, and an innovative concept in the case of Calzeus. But these assets were accompanied and leverage by the visionary thinking of the entrepreneurs who, from the beginning, positioned themselves as players at the international competition chess-board, with a philosophy of *made by* as opposed to *made in*. As a rule, they (and their management teams) have also shown a strong commitment to company growth and internationalization together with management capabilities. This is even more interesting since, with the exception of Carlos Quintas, founder of Altitude, entrepreneurs lacked a business experience or specific training in marketing or management, although they all had higher education qualifications. Also in the two cases of Critical Software and Calzeus the entrepreneurs international relational capital was lower, although one should not disregard the role played by the social linkages of the father of Calzeus founder.

The international impulse came from the entrepreneurs with an idea and a unique and innovative concept. They were able to identify windows of opportunity which were, up until then, invisible to others. In the three cases intensive knowledge resources are presented. Altitude employs a third of its associates in R&D, and Critical 25%. In the case of Calzeus, the ingredients for success come from the design, marketing and the life philosophy which they offer their clients, as well as from supply chain management.

But companies did not start on the path alone. External linkages played a key role in enabling access to specific resources as well as in opening market opportunities. In the case of Critical, software development was the culmination of a ten-year R&D effort pursued at the University of Coimbra. Access to institutional, reputation-building customers, like the European Space Agency, took shape from an international research project carried out with various public and private partners. For Altitude the relationship with an US venture capital organisation enabled the injection of cash, essential for both the development of UCI and the company's entry into the global market. No less relevant were the relationships with customers. It may be argued that some of them, particularly in the cases of Critical and

Altitude, were key drivers of innovation: their demands led the young companies to "push the envelope" (Bowen *et allii*, 1994), further developing their software competences and exploiting them in new applications. Customers were also relevant in supporting and encouraging internationalisation of those companies. Some customers, such as Alcatel and IBM for Altitude and NASA for Critical, acted like levers at the start of the process. They were also key references for these young, relatively unknown firms to build their international reputation. NASA and Sidney Olympiads were basic "calling cards" for introducing Critical and Altitude, respectively, to new potential clients.

The exploitation of original ideas developed by these three firms took place by focusing on a global niche created by the companies themselves. In the case of Calzeus, it was the taking advantage of a segment that established multinationals such as Nyke or Adidas did not want to touch. For Critical, the non-existence in Portugal of a critical mass for their type of software packages made the external market an obvious option. For Altitude, entering a global niche resulted from the very nature of the software developed.

Entering a global market also appears possible in response to the competitive opportunities that companies faced. In the case of Calzeus there was clearly a bet on a young, urban, global segment of the market with similar needs, making it possible for the company to sell the same thing, in the same way in all places (Levitt, 1983). In the case of the software companies, international protocols in hardware and software areas, the universal use of sources to connect with clients as well as the growing importance of technology in business processes, opened windows of global opportunity.

It becomes clear from the cases discussed above that the capabilities of entrepreneurs, combined with the knowledge intensive nature of the resources exploited and the relationships established with lead customers (Von Hippel, 1998) and other partners, stimulated the creation of a distinctive business idea. But there was simultaneously a strategic thinking which enabled the companies to focus their activities in a global niche. The path followed by the companies studied is very much in line with the conceptual framework presented in Figure 1.

Such a path was marked by an innovative capacity translated in the launching of new products and in the relationships with demanding, sophisticated customers. This resulted in a capital of confidence, which gave a further impetus to international expansion. The setting up of branches in USA by Altitude and Critical was to a large extent motivated by a desire of anticipating and responding customers' needs and of being able to learn from their demands. Calzeus opened mono-brand to promote the diffusion of *Swear* image and values among the "tribe" of fans, as well as to generate the final customer' feedback needed for nurturing a behaviour of innovation and creativity in design.

Strategic capacity was also clear in the choice of markets and modes of operation. In the case of the software companies, they recognized USA as the lead market in this area and made a committed bet there. Though facing a strong competition and some scarcity of financial resources, the companies have chosen to locate where "the action was" (that is, in the most innovative markets) to both respond their customers' needs and to keep abreast and internalise new business and technological developments. This enabled business processes and technological learning, by monitoring the competition, having access to information in real time and developing new knowledge. In the case of Calzeus, the location of their shops was decided by the proximity to the segment of urban, irreverent and unconventional youngsters, which can be found in London or Alexandria, as in New York or Moscow. Company performance in this niche is also illustrated by the use of the Web site as a place for urban youth to the *Swear* philosophy. These behaviours clearly show company capacity to learn through their operations abroad, using these as a privileged source of access to information, whether about their clients or their competition. They are also improving their competences as entrepreneurs, the relational capital of their companies and the distinctive nature of their resources; this leads them to develop new ideas to respond customers real needs. It seems, thus, that the competitive advantage of *born globals* is nurtured through an interactive and dynamic behaviour in which the speed of processing relevant information significantly improves firms capability to provide a fast and creative responses to customers needs.

Conclusions

Received theory (Johanson and Vahlne, 1977; Luostarinen, 1979) argues that internationalisation is an incremental process in which the accumulation of experiential knowledge acts as a key ingredient for firms to increase their commitment to external markets. However, in the 1990's, analysis of young firms business experiences led some authors to challenge this body of theory (Oviatt and McDougall, 1997; Autio, Sapienza e Almeida, 2000). For these types of companies, known as *born globals*, a worldwide business perspective is taken from the beginning. Market selection does not follow a pattern of growing psychic distance, while several modes of operation are used simultaneously, and cooperative arrangements with customers and other partners are frequent.

This paper analysed three cases of Portuguese *born globals*. These companies started international activities in their first year of existence. They located in countries which are neither psicologically nor geographically close to Portugal (such as Egypt, Norway, Russia or the United States). They use the subsidiaries abroad not only to improve customer servicing but also as scanners of new information and knowledge. They try to orchestrate knowledge and relational resources internationally, in a way which is similar to metanational organisations (Doz *et allii*, 1997). Most notably, our explanatory exercise has shown that the *born global* phenomenon is not specific to high technology intensive industries. The case of Calzeus shows how *born globals* may also emerge in traditional industries like footwear.

The explanation of this phenomenon is rooted in various factors. Of all these factors the entrepreneur stands out, although it would be important in the future to identify and classify those capabilities that stimulate an instant international performance. In the three cases analysed in this paper, the following essential characteristics emerged: i) basic technological and/or business knowledge, giving rise to the creation of a unique and innovative concept (internationally recognised with prizes) that enables the firm to enter the international competitive arena and to earn an international reputation; ii) the visionary thinking of entrepreneurs in terms of identifying global windows of opportunity and in taking an outward-oriented approach from the beginning; and iii) management skills in combining resources and in promoting their international development.

This international path is also a result of the relational capital built up by the company. Participation in R&D consortia is important in enabling the access to, and internalising, new technological developments, as well as in gaining institutional "flagship" customers. The triggering factor for internationalisation may also be the challenge raised by multinational customers which act as "godfathers" and facilitators of further international expansion. A common thread in the companies surveyed was the use of relational capital not just as a way to grow but also as a learning device, enabling firms to understand and anticipate customers' needs. This behaviour is very connected to the sort of knowledge intensive resources that are exploited, even in a company from the footwear sector. Here there was the capacity to reinvent an industry through a new concept, showing that the phenomenon of *born globals* is not solely confined to the sectors of new technologies.

Instant internationalisation is also facilitated by current competitive conditions. In the case of software companies it was the similar standards and needs of the companies, and in the case of the footwear company it was the existence of a young, urban global segment. This enabled, therefore, the identification of global niche, which rested undiscovered up until then.

However, though being protected from competitive from large, established multinationals, global niche players need to continuously regenerate and to respond customers' and competitors' challenges to keep their edge. First, by an ongoing innovation drive, and a commitment to faster learning. Second, by the use of various modes of operation which enable a more flexible and efficient response to clients.

A conceptual framework was suggested in this paper to understand the phenomenon of *born globals*. In such a framework, the emergence and growth of *born globals* are associated with the capabilities of entrepreneurs, in particular scientific and managerial knowledge, contact networks and strategic intent (Hamel e Prahalad, 1989), combined with relational capital and the exploitation of knowledge intensive resources. This leads to the generation of a unique or unusual business idea which is later exploited by the company in a global niche. All these developments are enabled by, and take place in a competitive environment characterised by globalisation, liberalisation of the economy and fast technological change. The empirical analysis performed, though explanatory, broadly confirms the appropriateness of the framework to understand the development of *born globals*, irrespectively of the industry concerned.

As indicated in the framework there is a dynamic feedback loop, where market servicing and customers' proximity are deliberately used to help companies to respond to the challenges of the market and to become sources of new ideas and solutions. This market learning process may be equated with the role of experiential knowledge in the Uppsala model. It should be acknowledged, however, that our dynamic feedback loop involves a more strategic perspective. It is not just a matter of accumulating experiential knowledge to support later decisions of additional market commitment. In a knowledge intensive, fast-changing and global environment, with reduced life cycles, the inability to listen and quickly respond to the market puts firm survival at stake. *Born globals* cannot standstill. They need to meet continuous change, and to anticipate it. They face a hard challenge. Most probably, many of them will not have long lifes, at least as independent companies.

This leads directly to raise questions for future research. Firstly, since our approach is only exploratory, it needs to be complemented and supported by further analysis based on the conceptual framework presented here. In this paper firms from the new technology sectors and traditional sectors have been studied together. It is our conviction that this approach should be carried out further, extending the research on *born globals* to firms in other industries, and not just to information technology, biotechnology and biomedical NTBFs. In third place it is important to compare *born globals* with young firms that do not go international or which are more cautions in going abroad, to identify the characteristics which are most likely to influence their contrasting behaviour. Finally, a longitudinal study could be carried on in these companies to try and to understand their paths, and to identify those firms which were able to become successfully established in international markets, while other did not fulfil their initial promises of becoming relevant global players, disappearing or loosing their independence at an early stage.

End Notes

[1] At least from a Portuguese perspective

[2] NETIE stands for the National Association of Electronics and Information Technology Firms.

[3] That is why Teixeira and Laranja (2001) consider Easiphone to belong to the second generation of Portuguese NTBFs.

[4] This process led ultimately to Alcatel subsidiary to be nominated as a centre of excellence in the Alcatel group. For a description of the process from this perspective, see Simões and Nevado (2001).

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