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# THE INTERNATIONAL ENTREPRENEURIAL DYNAMICS OF ACCELERATED INTERNATIONALIZATION

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## ABSTRACT

New forms of international business and multinational enterprises continue to be observed, and finding ways to account for their appearance constitutes a continuing challenge for IB scholars. In this paper we aim to delineate an emerging field of IB scholarship; we focus on the appearance of international new ventures, and the phenomenon of early and accelerated internationalization that they feature, as one that has slipped through the net of some of the existing IB frameworks. We propose that the salient features of accelerated internationalization are best captured in a framework that emphasizes international entrepreneurial dynamics (IED), advocating an approach that captures new realities of the international economy and can provide direction and focus in a promising and growing field in the international business literature. We discuss IED in terms of entry points and pathways mapped by firms as they probe the international business arena, and the key factors that impinge on behavior and strategic choices. In line with recent developments in the entrepreneurship literature, these are grouped into three milestones of entrepreneurial processes that extend across national boundaries: (1) the discovery of new opportunities, (2) the deployment of resources in the exploitation of these opportunities, and (3) the engagement with competitors. Implications for MNE and internationalization theory are discussed.

**Key words**: International entrepreneurship; IED, born globals; OLI; accelerated internationalization

## INTRODUCTION

The field of International Business studies burst onto the academic stage in the 1960s with the broad-based discovery of Multinational Enterprises (MNEs), which were recognized as posing new issues for scholarship. Why did firms run the risks of internationalizing? What were the sources of competitive advantage for MNEs over their domestic rivals? Were there distinctive patterns in the way that firms internationalized, and did these differ according to the national origins of MNEs? Such were the 'big questions' that launched the field, and that sustained it during its first few decades (Buckley, 2002).

With the rise of post-war globalization which accelerated in the 1980s and 1990s, things began to change. Many more firms internationalized, some staying quite small despite growing as they internationalized – a pattern quite different from the earlier phase where firms had to be firmly established and large in order to negotiate the perils of internationalization. The impediments to internationalization, such as barriers to inward and outward Foreign Direct Investment (FDI), started to come down. Institutional changes that included harmonization of international law and business practices, strengthened protection of intellectual property rights, and the advent of sophisticated IT-systems and the Internet created new opportunities for interaction across both country and firm boundaries. Many new players began to appear almost instantaneously, the so-called "born globals" and more generally the "international new ventures" whose primary characteristic was their *accelerated internationalization*.

Now in the 21$^{st}$ century, a case can be made that the impact of globalization is being felt as many new kinds of international new ventures are emerging, and as the possibilities for networking and expanding through partnerships as well as mergers and acquisitions are growing. These developments offer new opportunities, new entry points into the global economy, and new pathways for international expansion, and are doubtless involved in why so many firms have been able to accelerate their internationalization. The need to keep the frameworks utilized in International Business (IB) studies abreast of these developments is also pressing. In this paper we address this issue, and offer an international entrepreneurial dynamics framework to serve as a complement and addition to the current conceptual toolkits used in IB research.

By way of being concrete and setting the tone for the discussion to come, let us start with an example. Proteome Systems Ltd (PSL) celebrated its IPO in October 2004, nearly five years after its founding, by which time it was already an established and influential firm in the new field of proteomics, or protein sciences. The company was founded by a former university professor, together with five collaborators from the School of Biological Sciences at Macquarie University, Sydney. Searching for a direction in which to move, the newly founded firm developed its own proteomics platform, consisting of mass spectrometers, liquid chromatography and reagents, initially as a means of identifying and purifying human proteins of therapeutic interest. But it rapidly became clear that there would be a market for such pioneering instrumentation in the novel and global business of proteomics, successor to genomics as avant-garde in the biological sciences. And instead of seeking to build a proteomics platform *de novo*, from its own resources, the company instead took the step of assembling the pieces of such a platform from the best international suppliers of hardware and software – Shimadzu Corporation of Japan, Sigma-Aldrich, Millipore Corporation, Thermo-Finnigan, Alpha Innotech, and, not least, IBM Bioinformatics.[1]

Once the firm was formed and was promoting its initial product, it sought to develop its customer base internationally from inception. Its pattern of market expansion was rapid and opportunistic, and focused on gaining access to resources wherever they might be available. In the U.S. it expanded by acquisition of the pieces left after a biotech firm in Boston went out of business. In Japan it entered into a strategic alliance with an established trading house, Itochu, which was itself looking to enter high tech areas. In Malaysia it entered the market through the services of an agent. In other words, there was a heterogenous, entrepreneurial process of market entry and resource deployments as and when circumstances and opportunities presented themselves, but always with a view to sustaining a global market presence from the outset.

We see PSL as an interesting firm for international business scholars precisely because the existing frameworks dealing with the sources of advantage of international

[1] PSL is the subject of a Harvard case study, see West (2001).

firms and internationalization capture only some of the features of this firm's international expansion. This firm did not internationalize against the odds, overcoming liability of foreignness and undergoing a lengthy learning process as it expanded from one country to another – as we would expect from existing internationalization frameworks, and particularly from the Uppsala sequential learning model. Rather the firm and its distinct business model were rapidly enfolded into the global biotech economy as the natural place in which to do business – dealing with sophisticated suppliers of protein science instrumentation, and sophisticated customers, around the world. It would have been perverse or outright impossible for PSL to limit its business to one country only.

Nor does PSL draw its advantages solely from sources captured in the traditional frameworks, such as the OLI (Ownership, Locational and Internalization) framework based on comparative static, transaction cost reasoning. PSL draws its advantages from the assembly of a proteomics platform, to which numerous international firms contribute, and which is coordinated and marketed as such by PSL. Hence while PSL draws competitive advantages from its core intellectual resources, which are internalized, it builds and develops its actual product from resources garnered where they are available. Hence it is not just PSL's owned assets that are exploited in international markets, but its ability to manage and access the assets of others through inter-firm networks. And these assets – such as Shimadzu's mass spectrometry capabilities – are also found in numerous locations. So PSL is playing a crucial coordinating role across these existing international players with their own competitive advantages.

Undoubtedly the existing frameworks in international business continue to provide us with powerful insight into the workings of the international economy and MNEs. The point we are making is that they are bounded in their scope, and give little traction in many of the cases that are of significant interest in the global economy in the early years of the 21st century, such as cases of outsourcing of critical resources and accelerated internationalization exemplified in the case of PSL. In this article, we propose that the field of International Business has everything to gain by tackling cases like PSL in a fresh light, namely one that emphasizes the spectrum of international entrepreneurial dynamics involved in the appearance of such firms. We see such a fresh perspective as a complement and addition to the existing frameworks, with their emphasis on long-established MNEs, comparative statics and transactions costs reasoning.

Such an emerging field of scholarship places the emphasis on the entrepreneurial initiative associated with new internationalizing firms, their early entry points into the international economy and sometimes very rapid paths to becoming established international or global players, and the outcome of their early engagement in competition with other international firms. This is a field of scholarship that is closely aligned with current developments in entrepreneurship research (Shane and Venkataraman, 2000), promising and facilitating co-evolution and cross-fertilization between academic fields (Etemad and Lee, 2003). Our focus is on the entrepreneurial processes that stretch across the discovery of new business opportunities in an international context to aspects of exploitation including the redeployment of resources and the ultimate engagement with international competitors that takes place before organizational and industry maturity sets in. It is our concern in this paper to provide some justification for the emergence of this new field of scholarship, and highlight some of the ways in which it offers solutions to issues that remain unresolved in the existing International Business (IB) paradigm. In doing so, we aim to provide direction and a basis for future research, and to propose new theoretical approaches in an increasingly important field in the IB literature.

The paper is structured into three main sections. The first section illustrates the emergence of new types of multinational in the global economy, discusses how their emergence relates to substantial changes in the international business environment, and explores the limited applicability of existing theories and paradigms in the IB literature in capturing the reality of the development of these firms. The second section delineates our view of the new field of scholarship – international entrepreneurial dynamics (IED) – and identifies three conceptual organizational points or milestones around which the entrepreneurial processes that extend across national boundaries may be discussed. These are: (1) the discovery of opportunities, (2) the deployment of resources in the exploitation of these opportunities, and (3) the engagement with international competitors. The third section then discusses how these three aspects of international entrepreneurship may be incorporated within the field of study of international business. Finally we offer some concluding comments, directed towards the question whether this emerging field of scholarship may prove to be supportive of empirical and theoretical work in future years.

## NEW CURRENTS IN THE FIELD OF INTERNATIONAL BUSINESS

In the past decade, a host of new firms have arisen which are active in the global economy while bearing little resemblance to the giant multinationals of popular imagination. By the beginning of the 21st century, there were over 64,000 firms operating internationally, controlling at least 870,000 foreign affiliates (UNCTAD, 2003).[2] How much do we know about these firms in terms of their origins, their mode of operation, their strategies and organization (Stopford, 1998)? Certainly they include traditional MNEs which have vast resources, operations in more than 100 countries, and multiple sites covering R&D, production, logistics, marketing and customer support – the General Electrics, GMs, IBMs, Motorolas, ABBs, NECs, Siemens, and Unilevers. But these firms are in a very small minority, albeit a very influential minority. The majority consists of firms which are quite different from these conventional and resource-rich MNEs in terms of origins, growth patterns, and organizational forms and strategies, and which have received much less conceptual and empirical attention.

### The New Species of MNEs in the Global Economy

The large number of firms which have come to populate the global economy include, for example, smaller MNEs, both in terms of resources, staff and capital, which we might refer to as "infant multinationals" (Lindqvist, 1991) or "micro-MNEs" (Hedlund, 1993; Dimitratos *et al.*, 2003; Ibeh *et al.*, 2004). They include small or medium-sized firms, which originate from the advanced industrial countries but attack the world market with such vigor and with such innovative strategies of integration that they can be classified as "newcomers." Firms like the Dutch foodstuffs firm Nutreco, or the German renal dialysis machines firm-turned global health services provider, Fresenius, or the US-based CMS

[2] In comparison, there were about 7,000 internationally active firms in the 1960s, and 37,000 firms with 170,000 affiliates in the early 1990s (UNCTAD, 1999).

Energy which became a global energy giant within a decade, are all examples of this new phenomenon.

Other firms are included which almost bypass internationalization as a process since they are started and operate from day one in global markets as global players, servicing their customers wherever they are to be found. These are the firms that have been called “global start-ups”, “born globals”, or “international new ventures” (Rennie, 1993; Oviatt and McDougall, 1994, 1995, 1997, 1999; Knight and Cavusgil, 2004; Bloodgood *et al.*, 1996; Kohn, 1997; Madsen and Servais, 1997; also, Rialp *et al.*, 2005). These firms are increasingly active in the international economy; they are all characterized by their accelerated internationalization (Shrader, Oviatt and McDougall 2000); and they are thereby changing the dynamics of international competition (Coviello and McAuley, 1999).

Another cluster of firms, many of which originate from the peripheral regions of the global economy, may be labelled “latecomer MNEs” – since they arrive late on the international stage, but can thereby draw advantages not available to their earlier counterparts. These firms have pursued accelerated internationalization over the course of the past decade and acquired global reach in a fraction of the time taken by their predecessors, typically on the basis of leveraging or re-configuring the value chains of established competitors. Acer is a good example (Bartlett and Ghoshal, 2000), as are others from late-developing countries such as Li & Fung from Hong Kong (Magretta, 1998), or the Hong Leong group from Singapore and South East Asia (Yeung, 1999). Ispat International, started by an entrepreneur from India, is now the world’s most globalized steel company (Sull, 1999), while Cemex from Mexico has emerged as the world’s third largest producer of cement and the world’s most global supplier and producer (Roberts and Podolny, 1999). Only a few years ago such firms from developing countries were widely viewed as being of “marginal” significance only, this most definitely cannot be said of them today.[3]

[3] Yet more firms have always been “global” but kept quiet about it, focusing their efforts on maintaining a commanding position in a very narrowly defined niche market. Firms like Hauni, which after several decades continues to supply 90 percent of the world market for cigarette-making machines, show that suitably focused geocentric firms can sustain their world position against the efforts of even huge multinational competitors like a General Electric. These are the species “global niche players” and “hidden champions” (Simon, 1996).

## The Changing Setting for International Business Research

The emergence of these new species of MNEs reflects ongoing and rapid changes in what Osborn and Hunt (1974) identify as the macro or aggregate environment. These changes include enhanced geographical mobility of individuals, more ready access to information about internationally dispersed resources and customers, and regulatory changes that further the integration of international markets for capital, products, and technology (Dicken, 2003).[4] The new species of MNEs are different from traditional multinationals in that they are created by internationally experienced individuals and global in their outlook already from inception, seizing the opportunities offered by an increasingly integrated and inter-connected global economy (Chetty and Campbell-Hunt, 2004). As a result, firms identified as born globals or international new ventures have been found to target and penetrate international markets from very early on, and in some cases from the outset organize operations around internationally dispersed knowledge and resources (Jolly *et al.*, 1992). Our Proteome Systems Ltd (PSL) case is one good illustration of these new species of firms.

In contrast, what are today established multinational corporations had to be hardy and self-sufficient as they launched themselves in often troubled international waters. Lacking international experience and information about the international business environment, they tended to step cautiously into foreign markets (Johanson and Vahlne, 1977, 1990), so that their foreign operations only gradually evolved into more firmly embedded relationships with actors in host country environments. Hence the incremental internationalization patterns observed among some of the older and now well-established multinationals (Johanson and Wiedersheim-Paul, 1975). In the inter-war period, European and U.S. MNEs were forced to operate within a regime of increasingly protected and closed markets, and found themselves constrained to produce mini-versions of themselves as more or less self-contained and strategically independent national subsidiaries. They competed side-by-side with a number of domestic players, protected

[4] While broadly based and far-reaching, these changes are not necessarily universal. For a critical assessment, which emphasizes the "triadization" of the international economy, see Rugman (2000).

by tariff barriers and other impediments to competition and the transfer of goods across national borders. In the face of slowly integrating world markets after the Second World War, it took decades before MNEs started moving towards globally coordinated networks in a more systematic way (Sölvell, 1987; Bartlett and Ghoshal 1989).

In the business environment that characterized the first three decades of the post-war period, the period which also saw the broad-based discovery of the MNE as an object for scholarly research, it was perhaps inevitable that theorizing concerning the nature of the MNE should focus on its technological superiority compared with domestic producers. Theoretical development emphasized the importance of market imperfections, adding advantages of multinationality related to discriminatory pricing, transfer pricing schemes, and arbitrage across different tax regimes. Early formulations of the theory of multinational advantage, developed by such scholars as Hymer and Kindleberger in the 1960s, focused precisely on the means through which the MNE could mobilize its unique capabilities and trans-border assets to overcome perceived operational and informational deficiencies with respect to domestic rivals. In the hands of Buckley and Casson (1976), Dunning (1980, 1988) and other contributors to the "Reading School" this was elaborated into an extensive set of propositions concerning the sources of advantage – ownership, locational, and internalization – available to a multinational firm that utilized internalized asset transfer and global value chains to maximize the potential to exploit its advantages (for a recent review of this literature, see Pearce, 2004).

Historical circumstances in this way had a significant impact upon the selection of study objects, but also upon the theoretical approaches applied to understand and explain their fundamental nature and behavior.

The point about the new species of multinationals is that their creation and evolution into global players has been imperfectly captured by the established IB literature. At the fundamental level, the IB literature has tended to downplay the processes surrounding new firm formation and early evolution, and instead mainly contemplated the nature of MNEs as already established and mature entities.[5] Equally important, the type of formative and dynamic processes represented by the new species of multinationals does not offer a good fit with essentially comparative and static approaches applied to understand the MNEs. Let us briefly review the creation of the OLI framework, not to target it for criticism, but to understand its fundamental scope and assumptions, to see why it provides limited traction when addressing the new realties of globalization and the new species of multinationals.

**Creating the OLI Framework for Capturing the Nature of the MNE**

From the outset, the discussion of the theory of the MNE was based on the observation that large multinationals existed in a population of smaller and domestically oriented firms. The main question was not how these MNEs had gotten there in the first place, but rather what made them superior to their smaller and locally confined counterparts.[6] Hymer (1960/1976) opened the way to developing a theory of the multinational based on market imperfections and the capacity of firms to extend their advantages through their own internal organizational procedures. Kindleberger generalized these insights, and identified several cases of market imperfections which could account for the activities of MNEs.

The next step was to link these arguments for advantage based on market imperfections with the ideas of transaction cost economics, to create an integrated theory of the MNE based on its capacity to internalize activities which would otherwise be conducted externally through market relations. This was the step taken by the British economists Peter Buckley and Mark Casson (1976).[7] Thus the international firm was accommodated with the view of the firm as an efficiency-improving “island of organization” in a sea of market-mediated transactions, where the firm’s boundaries would be determined by the point where transactions costs of maintaining processes

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5 There are of course numerous studies on the emergence and historical development of MNEs (Hertner and Jones, 1986; Wilkins, 1991), but the entrepreneurial processes surrounding the formative years have traditionally played a marginal role both theoretically and empirically.

6 Wilkins (1986, 1988) explores this issue in the context of European and American multinationals, and much in line with subsequent perspectives on the nature of the MNE emphasizes the importance of home-grown advantages and sequential investment and internationalization patterns.

7 See Buckley and Casson (1976) for their definitive treatment, and Rugman (1980), Hennart (1982), Casson (1987), and Buckley (1988) for further elaboration of the “internalization” theory of the MNE.

internal to the firm equaled the costs of outsourcing those activities to external suppliers. Thus they brought the international firm within the ambit of the transaction cost economics reasoning pioneered by Coase and generalized by Williamson (1979).

By the end of the 1970s, this predominantly Anglo-American approach to theorizing the MNE was consolidated in the "internalization" view, cast by Dunning in terms of an "eclectic" theory of multinational advantage. Dunning brought together the advantages that international firms associated with extending their operations abroad, in terms of three characteristics or sources. There was the potential advantage derived from extending their proprietary assets abroad, such as brands or proprietary technologies, bringing greater fire power to bear on their domestic competitors in host markets (the "ownership" advantage). There was the potential advantage of being able to integrate activities across sectors of the world with very different factor costs and resource costs (the "location" advantage). Finally, there were the potential advantages derived from building economies of scale and scope through internalizing activities spread across borders that would otherwise be dispersed between numerous firms (the "internalization" advantage).

The eclectic "ownership-location-internalization" (OLI) theory of multinational activity became the arguably dominant view in the 1970s and 1980s, and continues to be perhaps the most influential theoretical account of the existence of MNEs as such, and of the sources of their advantages over domestic rivals. It is clear that the OLI theory never set out to capture new firm formation and early development processes, but is based squarely on the experiences of large, well-established international firms. The actual origin of firms, the process of the firm's internationalization, and the transformation of the sources of competitive advantage are of only limited interest to the theory. Thus it has little dynamic content, and little explanatory purchase on novel ways of implementing an internationalization approach.[8]

It is perhaps the limited concern with origins and early developmental processes that explains the theory's strong reliance on what are assumed to be ownership advantages developed in the home country. Despite observed asset-seeking behavior, aimed at protecting or augmenting *already existing* advantages (Dunning, 1998), there is limited emphasis in this theoretical account on the firm that moves internationally in order to *acquire resources*, or to *enhance* its existing resources and capabilities. There is little recognition in the theory for the firm's expansion internationally being seen as a way of anticipating and building its competitive position – in a way that would not be possible in the firm's domestic market, which may be too small, or too undeveloped, to serve such a purpose. Thus there is an important sense in which strategic elements are missing from the OLI framework.[9]

Finally, with its emphasis on *internalization advantages*, the established paradigm involves little recognition of firms whose primary competitive advantage rests in networks of external relationships. In this respect, it downplays or neglects that part of the strategy literature which has relatively recently come to argue for the competitive advantages that are tied to network positions. Such network positions may be associated with privileged and early access to knowledge and information, or the attractiveness or value as a collaborator which further enhances knowledge assimilation capabilities (e.g. Dyer and Singh, 1998; Gulati *et al.*, 2000; Kogut, 2000). Dunning (1995, 2000) of course recognizes the growing importance of inter-firm alliances for competitive advantage, but network relationships are mainly seen as a complement to the traditional ownership, location and internalization advantages.

Our point in making this historical digression is to argue that the scholarly field of international business has never really transcended these early beginnings. It is still mainly concerned with the large and well-established multinational (cf. Dunning, 1995: 471-472), and its struggle to exploit internalized advantages and to remain effective in increasingly competitive and globalized markets. The field remains anchored in economists' theories that compare one static situation with another – as in theories of market entry that compare the relative transaction costs of entering a market via a joint

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[8] Dunning (1988) addresses the framework's alleged inability to account for dynamics or the process of change of international production, but mainly focuses on the dynamics of investment development paths at the country level.

[9] The absence of a strategic element to the OLI framework is the focus of several recent studies. Melin (1992) initiated a discussion of internationalization as driven by strategic motives, while Dunning himself (Dunning, 1993, 2000), and Dunning and Narula (1995), in the context of internationalization of R&D activities, discussed such strategic issues, in the form of "strategic asset seeking" FDI.

venture with entry via a wholly-owned subsidiary or via a strategic alliance with a distributor. Such a comparative static approach is ill-equipped for dealing with firm origins, the increasingly varied sources of competitive advantage, and the motivations and pathways of globalization and international expansion on the part of the new species of MNEs we identified above (McDougall, 1989; McDougall *et al.*, 1994).

An alternative and complementary approach, we submit, starts with entrepreneurial initiative and the processes underlying the firms' entry into the international or global business arena. It is necessarily disequilibrium oriented rather than based on comparative static, starting with the subjective, creative and pro-active strategizing that underlies the recognition of new business opportunities and location and establishment of assets abroad. This alternative approach brings into focus the international entrepreneurial dynamics of international expansion, rather than its comparative static features.

## INTERNATIONAL ENTREPRENEURIAL DYNAMICS

We now turn to outline the key features of international entrepreneurial dynamics – seen as a process *sui generis*, to be pursued as a core activity within the field of International Business studies. In this framework we bring together the essential features of both the entrepreneurial process itself, seen as a dynamic process that disturbs the status quo, and various aspects of the process of discovering new business opportunities and exploiting them through internationalization and engagement in competition.[10] We see strong advantages to such a combination, since entrepreneurship on its own can be assessed too easily without regard to the business realities involved, and internationalization can be viewed too much as an issue involving established multinationals, and not enough as an entrepreneurial process upsetting the status quo.

The field of entrepreneurship is itself undergoing intense and potentially far-reaching change, and we wish to import into the IB literature the most dynamic of these scholarly shifts. A recent review of the literature by Shane and Venkataraman (2000)

[10] This coincides with Toyne and Nigh's (1998: 865) suggestion that: "…we need to have a much deeper understanding of the process that creates, maintains, and eventually destroys the firm…"

provides us with a starting point. The authors begin their survey of entrepreneurship as a field of study with the provocative statement that: "For a field of social science to have usefulness, it must have a conceptual framework that explains and predicts a set of empirical phenomena not explained or predicted by conceptual frameworks already in existence in other fields. To date, the phenomenon of entrepreneurship has lacked such a conceptual framework" (2001: 217). They then outline their way of developing a framework that should guide research on entrepreneurship. They reject approaches that are based on equilibrium analyses, on the grounds that entrepreneurial dynamics only make sense in disequilibrium settings. While ascertaining the role of the individual in entrepreneurial processes, they also reject approaches based on the attributes of certain people (and thus avoid the inconclusive debates over what personal characteristics go to make up the entrepreneur).

Shane and Venkataraman offer as definition of this field that it is "the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (2000: 218). What then distinguishes *international* entrepreneurial dynamics from traditional entrepreneurship studies is that it is concerned with processes that extend across national boundaries, and with the existence of a set of unique opportunities and constraints that influences the nature and unfolding of the entrepreneurial process (McDougall and Oviatt, 2000; Acs *et al.*, 2003; Wright and Dana, 2003). Specifically, the aggregate of locally contained and "sticky" resources and knowledge provides a global opportunity set that can be of unique value to those who can identity and act upon it (e.g. Pavitt, 1988; Porter, 1990; Maskell and Malmberg, 1999).[11] At the same time, geographical distances and institutional differences impose persistent but to a certain extent negotiable constraints on the discovery and exploitation of the opportunities inherent in the global opportunity set. These particular aspects of international business form the cornerstones for addressing and analyzing entrepreneurship from an international perspective.

While accepting Shane and Venkataraman's basic point of departure, international entrepreneurial *dynamics* emphasizes the point that the exploitation of opportunities extends beyond the founding and initial organization of a legal entity (Madsen and

[11] For an alternative perspective on non-convergence in the global economy, see Craig *et al.* (1992).

Servais, 1997), to include processes of change involving subsequent pathways of organizational development and the firm's adaptive engagement with international competitors. Although there is no distinctly observable point that marks the end of entrepreneurial processes, and indeed it could be argued that entrepreneurship and adaptation are ever present in the activities and strategizing of firms, we propose that the study of entrepreneurial dynamics becomes less fruitful under mature industry conditions, where competitive interaction reflects entrenched competitive positions and is associated mainly with marginal operational adjustments.

While entrepreneurial processes typically involve the parallel execution of a variety of tasks and activities, the significance of the international dimension is highlighted by distinguishing between three organizing principles, or milestones, of the entrepreneurial process: (1) the discovery of opportunities, (2) the deployment of resources in the exploitation of these opportunities, and (3) the engagement with international competitors. Very much in line with the suggestions by Hägerstrand (1985, 1991), the first of the milestones connects the geographical movements of the individual and prospective entrepreneur to the firm's potential and fundamental entry point into the global economy.[12] The deployment of resources milestone involves a more elaborate scheme to capture these entry points and how they map into different pathways of development and growth in the international marketplace. Engagement with international competitors, finally, focuses on the consequences of competition for the strategy and organization of internationalizing firms in their early stages of development.

## The Discovery of Opportunities

The discovery of new business opportunities is concerned with the process by which the individual identifies unobserved or latent combinations of resources and customer demand, including the identification of new, innovative solutions to the supply of already existing products and services (Schumpeter, 1934, 1942). It may also be associated with the more or less exact imitation of ideas and business concepts which have already been pioneered and proven by others, and application of these ideas and concepts in new contexts (e.g. unexploited geographical markets; Ward, 2004). The discovery of new business opportunities takes place in a disequilibrium setting, implying asymmetrically dispersed knowledge, subjective world views, and unanticipated change caused by incomplete information and genuine uncertainty (Hayek, 1948; Mises, 1949; Kirzner, 1997). As individuals tend to notice information that relates to and can be integrated with what they already know, a "given" opportunity may not be generally recognized and the same opportunity be given different interpretations depending on the individual (Shane, 2000).

It is the entrepreneur who discovers or "sees" a new business opportunity (Kirzner, 1973, 1979, 1985). Discovery connects prior experience and knowledge with observations of external conditions and events, requiring immersion in the "field" to determine whether a perceived opportunity indeed represents an attractive profit opportunity (Shackle, 1973, 1979). It is typically the observation of some external conditions or events that generates the impulse or vision that triggers further pursuit of a particular business idea (Aldrich and Whetten, 1981; Butler and Hansen, 1991; Aldrich, 1999), involving elements of evaluation and refinement which may occur sequentially, simultaneously or typically as part of an iterative process (Long and McMullan, 1984; Herron and Sapienza, 1992; Ardichvili *et al.*, 2003).

As in the case of PSL, the discovery of new business opportunities builds on prior experience and attention to external conditions and events. It is therefore in several ways highly dependent on the geographical movements of individuals and prospective entrepreneurs (Ellis, 2000). Place-bound individuals tend to develop interests, skills and knowledge that reflect local agglomerations of knowledge and economic activity, biasing spheres of attention and the interpretation of what constitutes a promising new opportunity. Likewise, the geographical movements and whereabouts of the individual determine the scope of social networks, which can serve as important conduits for information about new business opportunities. Generally, the expectation is that the more internationally travelled and experienced the individual, the higher the probability that he

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[12] Hägerstrand (1991:145) suggests that: "…there is a purely theoretical case for taking a closer look at the individual human being in his situational setting. To do so would improve our ability to relate the

or she sets in motion the transformation or integration of traditionally "sticky" agglomerations of knowledge and economic activity. These are also the individuals who tend to discover business opportunities representative of the new species of MNEs, combining geographically dispersed skills, knowledge, and resources with sales that are predominantly generated outside the entrepreneur's home country.

Yet, fine-grained data on the international movements of (prospective) entrepreneurs and evidence concerning the effect of such movements on opportunity recognition is scarce and scattered in the literature, and herein lies a substantial and largely untapped potential for further theoretical and empirical work. While the extant literature on born globals agrees that the international experience of entrepreneurial teams or managers influences their international outlook and the firm's internationalization process (e.g. Oviatt and McDougall, 1995; Madsen and Servais, 1997; Crick and Jones, 2002; Andersson and Wictor, 2003; McDougall *et al.*, 2003), much more is to be discovered about the various dimensions of international movements and experience, how it may be linked to the concept of global vision, and how it coincides with typical ways of discovering and connecting geographically dispersed skills, knowledge, resources and customers (Dimitratos and Jones, 2005; Zahra *et al.*, 2005).[13] To capture the critical drivers of opportunity recognition (determining for example the likelihood of identifying new, innovative solutions vs. imitating already pioneered concepts), future operationalizations may make a distinction between scope and depth of exposure, i.e. the number of locations an individual entrepreneur has been exposed to and the length of stay in each location, and also account for the diversity of locations in terms of skills, knowledge and economic activity (Zahra *et al.*, 2000).

**Resource Deployment**

behaviour of small scale elements and large scale aggregates."

[13] The measurement of international experience has been rather rudimentary. Some of the employed and often binary measures include work experience outside the home country and experience in selling to foreign markets (Rueber and Fischer, 1997), previous international work experience and international schooling (Bloodgood *et al.*, 1996), and experience in international business as part of international entrepreneurial orientation (Knight and Cavusgil, 2004).

The individual's decision to act upon a discovered opportunity depends on prior personal skills and knowledge and perceived support from social networks (Krueger and Brazeal, 1994; Krueger, 2000; Krueger *et al.*, 2000). As in the case of opportunity recognition, the chain of influence that runs from geographical movements through the formation of social networks and business contacts contains important information about the type of organization individuals are most likely to establish. The decision to pursue a discovered opportunity involves the creation of a firm as a legal entity, in most cases followed by a period of active resource deployment (Katz and Gartner, 1998). It is the way in which both internal and external resources, activities, and routines are coordinated and continuously redeployed that creates the unique characteristics of the firm and determines its level of success in the marketplace, but also as we will see in a moment constrains its further development.

In the conventional approach to discussing the impulse to internationalization, firms are seen to be taking with them abroad the competitive advantage built up at home, to a large extent through the internalization of resources, activities and routines. By contrast, the new species such as born globals and latecomer MNEs have often been concerned not with exploiting advantages built up at home, but to leverage or gain access to dispersed skills, knowledge, and resources through their international operations.[14] They further tend to rely extensively on international cooperative agreements, partnerships and joint ventures, which reduce the high level of risk involved in their leveraged strategies, in combination with internalized operations to achieve the desired coordination of resources, activities and routines (Oviatt and McDougall, 1994). In the case of PSL, it was a natural step to tap the resources of leading firms supplying parts of the proteomics platform in their different national locations, and for the founders of the

[14] The international business literature provides many examples of latecomer multinationals going abroad in search of new resources in the form of connections, partnerships, alliances as well as customers and suppliers. Chinese firms expanding abroad from Taiwan, Hong Kong and Singapore certainly fit such a pattern. For example, Yeung (1999) surveyed firms internationalizing from Hong Kong, and found a pattern of "horizontal integration" to be important, while the same scholar surveying firms expanding abroad from Singapore found that their most common motive was "market reach" –meaning their desire to encompass the leading markets and the assets within them in their field. Likewise Chen and Chen (1998) found that Taiwanese firms expanding abroad did so for the pursuit of assets available only in advanced foreign countries.

firm to be ‘drawn’ into these global alliances rather than creating them against the ‘resistance’ of the international economy.

The established literature on the process of internationalization again reflects its international business origins and the historical concern with large multinationals. Internationalization theory has tended to use a “push-oriented” concept, with the outward movement of the firm propelled by some pre-existing competitive advantage and economic objectives. Thus Welch and Luostarinen (1988: 36) define internationalization as “the process of increasing involvement in international operations.” This definition implies that internationalization is a unilinear sequential process of “increasing” involvement, which excludes the cases where firms start with an international presence or cut back on their international exposure. Calof and Beamish (1995: 116) sought a way around this problem with their definition of internationalization as being “the process of adapting firms’ operations (strategy, structure, resource, etc.) to international environments”. This would appear to be a superior formulation, in that it does not pose any specific direction on the process of engagement with the international economy.[15]

To accommodate the entrepreneurial dimension of accelerated internationalization, we submit that internationalization is to be reconceived as a “pull” rather than a push. It is the exposure to the resources and opportunities in the international business environment that draws entrepreneurs and firms into involvement across national borders, through contracting, licensing or other transacting relationships. Bearing this in mind, internationalization may be defined as *the entrepreneurial process of the firm’s becoming integrated in international economic activities*. The term “integration” covers both cases of push and pull, and provides a more comprehensive formulation, seeing the global economy as pre-existing and offering resources to the firm which acts upon entrepreneurial insight. In addition to covering the well-known and studied cases of export activity and FDI, such a broadly-based definition encompasses the experiences of the new species of multinationals found in the global economy. It emphasizes the point that the discovery of new opportunities, new firm formation and

[15] A similar tack is taken by Hitt *et al.* (1997) who link internationalization to diversification, and define it as “expansion across the borders of global regions and countries into different geographic locations, or markets.”

internationalization are processes of engagement and creation of inter-firm linkages of the global economy, driven by entrepreneurial observation, calculation, and strategic action.

These considerations enable us to construct a new perspective on the internationalization process, which starts with the geographical movements and pre-venture activities of the entrepreneur, and translates into entry points and pathways of resource deployment in the global marketplace. Introducing a dimension that captures the relative importance and use of external resources, these entry points and pathways may be plotted against a framework that in relative terms captures: (a) the geographical dispersion of employed skills, knowledge, and resources, (b) the degree of internationalization of sales, and (c) the predominant way of accessing and coordinating resources, activities, and routines (Figure 1). Obviously, in measurement terms these entry points are open to almost infinite variation and disaggregation, but we are here emphasizing the basic dimensions which are most frequently discussed in the extant literature. Making the distinction between skills, knowledge, and resources and sales is an important extension of previous frameworks (Oviatt and McDougall, 1994), because it captures the fundamental role of the entrepreneur as an arbitrageur or innovator in-between markets for resources and customer demand.

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Figure 1 about here

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While identifying three key features of firms that are active in the global marketplace, the framework is flexible enough to accommodate the introduction of a number of additional considerations that may distinguish old from new species of multinationals. For example, in the context of externally sourced skills, knowledge, and resources, it may prove useful to make a distinction between arm's-length contracts and embedded relationships, or more generally to consider the relative use of in-between forms of market coordination. In terms of international sales, a further differentiation could be made with regard to the number of customers served and targeted countries, and the range of alternative distribution or sales channels employed in the exploitation of new entrepreneurial ideas (McDougall, 1989). Finally, by allowing for the existence of multiple entry points along three continua the framework circumvents the need for identifying a strict and commonly agreed upon definition of born globals or international new ventures. Instead, it makes possible the comparative study of these new species and the more traditional MNEs, in this sense unifying rather than fragmenting theoretical and empirical discourse in the IB field.

By probing more deeply into the history of the individual entrepreneur, the opportunity recognition and resource deployment milestones of international entrepreneurial dynamics extend the scope of IB research and international entrepreneurship to processes that *precede* the creation of formal or legally defined firms (Ricks, 1985; McDougall and Oviatt, 2000). As an important consequence of this, internationalization to be perceived as a process that does not start with the firm's first engagements in foreign markets, but has an important and potentially very influential pre-venture history. While much is to be learnt about the relationship between the individual's geographical movements and the origin and nature of entrepreneurial ventures, the analysis of how fundamental entry points into the global marketplace relate to firm survival and various measures of performance represents a second unexplored but from a managerial point of view highly relevant issue for future study.

***Pathways of Resource Deployment***

It is expected that entry points into the global economy have a significant impact on further pathways of resource deployment.[16] Depending on their respective entry points, entrepreneurs and the firms they create may become particularly knowledgeable about certain ways of accessing and coordinating resources, activities and routines, tainted by personal preferences and the organizational modes the entrepreneur is most familiar with (Madhok, 1998; Burton, 2001; Johanson and Vahlne, 2003). Once the firm is established, inertia and endogenous processes lead to predictable yet potentially ineffective

[16] Some authors have proposed general patterns of internationalization among born global firms of specific entry points (Hashai and Almor, 2004), sometimes with a single focus on markets as opposed to the configurations of skills, knowledge, and resources that underlie the entrepreneurial idea (Coviello and Munro, 1997).

applications of practices and organizational forms, for example with respect to the employment of cooperative agreements and strategic alliances (e.g. Walker *et al.*, 1997; Gulati and Gargiulo, 1999).

Yet, given overall expectations about path-dependency and stability in terms of resource deployment, it may well prove to be the case that certain entry points into the global economy are inherently more unstable than others. To illustrate, entrepreneurial ideas that spring out of the global opportunity set sometimes reflect complex yet comparatively transparent arbitrage across national borders, where initial sources of profit only to a limited extent depend on the coordination of resources, activities, and routines within the firm itself. Under these conditions, causal ambiguity in terms of existing relationships to other market participants and how these relationships were developed may offer only weak and short-term protection against imitation. Whether by force or design, the entrepreneur may subsequently feel impelled to seek a more protected position on the basis of internalized resources, activities, and routines, supported by learning processes ultimately aimed at upgrading knowledge in-house. In this respect, there may be an initial reversion of the typical long-term movement towards division of labor and outsourcing that has been suggested by some authors (Langlois and Robertson, 1998).

As for the geographical location of activities, limited managerial resources and the complications associated with knowledge exchange and innovation across geographical distances may make entrepreneurs increasingly inclined to concentrate resources and activities closer to one distinct home base.[17] In the short term, the overall effect in the combined case is an increase in the relative importance of internalized resources, activities, and routines, and a reduction in the geographical dispersion of employed skills, knowledge, and resources. This is to be contrasted with the evolution and pathway of resource deployment associated with traditional MNEs, or even with born

[17] According to Oviatt and McDougall (1994: 60): "…once successfully established, they [Global Start-ups] appear to have the most sustainable competitive advantages [in comparison to other international new ventures] due to a combination of historically unique, causally ambiguous, and socially complex inimitability with close network alliances in multiple countries." The point is that even these sources of competitive advantage may undergo significant change over time.

globals that follow traditional but accelerated internationalization processes (Hashai and Almor, 2004).

Much more can and needs to be done to map out the relative occurrence of different entry points and pathways into the global marketplace, and to understand their sustainability and performance implications. Oviatt and McDougall (1995: 39) conclude that: “No one knows whether the survival probability for global start-ups will be any better or worse than for domestic new ventures”, but this should not discourage further empirical work. Specific questions include how different entry points affect the survival and performance of firms, and whether firms starting out from the same entry point but subsequently adopting different pathways of resource deployment experience different degrees of success. Additional questions of more narrow scope are how firms operating on the basis of external market relationships may overcome dependency on single and powerful firms in their network (Coviello and Munro, 1997), and whether early or late establishment of in-house market channels has any significant impact on performance. These are all questions open for examination and solution within the framework of international entrepreneurial dynamics.

## Competitive Interaction

In the process of exploiting a new business opportunity, the entrepreneur must deal with competition, whether in the process of seriously attacking incumbent firms or responding to imitation by followers. In this context, the international dimension introduces a unique element that impacts the nature of competitive interaction: historical, institutional and cultural biases that may influence the way in which entrepreneurs perceive and exploit new business opportunities (Toyne and Nigh, 1998; Busenitz *et al.*, 2000; Young *et al.*, 2003).[18] These biases will be revealed in the entrepreneur’s propensity to rely upon external rather than internal skills and resources, and reflected for example in the preferred mode of entering new markets. When pioneering, imitating and incumbent

[18] In Toyne and Nigh’s (1998) terms, societal conditions constitute the boundary conditions for activities at lower levels, for example through laws, rules and regulations governing business, tax structures, education of the workforce, and enforcement organizations. For empirical contributions, see e.g. Mayrhofer (2004).

firms ultimately meet in the international marketplace, the effects are likely to be observable in adapted and changing pathways of resource deployment.

Among the new species of multinationals, competitive interaction only to a limited extent is preceded by the co-evolution of firms that share similar operational contexts or the same historical, institutional or cultural heritage (Craig *et al.,* 1992; Aldrich and Fiol, 1994). Although observations and the social networks that underlie the entrepreneur's combination of resources and customers may come from broad exposure to the international business environment, very few if any firms can be expected to develop culturally and institutionally unbiased strategies and ways of organizing. In other words, new start-ups may ultimately find they are competing in a global business environment, in the same markets and possibly on the basis of very similar product offerings, but as they become more firmly locked in competitive interaction differ substantially in terms of entry points and pathways of resource deployment. For the case of PSL, competitive interaction started with other firms seeking to exploit the new proteomics opportunities, including established and more traditionally organized instrumentation firms (such as General Electric) that are positioning themselves with regard to the new field of proteomics.

Competitive interaction between firms representing different entry points and pathways of resource deployment involves adaptation and ultimately leads to a selection of superior business practices (a process which, in contrast to Schumpeterian innovation, is representative of Kirznerian equilibrating dynamics). Yet, the process of strategic adaptation and adjustment that takes place when pioneers and imitators ultimately meet in international markets, or when industry incumbents are challenged by firms drawing upon significantly different configurations of resources, activities, and routines (Djelic and Ainamo, 1999), is little explored in the international context. While the analysis of competitive interaction between internationally active firms can draw upon theories developed in other fields of research, notably institutional theory and the literature on competitive dynamics, it is a case where the field of International Business represents a particularly fruitful empirical context for testing, validating, and expanding existing theoretical perspectives (Roth and Kostova, 2003).

## THEORETICAL ISSUES

Our starting point in this article is that the phenomenon of accelerated internationalization is difficult to explain using existing IB frameworks alone. But in an important article published in 1994 Oviatt and McDougall offered some clues as to how MNEs might draw advantages from their accelerated internationalization. As explained in Oviatt and McDougall (2005), their 1994 article sought to account for the phenomenon in terms of four streams of literature: internalization theory, alternative governance structures, sources of foreign location advantage, and sustaining competitive advantage. In this article, they proposed that successful international new ventures (INVs) exhibit four basic elements:

> "As they usually suffer from a poverty of resources, they internalize a minimum proportion of their assets (Element 1) and focus on less costly governance mechanisms (Element 2), such as network structures, to control a greater percentage of vital resources than mature organizations would… they gain foreign location advantages from private knowledge that they possess or produce (Element 3), and make it sustainable through one or more means of protection – imperfect imitability, licensing, networks, and direct means, such as patents (Element 4)" (2005: 5-6).

None of these theoretical elements owes anything specifically to globalization – apart perhaps from a bias towards reliance on networking. Our aim by contrast is to build a framework for accelerated internationalization that explicitly draws from globalizing tendencies, and locates accelerated internationalization as a phenomenon to be linked to globalization – to broader geographical movements of individuals and to the processes of closer integration and inter-firm connections in the international domain.

In pursuit of this aim, we have proposed a framework of international entrepreneurial dynamics that goes beyond the narrow study of the nature and operations of international new ventures, spanning the wider sequence of opportunity recognition, resource deployment, and competitive interaction. To summarize and recapitulate, the key points in our view of international entrepreneurial dynamics are entry points determined by the process of discovering new business opportunities (that is, how individuals connect skills, knowledge, and resources with potential customers in the international business arena), pathways of resource deployment that follow from these entry points (that is, typically path-dependent processes that unfold over time), and the adaptation of resource deployment decided by the firm's engagement in competition. These raise points that engage directly with the pressures and forces of globalization. We wish to be able to apply the insights of our account of international entrepreneurial dynamics in a way that reveals how globalization facilitates and encourages the engagement of entrepreneurial ventures with their international counterparts, or what we have called firms' *integration* in the global economy. These are all topics that offer rich potential for further empirical and theoretical development in the fields of International Business and international entrepreneurship alike (Zahra, 2005). Our approach is one that views the firm's accelerated internationalization not through a sequence of "stages" nor as a result of comparative static advantages, but through pathways that reflect entrepreneurial observation and strategic action. Overall, it is a perspective that emphasizes how the pre-venture activities of entrepreneurs affect internationalization paths and perceives internationalization as integration – that is, internationalization is neither push nor pull, but the process of discovering, integrating, and adapting new business ideas into the structures and networks of the global economy.

The emergent field of IED takes as its starting point the experiences of the new species of multinationals in a changing international business environment. The experiences of these firms are only to a limited extent understandable and explainable in terms of the existing paradigms of IB research, such as OLI or the Uppsala School of incremental internationalization. From the OLI perspective, modified or otherwise, the MNE exists because of its possession of home-grown and largely internalized resources, superior to those available to a domestic competitor. It makes it clear that the prevailing view has been built around traditional and incumbent MNEs which have created their international empires and are seeking to derive maximum advantage from them. Through the internalization principle, it rules out cases where a firm can derive competitive advantage by building international networks to access skills, knowledge, and resources that are otherwise not available.

This is, as we argue here, the case that fits many of the born globals and newcomer and latecomer multinationals. To make full sense of their early and rapid internationalization, we must go beyond the basic assumptions of the framework established by OLI. This involves recognition of the multitude of diverse organizational forms that have emerged in more recent years (Daft and Lewin, 1993), and of their ability to draw competitive advantage from external networks and inter-firm relationships rather than from internalized resources, skills and knowledge. Moreover, the early growth and experiences of born globals and newcomers and latecomers to the global economy can best be accommodated in a theoretical framework that is open to an appreciation of internationalization as a process of entrepreneurial discovery, strategizing under genuine uncertainty rather than economizing, and dynamic processes of exploitation, redeployment of resources and learning.

We suggest that these are relevant viewpoints that can inform and open up a new field of IB scholarship in the coming decade. We envision that future developments will introduce theories on the behavior and organization of the MNE that embrace the genuine uncertainty, subjective world views, and disequilibrium processes that are characteristic of entrepreneurship. Under this overarching theoretical umbrella, each of the milestones of the IED framework offers further opportunities for the formalization of specific theoretical relationships and hypothesis-testing research. These relationships include the association between geographical movements of the individual, the formation of social networks, and their effects on opportunity recognition and entry points into the global economy. They also include the determinants of pathways of internationalization and outcomes of competitive interaction between diverse organizational forms as they meet in the global economy, and ultimately the effects on firm performance and survival.

## CONCLUDING REMARKS

With the rise of globalization as a central defining issue of the field of IB and the emergence of new species of multinationals as the most dynamic and fast-moving firms in the global economy, we see a new opportunity for the field of international business studies to impress itself on a wider world of scholarship. We argue in this article that new foundations can be laid in terms of the scope of scholarly investigation and in terms of disequilibrium and dynamic approaches, focused on process models and dynamics rather than comparative static and transactions costs frameworks. The key to such a new beginning is for the discipline to embrace frameworks that incorporate entrepreneurial dynamics in their international dimensions, including issues such as the discovery of opportunities, the deployment of resources in the exploitation of these opportunities, and the effects of engagement with competitors. These traditionally neglected fields of inquiry seem to offer vast and largely untapped opportunities for further theoretical and empirical developments. In this way, the discipline of International Business will, we believe, be able to continuously generate the "big questions" that will carry the field in the coming years (Buckley, 2002; Peng, 2004).

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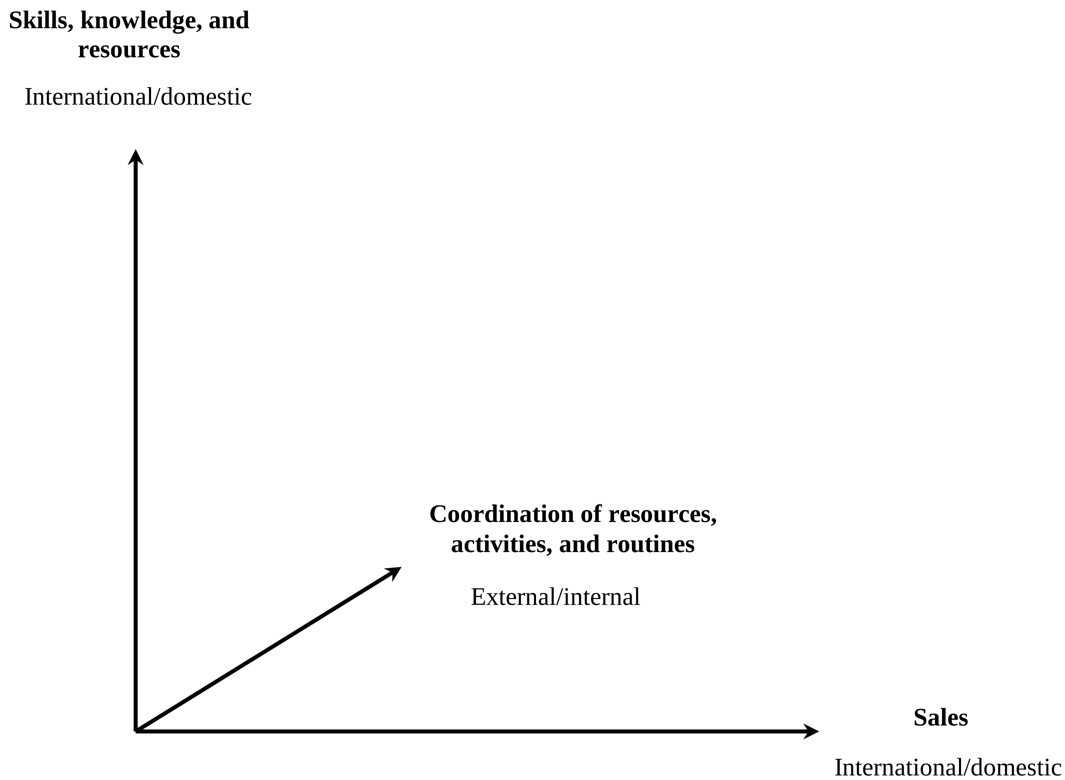


Figure 1: Entry points into the global marketplace.